| Screen identifier | Easting | Northing | Screen rpm | Stroke (mm) | Screen area (m^2) |
|---|---|---|---|---|---|
| 110-SN-01 Secondary Crusher Scalping Screen | 57043.29 | 58758.78 | 738 | 15 | 18 |
| 120-SN-11 Ore Sorter Screen | 56942.2 | 58909.18 | 738 | 15 | 14 |
| 120-SN-12 Tertiary Scalping Screen | 56948.84 | 58913.81 | 738 | 15 | 20.4 |
| 120-SN-13 Product Screen | 56945.4 | 58920.6 | 738 | 15 | 20.7 |
| 125-SN-01 Pebble Ore Sorter 1 Dewatering Screen | 57043.4 | 59010.4 | 960 | 10 | 3.6 |
| 125-SN-02 Pebble Ore Sorter 2 Dewatering Screen | 57047.5 | 59009.5 | 960 | 10 | 3.6 |
| 125-SN-03 Pebble Ore Sorter 3 Dewatering Screen | 57051.3 | 59009.7 | 960 | 10 | 3.6 |
| 125-SN-04 Pebble Ore Sorter 4 Dewatering Screen | 57054.9 | 59010 | 960 | 10 | 3.6 |
| 125-SN-06 Cobble Ore Sorter 1 Dewatering Screen | 57032.4 | 59009.4 | 960 | 10 | 3.6 |
| 125-SN-07 Cobble Ore Sorter 2 Dewatering Screen | 57036.2 | 59010 | 960 | 10 | 3.6 |
| 140-SN-01 DMS Feed Preparation Screen | 56900.06 | 58963.74 | 931 | 10 | 11.52 |
| 140-SN-02 Primary DMS 1 Sinks Screen | 56896.23 | 58969.39 | 916 | 10 | 11.52 |
| 140-SN-04 Primary DMS 1 Floats Screen | 56892.03 | 58975.53 | 923 | 9 | 26.28 |
| 140-SN-06 Secondary DMS Screen | 56911.58 | 58956.16 | 941 | 9 | 8.64 |
| 140-SN-07 Scavenger DMS Screen | 56915.15 | 58958.65 | 960 | 9 | 8.64 |
| 150-SN-01 Primary Mill Sizing Screen | 56922.49 | 58954.96 | 931 | 10 | 9 |

| | |
|---|---|
| Total screening area | 170.3 |

| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| **AREA 110** | **PRIMARY CRUSHING** | **Yes** | | | | |
| 110-BD-01 | Crusher Control Room | | | Wernick Buildings | | Type: Transportable Building<br>Size: 6.0 x 2.7 m |
| 110-BD-02 | Primary Crusher Area Switchroom | Yes | Existing modified | Eaton | Container | Type: Transportable Building<br>Size: 40' High Cube Shipping Container |
| 110-BN-01 | ROM Bin | Yes | Existing modified.<br>Grizzly aperture reduced.<br>Discharge skirt walls replaced | Centristic | Fabricated | Construction: Carbon steel with 12 mm thick Hardox 400 liners<br>Live Capacity: 250 t<br>Grizzly: ~~700 mm aperture~~ 250mm aperture<br>Suitable for direct tipping from CAT775 truck |
| 110-BN-02 | Primary Tramp Metal Bin | | | | | Type: Skip bin (Suitable for forklift)<br>Capacity: TBC $m^3$ |
| 110-BN-11 | Secondary Tramp Metal Bin | Yes | New | | | Type: Skip bin (Suitable for forklift) |
| 110-BN-12 | Secondary Crusher Surge Bin | Yes | New | | Fabricated | Construction: Carbon steel lined with 20 mm thick Hardox 400 wearplate<br>Live Capacity: 40 t, 20 t live for one crusher operating |
| 110-CH-01 | Apron Feeder Dribble Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined on front & back faces with 12 mm thick UHMWPE |
| 110-CH-05 | Secondary Crusher Scalping Screen U/S Conveyor Head Chute | Yes | Renamed only | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate |
| 110-CH-06 | Primary Tramp Metal Discharge Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel unlined |
| 110-CH-11 | Secondary Crusher Scalping Screen Feed Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 110-CH-12 | Secondary Crusher Scalping Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 110-CH-13 | Secondary Crusher Scalping Screen Oversize Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 110-CH-14 | Secondary Crusher Feed Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. Stainless 304 at magnet interface |
| 110-CH-15 | Secondary Metal Magnet Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel unlined |
| 110-CH-16 | Secondary Crusher 1 Feed Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. |
| 110-CH-17 | Secondary Crusher 2 Feed Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. |
| 110-CH-18 | Secondary Crusher 1 Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. |
| 110-CH-19 | Secondary Crusher 2 Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. |
| 110-CH-20 | Secondary Crusher Discharge Conveyor 1 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 110-CH-21 | Secondary Crusher Discharge Conveyor 2 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 110-CH-22 | Secondary Crusher Feed Conveyor Feed Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. |
| 110-CH-23 | Ore Sorter Screen Feed Conveyor Feed Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. |
| 110-CR-11A | Mobile Jaw Crusher 1 | Yes | Supplied by mining contractor | Kleeman | Mobicat MC120Z PRO | Mobile jaw crusher package diesel ~~and electric~~ driven |
| 110-CR-11B | Mobile Jaw Crusher 2 | Yes | Supplied by mining contractor | Kleeman | Mobicat MC120Z PRO | Mobile jaw crusher package diesel ~~and electric~~ driven |
| 110-CR-12 | Secondary Crusher 1 | Yes | New | Metso | GP300s | Type: Cone Crusher<br>Duty: 173 dry tph (Mixed) and 241 dry tph (Fresh)<br>CSS: xxmm |
| 110-AB-11 | Secondary Crusher 1 Overpressure Blower | Yes | New | Metso | | Part of Crusher Package |
| 110-LU-11 | Secondary Crusher 1 Lubrication Unit | Yes | New | Metso | | Part of Crusher Package |
| 110-PP-11 | Secondary Crusher 1 Lubrication Oil Pump | Yes | New | Metso | | Part of Crusher Package |

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3. Faint items represent unchanged items from original project

| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 110-HD-11 | Secondary Crusher 1 Hydroset Unit | Yes | New | Metso | | Part of Crusher Package |
| 110-PP-12 | Secondary Crusher 1 Hydroset Pump | Yes | New | Metso | | Part of Crusher Package |
| 110-HR-11 | Secondary Crusher 1 Oil Heater 1 | Yes | New | Metso | | Part of Crusher Package |
| 110-HR-12 | Secondary Crusher 1 Oil Heater 2 | Yes | New | Metso | | Part of Crusher Package |
| 110-CO-11 | Secondary Crusher 1 Heat Exchanger | Yes | New | Metso | | Part of Crusher Package |
| 110-FA-11 | Secondary Crusher 1 Heat Exchanger Fan | Yes | New | Metso | | Part of Crusher Package |
| 110-CR-13 | Secondary Crusher 2 | Yes | New | Sandvik | CS440 | Type: Cone Crusher<br>Duty: 176 dry tph (Mixed) and 241 dry tph (Fresh)<br>CSS: 55 mm |
| 110-AB-12 | Secondary Crusher 2 Overpressure Blower | Yes | New | Sandvik | | Part of Crusher Package |
| 110-LU-12 | Secondary Crusher 2 Lubrication Unit | Yes | New | Sandvik | | Part of Crusher Package |
| 110-PP-14 | Secondary Crusher 2 Lubrication Oil Pump | Yes | New | Sandvik | | Part of Crusher Package |
| 110-HD-12 | Secondary Crusher 2 Hydroset Unit | Yes | New | Sandvik | | Part of Crusher Package |
| 110-PP-15 | Secondary Crusher 2 Hydroset Pump | Yes | New | Sandvik | | Part of Crusher Package |
| 110-HR-14 | Secondary Crusher 2 Oil Heater 1 | Yes | New | Sandvik | | Part of Crusher Package |
| 110-HR-15 | Secondary Crusher 2 Oil Heater 2 | Yes | New | Sandvik | | Part of Crusher Package |
| 110-CO-12 | Secondary Crusher 2 Heat Exchanger | Yes | New | Sandvik | | Part of Crusher Package |
| 110-FA-12 | Secondary Crusher 2 Heat Exchanger Fan | Yes | New | Sandvik | | Part of Crusher Package |
| 110-CV-01 | Secondary Crusher Scalping Screen U/S Conveyor | Yes | Existing renamed & modified (New feed points & throughput) | Centristic | 1800 mm belt width 20° trough angle belt conveyor | Capacity: 500 dry tph (duty) 625 tph (max)<br>Belt Width: 1800 mm<br>Length: 21.5 m<br>Lift: 1.9 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 110-CV-21 | Secondary Crusher Feed Conveyor | Yes | New | | 1000 mm belt width 35° trough angle belt conveyor | Capacity: 241 dry tph (duty) 301 tph (max)<br>Belt Width: 1000 mm<br>Length: 20.0 m<br>Lift: 5.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 110-CV-22 | Secondary Crusher Discharge Conveyor 1 | Yes | New | | 1000 mm belt width 35° trough angle belt conveyor | Capacity: 241 dry tph (duty) 301 tph (max)<br>Belt Width: 1000 mm<br>Length: 41.3 m<br>Lift: 5.5 m<br>Speed: 1.0 m/s<br>Take-up: Gravity |
| 110-CV-23 | Secondary Crusher Discharge Conveyor 2 | Yes | New | | 1000 mm belt width 35° trough angle belt conveyor | Capacity: 241 dry tph (duty) 301 tph (max)<br>Belt Width: 1000 mm<br>Length: 52.0 m<br>Lift: 13.8 m<br>Speed: 1.0 m/s<br>Take-up: Gravity |
| 110-DB-01 | Primary Crushing Area 400V L+SP Distribution Board | Yes | Existing modified | | | Rating: 300kVAr |

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| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 110-DC-01 | Crusher Dust Collector | Yes | Existing modified, speed chage approx 5% increase | American Air Filter | 14-144 | Type: Free standing external baghouse<br>Duty: ~~22,500 Am³/h~~ 24,750 Am³/h fan inlet pressure 3297Pa |
| 110-DC-01A | Crusher Dust Collector Ducting | Yes | Existing modified | | Fabricated | Construction: 3 mm spiral welded ducting w/ blast dampers and clean out doors |
| 110-DC-01B | Secondary Crusher Ducting | Yes | New | | Fabricated | Construction: 3 mm spiral welded ducting w/ blast dampers and clean out doors |
| 110-FA-01 | Crusher Dust Collector Fan | Yes | Existing modified, speed chage approx 5% increase | American Air Filter | BC-SW | Type: Centrifugal fan with backwards laminar impellor and vee belt drive<br>Duty: ~~22,500 Am³/h~~ 24,750 Am³/h fan inlet pressure 3297Pa |
| 110-FE-01 | ROM Bin Discharge Feeder | | | Terex Jacques | Apron Feeder D4 1500 x 9281 | Type: Apron Feeder<br>Design Capacity: 514 dry tph<br>Max. Capacity: 640 tph<br>Size: 1500 mm wide x 9281 mm long<br>Drive Type: Electromechanical |
| 110-FE-01a | ROM Bin Discharge Feeder Lubrication System | | | Terex Jacques | Tecalemit | Type: Grease<br>Drum Capacity: 200 Litres |
| 110-FE-11 | Secondary Crusher Scalping Screen O/S Transfer Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 1.0m wide x 4.8m long |
| 110-FE-12 | Secondary Crusher 1 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 1.2m wide x 3.3m long |
| 110-FE-13 | Secondary Crusher 2 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 1.2m wide x 3.3m long |
| 110-HT-01 | Primary & Secondary Crusher Crane | Yes | Existing modified, rails extended | Street Crane | Street ZX1004-SS Crab Unit | Type: Double girder overhead bridge crane<br>WLL: 20 t<br>Span: 12.8 m<br>Travel: 23.0 m<br>Lift: 17.2 m |
| 110-MC-01 | Primary Crushing Area 400V MCC | Yes | Existing modified | Eaton | Power Xpert CX | Specification: 400V, 200A, 50kA / 1sec, Form 4b, IP31 |
| 110-MG-01 | Primary Tramp Metal Magnet | | | Centristic | Eriez SE 785 SC2 | Type: Self cleaning cross belt electromagnet<br>Minimum Tramp Size: 50 mm |
| 110-MG-11 | Secondary Tramp Metal Magnet | Yes | New | Eriez Magnetics | SE780 SC1 | Type: Self cleaning electromagnet<br>Minimum Tramp Size: 20 mm |
| 110-PF-01 | Primary Crusher Area MCC Power Factor Correction | | | | | Rating: 300kVAr |
| 110-PN-07 | Primary Crusher Switchroom Communications Panel | Yes | Existing modified | | | |
| 110-PP-17 | Secondary Crushing Area Sump Pump | Yes | New TWL design | TBA | TBA | TBA |
| 110-RE-01 | Primary Tramp Metal Magnet Rectifier | | | Centristic | Eriez Rectifier Transformer Unit | Type: Combined Rectifier Transformer Unit<br>Construction: Stainless Steel |
| 110-RE-11 | Secondary Tramp Metal Magnet Rectifier | Yes | New | Eriez Magnetics | Eriez Rectifier Transformer Unit | Type: Combined Rectifier Transformer Unit<br>Construction: Stainless Steel |
| 110-RV-01 | Crusher Dust Collector Rotary Valve | | | American Air Filter | 300 x 300 Cast Iron | Construction: Cast iron body<br>Capacity: 9,840 kg/h (duty) 16,400 kg/h (max) |
| 110-SN-01 | Secondary Crusher Scalping Screen | Yes | New | Vibramech | | Type: Single Deck 10 deg declining screen<br>Size: 3000x5000-6378 |
| 110-TX-01 | Primary Crusher Area Transformer | | | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 1000 kVA |
| 110-WT-01 | Secondary Crusher Feed Conveyor  Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-22 | Type: Dual idler weigh scale. 1000mm wide belt<br>Accuracy: ±0.5% |

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| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 110-WT-02 | Secondary Crusher Discharge Weightometer | Future | design allowance only | | Thermo Ramsay 10-22 | Type: Dual idler weigh scale. 1000mm wide belt<br>Accuracy: ±0.5% |
| **AREA 120** | **WASHING AND SCREENING** | **Yes** | | | | |
| 120-AN-01 | Ore Sorter Sizing Screen Feed Moisture Analyser | TWL | By TWL | Process Sensors Corporation | MCT466-100-1PA NIR | |
| 120-CH-21 | Ore Sorter Sizing Screen Feed Conveyor Head Chute | Yes | New replaces CH-07 | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 120-CH-22 | Ore Sorter Sizing Screen Feed Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 120-CH-23 | Ore Sorter Sizing Screen Pebble Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with Ceramic replaceable liners 13m thick ceramic on 7mm rubber bonded to 6mm thick plate |
| 120-CH-24 | Pebble Transfer Conveyor 1 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 120-CH-25 | Ore Sorter Sizing Screen Cobble Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 120-CH-26 | Cobble Transfer Conveyor 1 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 120-CH-28 | Ore Sorter Sizing Screen Underpan | Yes | New | | Fabricated | Ceramic replaceable liners 13m thick ceramic on 7mm rubber bonded to 6mm thick plate.Skega bars on floor plate |
| 120-CH-30 | Tertiary Crusher Return Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 120-CH-31 | Tertiary Crusher Sizing Screen Feed Chute | Yes | New | | Fabricated | Ceramic replaceable liners 13m thick ceramic on 7mm rubber bonded to 6mm thick plate.Skega bars on floor plate |
| 120-CH-32 | Tertiary Crusher Sizing Screen Oversize Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate. With rock box wear billets |
| 120-CH-33 | Tertiary Crusher Sizing Screen Underpan | Yes | New | | Fabricated | Ceramic replaceable liners 13m thick ceramic on 7mm rubber bonded to 6mm thick plate.Skega bars on floor plate |
| 120-CH-35 | Product Screen Feed Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel 6mm rubber lined Ceramic replaceable liners 13m thick ceramic on 7mm rubber bonded to 6mm thick plate.Skega bars on floor plate |
| 120-CH-36 | Product Screen Oversize Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel Ceramic replaceable liners 13m thick ceramic on 7mm rubber bonded to 6mm thick plate. With rock box wear billets |
| 120-CH-37 | Product Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick rubber |
| 120-CH-38 | Plant Feed Primary Sampler Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 12mm thick Hardox 400 bolted wearplate |
| 120-CH-48 | Plant Feed Sample Return Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 120-CH-49 | Plant Feed Sample Transfer Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 12mm thick Hardox 400 bolted wearplate |

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3. Faint items represent unchanged items from original project

| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 120-CV-02 | Ore Sorter Sizing Screen Feed Conveyor | Yes | Existing renamed & modified (head end extended) | Centristic | 1000 mm belt width 35° trough angle belt conveyor | Capacity: 500 tph (duty) 625tph (max)<br>Belt Width: 1000 mm<br>Length: 171.0 m<br>Lift: 42.7 m<br>Speed: 1.66 m/s<br>Take-up: Gravity (3.55 t)<br>Head Pulley: Ceramic lagged |
| 120-CV-24 | Plant Feed Sample Transfer Conveyor | Yes | New | | 450 mm belt width 35° trough angle belt conveyor | Capacity: 0.07 dry tph (duty) 0.088 tph (max)<br>Belt Width: 450 mm<br>Length: 8.0 m<br>Lift: 0.0 m<br>Speed: 0.1 m/s<br>Take-up: Screw |
| 120-CV-25 | Pebble Transfer Conveyor 1 | Yes | New | | 800 mm belt width 35° trough angle belt conveyor | Capacity: 172 dry tph (duty) 215 tph (max)<br>Belt Width: 800 mm<br>Length: 15.5 m<br>Lift: 1.2 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 120-CV-26 | Cobble Transfer Conveyor 1 | Yes | New | | 800 mm belt width 35° trough angle belt conveyor | Capacity: 237 dry tph (duty) 296 tph (max)<br>Belt Width: 800 mm<br>Length: 18.5 m<br>Lift: 1.2 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 120-DB-01 | Scrubber & Fines Area 400V L+SP Distribution Board | Yes | Modified | | | Rating: 300kVAr |
| 120-HP-11 | Product Screen Fines Transfer Hopper | Yes | New | | Square Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 12 mm thick rubber, cermaic lined on sloping faces.<br>Live Capacity: 14 $m^3$ |
| 120-MC-03 | Scrubber & Fines Area MCC | Yes | Modified | | | |
| 120-PF-03 | Scrubber & Fines Area MCC Power Factor Correction | | | | | Rating: 300kVAr |
| 120-PN-08 | Scrubber & Fines Area Switchroom Communications Panel | Yes | Modified | | | |
| 120-PP-03 | Washing and Screening Area Sump Pump | | | Metso | VS100 L180 O3S | Type: Vertical centrifugal sump pump<br>Duty: 90.0 $m^3$/hr @ 17.1 m TDH<br>Consumed Power: 13.3 kW<br>Shaft Length: 1800 mm |
| 120-PP-04 | Fines Storage Tank Area Sump Pump | | | Metso | VS25 L120 05D85 HC | Type: Vertical centrifugal sump pump<br>Duty: 5.0 $m^3$/hr @ 20 m TDH<br>Consumed Power: 1.5 kW<br>Shaft Length: 1200 mm |
| 120-PP-11 | Product Screen Fines Transfer Pump 1 | Yes | New | Weir Pty Ltd | Warman Pump 10x8-AH - High Chrome | Type: Horizontal centrifugal slurry pump<br>Duty: 460$m^3$/h @ 19.1 m TDH |
| 120-PP-12 | Product Screen Fines Transfer Pump 2 | Yes | New | Weir Pty Ltd | Warman Pump 10x8-AH - High Chrome | Type: Horizontal centrifugal slurry pump<br>Duty: 460$m^3$/h @ 19.1 m TDH |
| 120-SA-11 | Primary Feed Sampling Station | Yes | New | FLSmith | Vendor Package | Supplied with local control panel. |
| 120-SA-11A | Plant Feed Primary Sampler | Yes | New | FLSmith | BDLS40-1500 | Cross cut with bottom dump bucket |
| 120-SN-11 | Ore Sorter Sizing Screen | Yes | New | Vibramech | | Type: Double Deck 5 deg declining screen<br>Size: 2400x5500-6493 |

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| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 120-SN-12 | Tertiary Crusher Sizing Screen | Yes | New | Vibramech | | Type: Singe Deck 10 deg declining screen<br>Size: 3000x6000-7191 |
| 120-SN-13 | Product Screen | Yes | New | Vibramech | | Type: Singe Deck flat screen<br>Size: 3000x6000-7100 |
| 120-TX-03 | Scrubber & Fines Area Transformer | | | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 1600 kVA |
| 120-WT-01 | Ore Sorter Sizing Screen Feed Weightomteter | Yes | Renamed only | Centristic | Thermo Ramsay 10-14 | Type: Four idler weigh scale 1000mm wide belt<br>Accuracy: ±0.25% (OIML Class 0.5) |
| **AREA 125** | **ORE SORTING** | **Yes** | | | | |
| 125-BD-01 | Ore Sorting Area Switchroom | Yes | New | | Container | Type: Transportable Building |
| 125-BD-02 | Ore Sorting Area Control Room | Yes | New | | | Type: Transportable building<br>Size: 12.0 x 3.0 m Includes ablutions |
| 125-DB-01 | Ore Sorting Area 400V L+SP Distribution Board | Yes | New | | | |
| 125-DB-02 | Ore Sorting Area Switchroom L+SP Distribution Board | Yes | New | | | |
| 125-MC-11 | Ore Sorting Area MCC | Yes | New | | | |
| 125-PF-11 | Ore Sorting Area MCC Power Factor Correction | Yes | New | | | |
| 125-PN-21 | Ore Sorting Area Switchroom Communications Panel | Yes | New | | | |
| 125-TX-11 | Ore Sorting Area Transformer | Yes | New | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 1600 kVA |
| 125-BN-01 | Pebble Ore Sorter Feed Bin | Yes | New | | | Construction: Carbon steel lined with 20 mm thick Hardox 400 wearplate in sloping faces only<br>Live Capacity: 1000 t |
| 125-BN-02 | Cobble Ore Sorter Feed Bin | Yes | New | | | Construction: Carbon steel lined with 20 mm thick Hardox 400 wearplate in sloping faces only<br>Live Capacity: 1000 t |
| 125-DC-01 | Ore Sorter Dust Collector | Yes | New | Camfil | | Type: Free standing external baghouse<br>Duty: 40,500 Am³/h |
| 125-FE-01 | Pebble Ore Sorter 1 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 0.8m wide x 3.3m long |
| 125-FE-02 | Pebble Ore Sorter 2 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 0.8m wide x 3.3m long |
| 125-FE-03 | Pebble Ore Sorter 3 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 0.8m wide x 3.3m long |
| 125-FE-04 | Pebble Ore Sorter 4 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 0.8m wide x 3.3m long |
| 125-FE-05A | Pebble Ore Sorter Standby Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 1m wide x 2.8m long |
| 125-FE-05B | Cobble Ore Sorter Standby Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 1m wide x 3.8m long |
| 125-FE-06 | Cobble Ore Sorter 1 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 1m wide x 3.1m long |
| 125-FE-07 | Cobble Ore Sorter 2 Feeder | Yes | New | Vibramech | | Type: Vibrating pan feeder foot mounted<br>Size: 1m wide x 3.1m long |
| 125-FA-01 | Ore Sorter Dust Collector Fan | Yes | New | Camfil | | Type: Centrifugal fan<br>Duty: 40,500 Am³/h |
| 125-CH-01 | Pebble Transfer Conveyor 2 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-02 | Cobble Transfer Conveyor 2 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-04 | Pebble Ore Sorter Feed Bin Overflow Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-05 | Cobble Ore Sorter Feed Bin Overflow Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-06 | Pebble Ore Sorter 1 Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |

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|---|---|---|---|---|---|---|
| 125-CH-07 | Pebble Ore Sorter 2 Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-08 | Pebble Ore Sorter 3 Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-09 | Pebble Ore Sorter 4 Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-10 | Pebble Ore Sorter Standby Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-11 | Cobble Ore Sorter Standby Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-12 | Cobble Ore Sorter 1 Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-13 | Cobble Ore Sorter 2 Feeder Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-14 | Pebble Ore Sorter 1 Feeder Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-15 | Pebble Ore Sorter 2 Feeder Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-16 | Pebble Ore Sorter 3 Feeder Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-17 | Pebble Ore Sorter 4 Feeder Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-18 | Standby Ore Sorter Feeder Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-19 | Cobble Ore Sorter 1 Feeder Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-20 | Cobble Ore Sorter 2 Feeder Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate |
| 125-CH-21 | Pebble Ore Sorter 1 Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-22 | Pebble Ore Sorter 2 Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-23 | Pebble Ore Sorter 3 Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-24 | Pebble Ore Sorter 4 Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-25 | Standby Ore Sorter Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-26 | Cobble Ore Sorter 1 Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-27 | Cobble Ore Sorter 2 Conveyor Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-28 | Pebble Ore Sorter 1 Product Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-29 | Pebble Ore Sorter 1 Rejects Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-30 | Pebble Ore Sorter 2 Product Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-31 | Pebble Ore Sorter 2 Rejects Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-32 | Pebble Ore Sorter 3 Product Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |

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|---|---|---|---|---|---|---|
| 125-CH-33 | Pebble Ore Sorter 3 Rejects Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-34 | Pebble Ore Sorter 4 Product Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-35 | Pebble Ore Sorter 4 Rejects Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-36 | Standby Ore Sorter Product Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-37 | Standby Ore Sorter Rejects Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-38 | Cobble Ore Sorter 1 Product Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-39 | Cobble Ore Sorter 1 Rejects Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-40 | Cobble Ore Sorter 2 Product Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-41 | Cobble Ore Sorter 2 Rejects Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber bonded to 6mm plate |
| 125-CH-42 | Ore Sorter Product Conveyor 1 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-43 | Ore Sorter Product Conveyor 2 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-44 | Ore Sorter Product Conveyor 3 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-45 | Ore Sorter Reject Conveyor 1 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-46 | Ore Sorter Reject Conveyor 2 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-47 | Ore Sorter Reject Conveyor 3 Head Chute | Yes | New | | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 125-CH-48 | Ore Sorter Reject Primary Sampler Discharge Chute | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 12mm thick Hardox 400 bolted wearplate |
| 125-CH-59 | Pebble Ore Sorter 1 Dewatering Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 6mm rubber |
| 125-CH-60 | Pebble Ore Sorter 2 Dewatering Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 6mm rubber |
| 125-CH-61 | Pebble Ore Sorter 3 Dewatering Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 6mm rubber |
| 125-CH-62 | Pebble Ore Sorter 4 Dewatering Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 6mm rubber |
| 125-CH-63 | Standby Ore Sorter Dewatering Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 6mm rubber |
| 125-CH-64 | Cobble Ore Sorter 1 Dewatering Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 6mm rubber |
| 125-CH-65 | Cobble Ore Sorter 2 Dewatering Screen Underpan | Yes | New | | Fabricated | Construction: 6 mm Carbon steel lined with 6mm rubber |
| 125-CH-66 | Pebble Ore Sorter 1 Dewatering Screen Feed Chute | Yes | New | | | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |

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|---|---|---|---|---|---|---|
| 125-CH-67 | Pebble Ore Sorter 2 Dewatering Screen Feed Chute | Yes | New | | | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 125-CH-68 | Pebble Ore Sorter 3 Dewatering Screen Feed Chute | Yes | New | | | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 125-CH-69 | Pebble Ore Sorter 4 Dewatering Screen Feed Chute | Yes | New | | | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 125-CH-70 | Standby Ore Sorter Dewatering Screen Feed Chute | Yes | New | | | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 125-CH-71 | Cobble Ore Sorter 1 Dewatering Screen Feed Chute | Yes | New | | | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 125-CH-72 | Cobble Ore Sorter 2 Dewatering Screen Feed Chute | Yes | New | | | Construction: 6 mm Carbon steel lined with 20 mm thick Hardox 400 bolted wearplate in impact areas. Sliding wear areas 20mm thick rubber liner bonded to 6mm plate |
| 125-CV-27 | Pebble Transfer Conveyor 2 | Yes | New | | 800 mm belt width 35° trough angle belt conveyor | Capacity: 172 dry tph (duty) 215 tph (max)<br>Belt Width: 800 mm<br>Length: 126.3 m<br>Lift: 12.7 m<br>Speed: 1.0 m/s<br>Take-up: Gravity |
| 125-CV-28 | Cobble Transfer Conveyor 2 | Yes | New | | 800 mm belt width 35° trough angle belt conveyor | Capacity: 237 dry tph (duty) 296 tph (max)<br>Belt Width: 800 mm<br>Length: 138.3 m<br>Lift: 13.8 m<br>Speed: 1.0 m/s<br>Take-up: Gravity |
| 125-CV-29 | Pebble Ore Sorter 1 Feed Conveyor | Yes | New | | 600mm belt width 35° trough angle belt conveyor | Capacity: 43 dry tph (duty) 60 tph (max)<br>Belt Width: 600 mm<br>Length: 40.0 m<br>Lift: 9.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 125-CV-30 | Pebble Ore Sorter 2 Feed Conveyor | Yes | New | | 600mm belt width 35° trough angle belt conveyor | Capacity: 43 dry tph (duty) 60 tph (max)<br>Belt Width: 600 mm<br>Length: 40.0 m<br>Lift: 9.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 125-CV-31 | Pebble Ore Sorter 3 Feed Conveyor | Yes | New | | 600mm belt width 35° trough angle belt conveyor | Capacity: 43 dry tph (duty) 60 tph (max)<br>Belt Width: 600 mm<br>Length: 40.0 m<br>Lift: 9.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 125-CV-32 | Pebble Ore Sorter 4 Feed Conveyor | Yes | New | | 600mm belt width 35° trough angle belt conveyor | Capacity: 43 dry tph (duty) 60 tph (max)<br>Belt Width: 600 mm<br>Length: 40.0 m<br>Lift: 9.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |

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|---|---|---|---|---|---|---|
| 125-CV-33 | Standby Ore Sorter Feed Conveyor | Yes | New | | 600mm belt width 35° trough angle belt conveyor | Capacity: 119 dry tph (duty) 148 tph (max)<br>Belt Width: 600 mm<br>Length: 40.0 m<br>Lift: 9.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 125-CV-34 | Cobble Ore Sorter 1 Feed Conveyor | Yes | New | | 600mm belt width 35° trough angle belt conveyor | Capacity: 119 dry tph (duty) 148 tph (max)<br>Belt Width: 600 mm<br>Length: 40.0 m<br>Lift: 9.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 125-CV-35 | Cobble Ore Sorter 2 Feed Conveyor | Yes | New | | 600mm belt width 35° trough angle belt conveyor | Capacity: 119 dry tph (duty) 148 tph (max)<br>Belt Width: 600 mm<br>Length: 40.0 m<br>Lift: 9.7 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 125-CV-36 | Ore Sorter Product Conveyor 1 | Yes | New | | 800mm belt width 35° trough angle belt conveyor | Capacity: 121 dry tph (duty) 151 tph (max)<br>Belt Width: 800 mm<br>Length: 30.6 m<br>Lift: 1.0 m<br>Speed: 1.0 m/s<br>Take-up: Screw |
| 125-CV-37 | Ore Sorter Product Conveyor 2 | Yes | New | | 800mm belt width 35° trough angle belt conveyor | Capacity: 121 dry tph (duty) 151 tph (max)<br>Belt Width: 800 mm<br>Length: 45.5 m<br>Lift: 9.3 m<br>Speed: 1.0 m/s<br>Take-up: Gravity |
| 125-CV-38 | Ore Sorter Product Conveyor 3 | Yes | New | | 800mm belt width 35° trough angle belt conveyor | Capacity: 121 dry tph (duty) 151 tph (max)<br>Belt Width: 800 mm<br>Length: 49.5 m<br>Lift: 0.0 m<br>Speed: 1.0 m/s<br>Take-up: Gravity |
| 125-CV-39 | Ore Sorter Reject Conveyor 1 | Yes | New | | 800mm belt width 35° trough angle belt conveyor | Capacity: 283 dry tph (duty) 354 tph (max)<br>Belt Width: 800 mm<br>Length: 39.1m<br>Lift: 1.0 m<br>Speed: 1.2 m/s<br>Take-up: Screw |
| 125-CV-40 | Ore Sorter Reject Conveyor 2 | Yes | New | | 800mm belt width 35° trough angle belt conveyor | Capacity: 283 dry tph (duty) 354 tph (max)<br>Belt Width: 800 mm<br>Length: 126.0 m<br>Lift: 19.1 m<br>Speed: 1.2 m/s<br>Take-up: Gravity |

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|---|---|---|---|---|---|---|
| 125-CV-41 | Ore Sorter Reject Conveyor 3 | Yes | New | | 800mm belt width 35° trough angle belt conveyor | Capacity: 283 dry tph (duty) 354 tph (max)<br>Belt Width: 800 mm<br>Length: 80.0 m<br>Lift: 10.5 m<br>Speed: 1.2 m/s<br>Take-up: Gravity |
| 125-HT-01 | Ore Sorter Maintenance Crane | Yes | New | Street Cranes | | Type: Single girder bridge crane<br>WLL: 2 t<br>Span: 15 m<br>Travel: 31 m<br>Lift: 12 m |
| 125-HP-01 | Ore Sorter Fines Transfer Hopper | Yes | New | | Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber 12 mm on sloping faces<br>Live Capacity: 6.5 $m^3$ |
| 125-OS-01 | Pebble Ore Sorter 1 | Yes | New | Tomra | COM XRT 1200 /B 2.0 | |
| 125-CO-01 | Pebble Ore Sorter 1 Cooler | Yes | New | Tomra | Part of ore sorter package | |
| 125-OS-02 | Pebble Ore Sorter 2 | Yes | New | Tomra | COM XRT 1200 /B 2.0 | |
| 125-CO-02 | Pebble Ore Sorter 2 Cooler | Yes | New | Tomra | Part of ore sorter package | |
| 125-OS-03 | Pebble Ore Sorter 3 | Yes | New | Tomra | COM XRT 1200 /B 2.0 | |
| 125-CO-03 | Pebble Ore Sorter 3 Cooler | Yes | New | Tomra | Part of ore sorter package | |
| 125-OS-04 | Pebble Ore Sorter 4 | Yes | New | Tomra | COM XRT 1200 /B 2.0 | |
| 125-CO-04 | Pebble Ore Sorter 4 Cooler | Yes | New | Tomra | Part of ore sorter package | |
| 125-OS-05 | Standby Ore Sorter | Yes | New | Tomra | COM XRT 1200 /B 2.0 | |
| 125-CO-05 | Standby Ore Sorter Cooler | Yes | New | Tomra | Part of ore sorter package | |
| 125-OS-06 | Cobble Ore Sorter 1 | Yes | New | Tomra | COM XRT 1200 /B 2.0 | |
| 125-CO-06 | Cobble Ore Sorter 1 Cooler | Yes | New | Tomra | Part of ore sorter package | |
| 125-OS-07 | Cobble Ore Sorter 2 | Yes | New | Tomra | COM XRT 1200 /B 2.0 | |
| 125-CO-07 | Cobble Ore Sorter 2 Cooler | Yes | New | Tomra | Part of ore sorter package | |
| 125-LA-01 | Pebble Ore Sorter 1 Spillage Launder | Future | Allow for future fitment | | Fabricated | Construction: 6 mm Carbon steel painted |
| 125-LA-02 | Pebble Ore Sorter 2 Spillage Launder | Future | Allow for future fitment | | Fabricated | Construction: 6 mm Carbon steel painted |
| 125-LA-03 | Pebble Ore Sorter 3 Spillage Launder | Future | Allow for future fitment | | Fabricated | Construction: 6 mm Carbon steel painted |
| 125-LA-04 | Pebble Ore Sorter 4 Spillage Launder | Future | Allow for future fitment | | Fabricated | Construction: 6 mm Carbon steel painted |
| 125-LA-05 | Standby Ore Sorter Spillage Launder | Future | Allow for future fitment | | Fabricated | Construction: 6 mm Carbon steel painted |
| 125-LA-06 | Cobble Ore Sorter 1 Spillage Launder | Future | Allow for future fitment | | Fabricated | Construction: 6 mm Carbon steel painted |
| 125-LA-07 | Cobble Ore Sorter 2 Spillage Launder | Future | Allow for future fitment | | Fabricated | Construction: 6 mm Carbon steel painted |

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|---|---|---|---|---|---|---|
| 125-PP-01 | Ore Sorter Fines Transfer Pump 1 | Yes | New | Weir Pty Ltd | Warman Pump 8x6-AH - High Chrome | Type: Horizontal centrifugal slurry pump<br>Duty: 212m³/h @ 22.7 m TDH |
| 125-PP-02 | Ore Sorter Fines Transfer Pump 2 | Yes | New | Weir Pty Ltd | Warman Pump 8x6-AH - High Chrome | Type: Horizontal centrifugal slurry pump<br>Duty: 212m³/h @ 22.7 m TDH |
| 125-PP-03 | Ore Sorting Area Raw Pump 1 | Yes | New | Crest Process Engineering | | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 5.5 l/s @ 70 m TDH |
| 125-PP-04 | Ore Sorting Area Raw Pump 2 | Yes | New | Crest Process Engineering | | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 5.5 l/s @ 70 m TDH |
| 125-PP-05 | Ore Sorter Bin Area Sump Pump | Yes | New | Weir Pty Ltd | Warman 65-QV-SP | Type: Centrifugal submersible pump<br>Duty: 40 m³/h @ 15 m TDH |
| 125-PP-06 | Ore Sorter Area Sump Pump 1 | Yes | New | Weir Pty Ltd | Warman 65-QV-SP | Type: Centrifugal submersible pump<br>Duty: 40 m³/h @ 5.4 m TDH |
| 125-PP-07 | Ore Sorter Area Sump Pump 2 | Yes | New | Weir Pty Ltd | Warman 65-QV-SP | Type: Centrifugal submersible pump<br>Duty: 40 m³/h @ 5.4 m TDH |
| 125-PP-08 | Ore Sorter Area Sewerage Pump 1 | Yes | New | | Electro- Submersible Macerator Pump | Type: Elector-submersible pump<br>Duty: 15 m³/h @ 12.7 m TDH |
| 125-PP-09 | Ore Sorter Area Sewerage Pump 2 | Yes | New | | Electro- Submersible Macerator Pump | Type: Elector-submersible pump<br>Duty: 15 m³/h @ 12.7 m TDH |
| 125-RV-01 | Ore Sorter Dust Collector Rotary Valve | Yes | New | Camfil | part of dust collector package | |
| 125-SA-01 | Ore Sorter Reject Sampling Station | Yes | New | FLSmith | Vendor Package | Supplied with control panel |
| 125-SA-01A | Ore Sorter Reject Primary Sampler | Yes | New | FLSmith | BDLS20-1500 | Spoon type with bottom dump bucket |
| 125-SN-01 | Pebble Ore Sorter 1 Dewatering Screen | Yes | New | Vibramech | | Type: Single Deck Dewatering Screen & Feeder<br>Size: 1200x3000-4064 |
| 125-SN-02 | Pebble Ore Sorter 2 Dewatering Screen | Yes | New | Vibramech | | Type: Single Deck Dewatering Screen & Feeder<br>Size: 1200x3000-4064 |
| 125-SN-03 | Pebble Ore Sorter 3 Dewatering Screen | Yes | New | Vibramech | | Type: Single Deck Dewatering Screen & Feeder<br>Size: 1200x3000-4064 |
| 125-SN-04 | Pebble Ore Sorter 4 Dewatering Screen | Yes | New | Vibramech | | Type: Single Deck Dewatering Screen & Feeder<br>Size: 1200x3000-4064 |
| 125-SN-05 | Standby Ore Sorter Dewatering Screen | Yes | New | Vibramech | | Type: Single Deck Dewatering Screen & Feeder<br>Size: 1200x3000-4064 |
| 125-SN-06 | Cobble Ore Sorter 1 Dewatering Screen | Yes | New | Vibramech | | Type: Single Deck Dewatering Screen & Feeder<br>Size: 1200x3000-4064 |
| 125-SN-07 | Cobble Ore Sorter 2 Dewatering Screen | Yes | New | Vibramech | | Type: Single Deck Dewatering Screen & Feeder<br>Size: 1200x3000-4064 |
| 125-TK-01 | Ore Sorter Area Sewerage Tank | Yes | New | Vibramech | | |
| 125-TK-02 | Ore Sorting Area Raw Water Tank | Yes | New | Forbes | HDPE 5,000 litre Water Tank | Type: Preformed flat bottom tank<br>Construction: HDPE<br>Capacity: 5 kL<br>Size: 1.85 m ø x 2.348 m H |
| 125-WT-01 | Pebble Transfer Conveyor 2 Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-22 | Type: Dual idler weigh scale 800mm wide belt<br>Accuracy: ±0.5% |
| 125-WT-02 | Cobble Transfer Conveyor 2 Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-22 | Type: Dual idler weigh scale 800mm wide belt<br>Accuracy: ±0.5% |

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| 125-WT-03 | Pebble Ore Sorter 1 Conveyor Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-22 | Type: Dual idler weigh scale 600mm wide belt<br>Accuracy: ±0.5% |
| 125-WT-04 | Standby Ore Sorter Conveyor Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-22 | Type: Dual idler weigh scale 600mm wide belt<br>Accuracy: ±0.5% |
| 125-WT-05 | Cobble Ore Sorter 1 Conveyor Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-22 | Type: Dual idler weigh scale 600mm wide belt<br>Accuracy: ±0.5% |
| 125-WT-06 | Ore Sorter Product Conveyor 3 Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-22 | Type: Dual idler weigh scale 800mm wide belt<br>Accuracy: ±0.5% |
| 125-WT-07 | Ore Sorter Reject Conveyor 2 Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-14 | Type: Four idler weigh scale 800mm wide belt<br>Accuracy: ±0.25% (OIML Class 0.5) |
| **AREA 130** | **TERTIARY CRUSHING** | **Yes** | | | | |
| 130-BD-01 | Tertiary Crusher Area Switchroom | | | Eaton | Container | Type: Transportable Building<br>Size: 40' High Cube Shipping Container |
| 130-BN-01 | Tertiary Tramp Metal Bin | | | | | Type: Skip bin (Suitable for forklift)<br>Capacity: TBC m³ |
| 130-BN-02 | Tertiary Crusher Surge Bin | | | Centristic | Fabricated | Construction: 6mm carbon steel lined with 12 mm thick Hardox 400 wearplate<br>Live Capacity: 42 t (21 t per crusher) |
| 130-BU-01 | Tertiary Tramp Metal Bunker | | | Dawnus Construction Holdings | Concrete Bunker | Construction: Concrete Bunker |
| 130-CH-01 | Metal Detector Tramp Metal Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel unlined |
| 130-CH-02 | Tertiary Crusher Feed Conveyor Head Chute | | | Centristic | Fabricated | Type: Bifurcating chute w/ pneumatically actuated gates<br>Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate and 50x50 Hardox 400 lip billets |
| 130-CH-03 | Tertiary Crusher 1 Feed Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate and 50x50 Hardox 400 lip billets |
| 130-CH-04 | Tertiary Crusher 1 Discharge Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate and 50x50 Hardox 400 lip billets |
| 130-CH-05 | Tertiary Crusher 2 Feed Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate and 50x50 Hardox 400 lip billets |
| 130-CH-06 | Tertiary Crusher 2 Discharge Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate and 50x50 Hardox 400 lip billets |
| 130-CH-07 | Tertiary Crusher Discharge Conveyor Head Chute | Yes | Existing replaced | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 20mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 130-CH-08 | Tertiary Tramp Metal Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel unlined |
| 130-CR-03 | Tertiary Crusher 1 | | | Sandvik | CH660F | Type: Cone Crusher<br>Duty: 291 dry tph (soft) and 367 dry tph (hard)<br>Capacity: 350 tph<br>CSS: 17 mm |
| 130-CR-03a | Tertiary Crusher 1 Lubrication Oil Pump | | | Sandvik | | Part of Crusher Package |
| 130-CR-03b | Tertiary Crusher 1 Hydroset Pump | | | Sandvik | | Part of Crusher Package |
| 130-CR-03c | Tertiary Crusher 1 Oil Heaters | | | Sandvik | | Part of Crusher Package |
| 130-CR-03d | Tertiary Crusher 1 Heat Exchanger | | | Sandvik | | Part of Crusher Package |
| 130-CR-03e | Tertiary Crusher 1 Pinion shaft Lube Oil Pump | | | Sandvik | | Part of Crusher Package |
| 130-CR-03f | Tertiary Crusher 1 Overpressure Blower | | | Sandvik | | Part of Crusher Package |
| 130-CR-04 | Tertiary Crusher 2 | | | Sandvik | CH660F | Type: Cone Crusher<br>Duty: 291 dry tph (soft) and 367 dry tph (hard)<br>Capacity: 350 tph<br>CSS: 17 mm |
| 130-CR-04a | Tertiary Crusher 2 Lubrication Oil Pump | | | Sandvik | | Part of Crusher Package |
| 130-CR-04b | Tertiary Crusher 2 Hydroset Pump | | | Sandvik | | Part of Crusher Package |

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|---|---|---|---|---|---|---|
| 130-CR-04c | Tertiary Crusher 2 Oil Heaters | | | Sandvik | | Part of Crusher Package |
| 130-CR-04d | Tertiary Crusher 2 Heat Exchanger | | | Sandvik | | Part of Crusher Package |
| 130-CR-04e | Tertiary Crusher 2 Pinion shaft Lube Oil Pump | | | Sandvik | | Part of Crusher Package |
| 130-CR-04f | Tertiary Crusher 2 Overpressure Fan | | | Sandvik | | Part of Crusher Package |
| 130-CV-04 | Tertiary Crusher Feed Conveyor | Yes | Tail end modified, Reduced throughput. Weightometer added | Centristic | 1000 mm belt width 35° trough angle belt conveyor | Capacity: 308 tph (duty) 385 tph (max)<br>Belt Width: 1000 mm<br>Length: 80.5 m<br>Lift: 17.4 m<br>Speed: 2.14 m/s<br>Take-up: Gravity (1.80 t)<br>Head Pulley: Ceramic lagged |
| 130-CV-05 | Tertiary Crusher Discharge Conveyor | Yes | Tail and head end extended, reduced throughput | Centristic | 1000 mm belt width 35° trough angle belt conveyor | Capacity: 429 dry (duty) 536 tph (max)<br>Belt Width: 1000 mm<br>Length: 89.5 m<br>Lift: 17.9 m<br>Speed: 2.14 m/s<br>Take-up: Gravity (1.95 t)<br>Head Pulley: Ceramic lagged |
| 130-DB-01 | Tertiary Crushing Area 400V L+SP Distribution Board | | | | | Rating: 300kVAr |
| 130-FE-01 | Tertiary Crusher 1 Feeder | | | Hewitt Robins | UFR Feeder 1.0 x 3.8 | Type: Vibrating pan feeder<br>Design Capacity: 291 dry tph (soft) 367 dry tph (hard)<br>Max. Capacity: 450 tph<br>Size: 1.066 m wide x 3.80 m long<br>Drive Type: Twin vibrator motors |
| 130-FE-02 | Tertiary Crusher 2 Feeder | | | Hewitt Robins | UFR Feeder 1.0 x 3.8 | Type: Vibrating pan feeder<br>Design Capacity: 291 dry tph (soft) 367 dry tph (hard)<br>Max. Capacity: 450 tph<br>Size: 1.066 m wide x 3.80 m long<br>Drive Type: Twin vibrator motors |
| 130-HT-01 | Tertiary Crusher Crane | | | Street Cranes | Street ZX084-4SoEM5P074 | Type: Single girder bridge crane<br>WLL: 12.5 t<br>Span: 9.425 m<br>Travel: 10.0 m<br>Lift: 13.5 m |
| 130-MC-02 | Tertiary Crusher Area MCC | | | Eaton | Power Xpert CX | Specification: 400V, 2500A, 50kA / 1sec, Form 4b, IP31 |
| 130-MD-01 | Tertiary Crusher Metal Detector | | | Centristic | | |
| 130-MG-01 | Tertiary Crusher Magnet | | | Centristic | Eriez SE 755 SC2 | Type: Self cleaning cross belt electromagnet<br>Minimum Tramp Size: 12 mm |
| 130-PF-02 | Tertiary Crusher Area MCC Power Factor Correction | | | | | Rating: 300kVAr |
| 130-PN-09 | Tertiary Crusher Area Switchroom Communications Panel | | | | | |
| 130-PP-01 | Tertiary Crusher Area Sump Pump | | | Metso | VS50 L150 O5S | Type: Vertical centrifugal sump pump<br>Duty: 40.0 $m^3$/hr @ 18.6 m TDH<br>Consumed Power: 6.9 kW<br>Shaft Length: 1500 mm |
| 130-RE-01 | Tertiary Crusher Magnet Rectifier | | | Centristic | Eriez Rectifier Transformer Unit | Type: Combined Rectifier Transformer Unit<br>Construction: Stainless Steel |
| 130-TX-02 | Tertiary Crusher Area Transformer | | | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 2000 kVA |
| 130-WT-01 | Tertiary Crusher Feed Conveyor Weightometer | Yes | New | CustomTek | Thermo Ramsay 10-14 | Type: Dual idler weigh scale. 1000mm wide belt<br>Accuracy: ±0.5% |
| **AREA 140** | **DENSE MEDIA SEPARATION** | **Yes** | | | | |

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|---|---|---|---|---|---|---|
| 140-AG-01 | Primary DMS 1 Correct Medium Agitator | | | Mixtec | 1107 | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 47 rpm |
| 140-AG-02 | Primary DMS 2 Correct Medium Agitator | | | Mixtec | 1107 | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 47 rpm |
| 140-AG-03 | Primary DMS 1 Dilute Medium Agitator | | | Mixtec | 1107 | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 65 rpm |
| 140-AG-04 | Primary DMS 2 Dilute Medium Agitator | | | Mixtec | 1107 | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 65 rpm |
| 140-AG-05 | Secondary DMS Correct Medium Agitator | | | Mixtec | 1087 | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 75 rpm |
| 140-AG-06 | Scavenger DMS Correct Medium Agitator | | | Mixtec | 1087 | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 75 rpm |
| 140-AG-07 | Primary DMS Correct Medium Storage Agitator | | | Mixtec | | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined |
| 140-AG-08 | Sec/Scav DMS Correct Medium Storage Agitator (Future) | | | Mixtec | | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined |
| 140-BD-01 | DMS & Milling Area Switchroom | | | Eaton | Container | Type: Transportable Building<br>Size: 2 x 40' High Cube Shipping Container |
| 140-BN-01 | DMS Feed Bin | | | Ryhal Engineering | Fabricated | Construction: Carbon steel with plug welded 12 mm thick Hardox 400 liners<br>Live Capacity: 1500 t (845 m³)<br>Size: 12.4 m ø x 12.5 m cylinder height, total height approx 14.3 m |
| 140-BN-02 | Secondary DMS Feed Bin | | | Chesterfield | Fabricated | Construction: Carbon steel with plug welded 12 mm thick Hardox 400 liners<br>Live Capacity: 15 t (7.9 m³) |
| 140-BN-03 | Scavenger DMS Feed Bin | | | Chesterfield | Fabricated | Construction: Carbon steel lined with 6 mm rubber<br>Live Capacity: 15 t (7.9 m³)<br>Size: ? m W x ? m L x ? m H |
| 140-BN-04 | DMS Floats Bin 1 | | | Ryhal Engineering | Fabricated | Construction: Carbon steel with plug welded 12 mm thick Hardox 400 liners<br>Live Capacity: 2000 t (1250 m³)<br>Size: 11.4 m ø x 16 m cylinder height, total height 17.4 m |
| 140-BN-05 | DMS Floats Bin 2 | | | Ryhal Engineering | Fabricated | Construction: Carbon steel with plug welded 12 mm thick Hardox 400 liners<br>Live Capacity: 2000 t (1250 m³)<br>Size: 11.4 m ø x 16 m cylinder height, total height 17.4 m |
| 140-BN-06 | DMS Feed Tramp Metal Bin | | | | | |
| 140-CH-01 | DMS Bin Feed Conveyor 1 Head Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-02 | DMS Bin Feed Conveyor Transfer Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-03 | DMS Bin Feed Conveyor 2 Head Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-04 | DMS Feeder Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-05 | DMS Feed Preparation Screen Feed Chute | | | SP Fabrications | Fabricated | Type: Bifurcating chute w/ pneumatically actuated gates<br>Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate and 50x50 Hardox 400 lip billets |
| 140-CH-08 | Primary DMS 1 Sinks Screen Feedbox | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber c/w static screen panel |

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|---|---|---|---|---|---|---|
| 140-CH-09 | Primary DMS 1 Sinks Screen Underpan | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-11 | Primary DMS 1 Floats Screen Feedbox | | | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber and 20 mm thick ceramic tiles in impact zones c/w static wedge wire screen panel |
| 140-CH-16 | Secondary DMS Screen Feedbox | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-17 | Secondary DMS Screen Underpan | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-18 | Secondary & Scavenger DMS Screen Oversize Chute | | | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-19 | DMS Feed Preparation Screen Underpan | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-20 | Scavenger DMS Non Magnetics Distribution Launder | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-24 | Scavenger DMS Screen Feedbox | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-25 | Scavenger DMS Screen Underpan | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-27 | Primary DMS 1 Magnetics Discharge Launder | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 140-CH-28 | Primary DMS 2 Non Magnetics Distribution Launder | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-29 | Primary DMS 1 Densifier Overflow Splitter Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-30 | DMS Floats Bin Feed Conveyor Head Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-32 | Primary DMS Medium Distribution Launder | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-33 | Primary DMS 1 Non Magnetics Distribution Launder | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-36 | Primary DMS 2 Sinks Screen Feedbox | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber and 12 mm thick Hardox 400 bolted wearplate in impact zones c/w 0.4 mm x 8.8 mm aperture static screen panel |
| 140-CH-37 | Primary DMS 2 Sinks Screen Underpan | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-39 | Primary DMS 2 Floats Screen Feedbox | | | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber and 20 mm thick ceramic tiles in impact zones c/w static wedge wire screen panel |
| 140-CH-42 | Primary DMS 2 Magnetics Discharge Launder | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 140-CH-43 | Primary DMS 2 Densifier Overflow Splitter Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-44 | Secondary DMS Magnetics Discharge Launder | | | SP Fabrications | Fabricated | Construction: 6 mm stainless steel (Grade 304) |
| 140-CH-45 | Secondary DMS Densifier Overflow Splitter Box | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-46 | Scavenger DMS Magnetics Discharge Launder | | | SP Fabrications | Fabricated | Construction: 6 mm stainless steel (Grade 304) |
| 140-CH-47 | Scavenger DMS Densifier Overflow Splitter Box | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-48 | DMS Feed Conveyor Head Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-49 | Primary DMS Floats Transfer Conveyor Head Chute | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-50 | Secondary & Scavenger DMS Medium Distribution Launder | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-51 | Secondary DMS Non Magnetics Distribution Launder | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-52 | Secondary DMS Floats Screen Medium Splitter Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |

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|---|---|---|---|---|---|---|
| 140-CH-53 | Scavenger DMS Floats Screen Medium Splitter Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-54 | Primary DMS 1 Densifier Underflow Splitter Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-55 | Primary DMS 2 Densifier Underflow Splitter Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-56 | Secondary DMS Densifier Underflow Splitter Box | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-57 | Scavenger DMS Densifier Underflow Splitter Box | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-60 | DMS Floats Bin Bidirectional Conveyor Head Chute 1 | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-61 | DMS Floats Bin Bidirectional Conveyor Head Chute 2 | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick Hardox 400 bolted wearplate, rock boxed with 50x50 Hardox 400 lip billets |
| 140-CH-62 | DMS Floats Bin 1 Cast In Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-63 | DMS Floats Bin 2 Cast In Chute | | | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-64 | DMS Floats Bin 1 Loading Gate Feed Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-65 | DMS Floats Bin 2 Loading Gate Feed Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-66 | DMS Floats Bin 1 Loading Gate 1 Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-67 | DMS Floats Bin 1 Loading Gate 2 Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-68 | DMS Floats Bin 2 Loading Gate 1 Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-69 | DMS Floats Bin 2 Loading Gate 2 Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-70 | Secondary DMS Feed Conveyor Head Chute | | | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted plate |
| 140-CH-71 | DMS Feeder 1 Cast-in Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-72 | DMS Feeder 2 Cast-in Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-73 | DMS Feeder 1 Feed Chute | | | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-74 | DMS Feeder 2 Feed Chute | | | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-75 | Primary DMS Feed Sampler Feeder Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-76 | Primary DMS Feed Secondary Sampler Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-78 | Primary DMS Floats Sampler Feeder Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-77 | Scavenger DMS Floats Purge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-CH-79 | Primary DMS Floats Secondary Sampler Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-80 | DMS Stockpile Feed Conveyor Feed Chute | | | | | |
| 140-CH-81 | DMS Stockpile Feed Conveyor Discharge Chute | | | | | |
| 140-CH-82 | DMS Stockpile Reclaim Conveyor Discharge Chute | | | | | |
| 140-CH-83 | Primary DMS 1 Floats Box | | | | | |
| 140-CH-84 | Primary DMS 2 Floats Box | | | | | |
| 140-CH-85 | Primary DMS 1 Sinks Box | | | | | |

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|---|---|---|---|---|---|---|
| 140-CH-86 | Primary DMS 2 Sinks Box | | | | | |
| 140-CH-87 | Primary DMS 1 Cyclone Feed Primary Distributor | | | | | |
| 140-CH-88 | Primary DMS 1 Cyclone Feed Secondary Distributor 1 | | | | | |
| 140-CH-89 | Primary DMS 1 Cyclone Feed Secondary Distributor 2 | | | | | |
| 140-CH-90 | Primary DMS 2 Cyclone Feed Primary Distributor | | | | | |
| 140-CH-91 | Primary DMS 2 Cyclone Feed Secondary Distributor 1 | | | | | |
| 140-CH-92 | Primary DMS 2 Cyclone Feed Secondary Distributor 2 | | | | | |
| 140-CH-93 | DMS Tramp Metal Discharge Chute | | | | | |
| 140-CH-91 | Primary DMS 1 Floats Screen Underpan | TWL | New replaces CH-12 | | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick rubber |
| 140-CH-92 | Primary DMS 1 Floats Screen Oversize Chute | TWL | New replaces CH-13 | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Ceramic liners and rock boxes |
| 140-CH-93 | Primary DMS 2 Floats Screen Underpan | TWL | New replaces CH-40 | | Fabricated | Construction: 6 mm carbon steel lined with 12 mm thick rubber |
| 140-CH-94 | Primary DMS 2 Floats Screen Oversize Chute | TWL | New replaces CH-41 | | Fabricated | Construction: 6 mm carbon steel lined with 20 mm thick Ceramic liners and rock boxes |
| 140-CH-95 | Primary DMS Sinks Screen Oversize Chute | TWL | New replaces CH-10 sampler fitted | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber and 20mm thick ceramic tiles in impact zones |
| 140-CH-96 | Primary DMS Sinks Primary Sampler Discharge Chute | TWL | New | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-97 | Primary DMS Sinks Secondary Sampler Feeder Discharge Chute | TWL | New | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-98 | Primary DMS Sinks Primary Secondary Discharge Chute | TWL | New | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-99 | Secondary DMS Floats Sampler Feed Chute | TWL | New | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-100 | Secondary DMS Floats Sampler Discharge Chute | TWL | New | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-101 | Secondary DMS Floats Secondary Sampler Feeder Discharge Chute | TWL | New | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CH-102 | Secondary DMS Floats Secondary Sampler Discharge Chute | TWL | New | | Fabricated | Construction: 6 mm carbon steel with 12 mm thick Hardox 400 bolted wearplate |
| 140-CV-06 | DMS Bin Feed Conveyor 1 | Yes | Conveyor shortened for access and skirt length modified for new feed arrangements, reduced throughput | Centristic | 800 mm belt width 35° trough angle belt conveyor | Capacity: 156 tph (duty) 195 tph (max)<br>Belt Width: 800 mm<br>Length: 82.0 m<br>Lift: 13.5 m<br>Speed: 2.0 m/s<br>Take-up: Gravity (1.20 t)<br>Pulleys: Ceramic lagged pulleys |
| 140-CV-07 | DMS Bin Feed Conveyor 2 | | | Centristic | 800 mm belt width 35° trough angle belt conveyor | Capacity: 461 tph (duty) 554 tph (max)<br>Belt Width: 800 mm<br>Length: 57.75 m<br>Lift: 12.02 m<br>Speed: 2.0 m/s<br>Take-up: Gravity (1.23 t)<br>Pulleys: Ceramic lagged pulleys |
| 140-CV-08 | DMS Feed Conveyor | | | Centristic | 1000 mm belt width 35° trough angle belt conveyor | Capacity: 461 tph (duty) 554 tph (max)<br>Belt Width: 1000 mm<br>Length: 62.50 m<br>Lift: 11.02 m<br>Speed: 1.2 m/s<br>Take-up: Gravity (1.84 t)<br>Pulleys: Ceramic lagged pulleys |

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|---|---|---|---|---|---|---|
| 140-CV-09 | Secondary DMS Feed Conveyor | | | | 600 mm belt width 35° trough angle | Capacity: 60 tph (duty) 290 tph (max)<br>Belt Width: 600 mm<br>Pulley Centres: 14.5 m<br>Slope: 8°<br>Speed: 1.3 m/s<br>Take-up: Screw<br>Pulleys: Rubber lagged pulleys |
| 140-CV-10 | Primary DMS Floats Transfer Conveyor | | | Centristic | 800 mm belt width 35° trough angle belt conveyor | Capacity: 389 tph (duty) 466 tph (max)<br>Belt Width: 800 mm<br>Length: 19.09 m<br>Lift: 0.00 m<br>Speed: 2.0 m/s<br>Take-up: Screw<br>Pulleys: Rubber lagged pulleys |
| 140-CV-11 | DMS Floats Bin Feed Conveyor | | | Centristic | 800 mm belt width 35° trough angle belt conveyor | Capacity: 389 tph (duty) 466 tph (max)<br>Belt Width: 800 mm<br>Length: 176.10 m<br>Lift: 24.10 m<br>Speed: 2.0 m/s<br>Take-up: Gravity (1.79 t)<br>Pulleys: Ceramic lagged pulleys |
| 140-CV-12 | DMS Floats Bin Bidirectional Conveyor | | | Centristic | 800 mm belt width 35° trough angle belt conveyor | Capacity: 389 tph (duty) 466 tph (max)<br>Belt Width: 800 mm<br>Length: 12.40 m<br>Lift: 0.00 m<br>Speed: 2.0 m/s<br>Take-up: Screw<br>Pulleys: Rubber lagged pulleys |
| 140-CV-13 | DMS Stockpile Feed Conveyor | | | | | |
| 140-CV-14 | DMS Stockpile Reclaim Conveyor | | | | | |
| ~~140-CY-01~~ | ~~Primary DMS 1 Cyclone Cluster~~ | | | ~~Multotec~~ | ~~D3-51/3 Distributor with MAX510-20-1/AB-A/155 Ceramic Lined Cyclones~~ | ~~Duty: 772.5 m³/h~~<br>~~Operating Density: 2.70 SG~~<br>~~Cyclone Size: 510 mm~~<br>~~Operating Pressure: 201 kPa~~<br>~~Arrangement: 3 Operating, 0 Standby~~ |
| ~~140-CY-02~~ | ~~Primary DMS 2 Cyclone Cluster~~ | | | ~~Multotec~~ | ~~D3-51/3 Distributor with MAX510-20-1/AB-A/155 Ceramic Lined Cyclones~~ | ~~Duty: 772.5 m³/h~~<br>~~Operating Density: 2.70 SG~~<br>~~Cyclone Size: 510 mm~~<br>~~Operating Pressure: 201 kPa~~<br>~~Arrangement: 3 Operating, 0 Standby~~ |
| 140-CY-06 | Primary DMS 1 Cyclone Cluster | | | Multotec | HY420-20-0/B-A/125 c/w 300 VEX (LH) | |
| 140-CY-07 | Primary DMS 2 Cyclone Cluster | | | Multotec | HY420-20-0/B-A/125 c/w 300 VEX (LH) | |

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|---|---|---|---|---|---|---|
| 140-CY-03 | Secondary DMS Cyclone Cluster | | | Multotec | D2-36/2 Distributor with C360-20-1 Cyclones c/w 90 I/D Spigots & 400 V/EXT | Duty: 187.7 m³/h<br>Operating Density: 3.30 SG<br>Cyclone Size: 350 mm<br>Operating Pressure: 192 kPa<br>Arrangement: 2 Operating, 0 Standby |
| 140-CY-04 | Scavenger DMS Cyclone Cluster | | | Multotec | D2-36/2 Distributor with C360-20-1 Cyclones c/w 90 I/D Spigots & 400 V/EXT | Duty: 187.7 m³/h<br>Operating Density: 3.30 SG<br>Cyclone Size: 350 mm<br>Operating Pressure: 192 kPa<br>Arrangement: 2 Operating, 0 Standby |
| 140-CY-05 | DMS Effluent Dewatering Cyclone Cluster | | | Multotec | D7-50/6 Distributor with HC500-30-0 Cyclones c/w 120HS Spigots | Duty: 769 m³/h<br>Cut Size: 39 µm (soft) 39 µm (hard)<br>Cyclone Size: 500 mm<br>Operating Pressure: 50 kPa<br>Arrangement: 5 Operating, 1 Standby |
| 140-DB-01 | DMS & Milling Area 400V L+SP Distribution Board | | | | | Rating: 300kVAr |
| 140-DE-01 | Primary DMS 1 Densifier | | | Multotec | 2 x D4-20/2 c/w 2 x PC200-180-1/A-C/80 | Duty: 114 m³/h<br>Densifier Size: 200 mm<br>Operating Pressure: 265 kPa |
| 140-DE-02 | Primary DMS 2 Densifier | | | Multotec | 2 x D4-20/2 c/w 2 x PC200-180-1/A-C/80 | Duty: 114 m³/h<br>Densifier Size: 200 mm<br>Operating Pressure: 265 kPa |
| 140-DE-03 | Secondary DMS Densifier | | | Multotec | 2 x D4-10/2 c/w 2 x CN100-180-2/A-C/45 | Duty: 28 m³/h<br>Densifier Size: 100 mm<br>Operating Pressure: 325 kPa |
| 140-DE-04 | Scavenger DMS Densifier | | | Multotec | 2 x D4-10/2 c/w 2 x CN100-180-2/A-C/45 | Duty: 28 m³/h<br>Densifier Size: 100 mm<br>Operating Pressure: 325 kPa |
| 140-FE-01 | DMS Feeder 1 | | | Hewitt Robins | UFR Feeder 1.0 x 3.8 | Type: Vibrating pan feeder<br>Design Capacity: 154 dry tph (soft) 201 dry tph (hard)<br>Max. Capacity: 450 tph<br>Size: 1.066 m wide x 3.80 m long<br>Drive Type: Twin vibrator motors |
| 140-FE-02 | DMS Feeder 2 | | | Hewitt Robins | UFR Feeder 1.0 x 3.8 | Type: Vibrating pan feeder<br>Design Capacity: 154 dry tph (soft) 201 dry tph (hard)<br>Max. Capacity: 450 tph<br>Size: 1.066 m wide x 3.80 m long<br>Drive Type: Twin vibrator motors |
| 140-FE-03 | Secondary DMS Feeder | | | Hewitt Robins | UFR Feeder 0.9 x 1.5 | Type: Vibrating pan feeder<br>Design Capacity: 31.7 dry tph (soft) 58.9 dry tph (hard)<br>Max. Capacity: 75 tph<br>Size: 0.90 m wide x 1.50 m long<br>Drive Type: Twin vibrator motors |
| 140-FE-04 | Scavenger DMS Feeder | | | Hewitt Robins | UFR Feeder 0.9 x 1.5 | Type: Vibrating pan feeder<br>Design Capacity: 28.6 dry tph (soft) 50.5 dry tph (hard)<br>Max. Capacity: 75 tph<br>Size: 0.90 m wide x 1.50 m long<br>Drive Type: Twin vibrator motors |
| 140-FE-05 | Primary DMS Feed Sampler Feeder | | | Multotec | Multotec 450-SFC-1500 | Type: Belt feeder<br>Size: 450 mm wide x 1500 mm long<br>Speed: 0.15 m/s<br>Drive Type: Electromechanical |
| 140-FE-06 | Primary DMS Floats Sampler Feeder | | | Multotec | Multotec 450-SFC-1500 | Type: Belt feeder<br>Size: 450 mm wide x 1500 mm long<br>Speed: 0.15 m/s<br>Drive Type: Electromechanical |
| 140-FE-07 | DMS Bin Feed Conveyor 2 Plough Feeder | | | | | |

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|---|---|---|---|---|---|---|
| 140-FE-08 | DMS Stockpile Reclaim Feeder | | | | | |
| 140-FE-11 | Primary DMS Sinks Secondary Sampler Feeder | TWL | New | Consep | Consep BFT300-1.33 Flat Bed Feeder | Belt feeder |
| 140-FE-12 | Secondary DMS Floats Secondary Sampler Feeder | TWL | New | Consep | Consep BFT300-1.33 Flat Bed Feeder | Belt feeder |
| 140-GT-01 | DMS Floats Bin 1 Loading Gate 1 | | | Pebco | SGDW-48-PH-FLD-CS-34-FE-M | Type: Water capture slide gate<br>Throughput: 315 tph (soft) 389 tph (hard)<br>Opening Size: 1200 x 1200 mm<br>Actuator: 152 mm ø x 1257 mm stroke |
| 140-GT-02 | DMS Floats Bin 1 Loading Gate 2 | | | Pebco | SGDW-48-PH-FLD-CS-34-FE-M | Type: Water capture slide gate<br>Throughput: 315 tph (soft) 389 tph (hard)<br>Opening Size: 1200 x 1200 mm<br>Actuator: 152 mm ø x 1257 mm stroke |
| 140-GT-02a | DMS Floats Bin 1 Loading Gate Hydraulic Power Pack | | | Pebco | | Type: Skid mounted carbon steel tank c/w heaters, pumps accumulators & filters<br>Capacity: 200 L |
| 140-GT-02b | DMS Floats Bin 1 Loading Gate Hydraulic Oil Heater | | | Pebco | | Part of Loading Gate Package |
| 140-GT-02c | DMS Floats Bin 1 Loading Gate Hydraulic Oil Pump | | | Pebco | | Part of Loading Gate Package |
| 140-GT-03 | DMS Floats Bin 2 Loading Gate 1 | | | Pebco | SGDW-48-PH-FLD-CS-34-FE-M | Type: Water capture slide gate<br>Throughput: 315 tph (soft) 389 tph (hard)<br>Opening Size: 1200 x 1200 mm<br>Actuator: 152 mm ø x 1257 mm stroke |
| 140-GT-04 | DMS Floats Bin 2 Loading Gate 2 | | | Pebco | SGDW-48-PH-FLD-CS-34-FE-M | Type: Water capture slide gate<br>Throughput: 315 tph (soft) 389 tph (hard)<br>Opening Size: 1200 x 1200 mm<br>Actuator: 152 mm ø x 1257 mm stroke |
| 140-GT-04a | DMS Floats Bin 2 Loading Gate Hydraulic Power Pack | | | Pebco | | Type: Skid mounted carbon steel tank c/w heaters, pumps accumulators & filters<br>Capacity: 200 L |
| 140-GT-04b | DMS Floats Bin 2 Loading Gate Hydraulic Oil Heater | | | Pebco | | Part of Loading Gate Package |
| 140-GT-04c | DMS Floats Bin 2 Loading Gate Hydraulic Oil Pump | | | Pebco | | Part of Loading Gate Package |
| 140-GT-05 | DMS Feed Bin Isolating Gate 1 | | | Pebco | SGRDW-63x34-PH-CS-34-UH-M | Type: Water capture slide gate<br>Throughput: 154 dry tph (soft) 200 dry tph (hard)<br>Opening Size: 1600 x 860 mm<br>Actuator: TBC mm ø x TBC mm stroke |
| 140-GT-06 | DMS Feed Bin Isolation Gate 2 | | | Pebco | SGRDW-63x34-PH-CS-34-UH-M | Type: Water capture slide gate<br>Throughput: 154 dry tph (soft) 200 dry tph (hard)<br>Opening Size: 1600 x 860 mm<br>Actuator: TBC mm ø x TBC mm stroke |
| 140-GT-06a | DMS Feed Bin Isolation Gate Hydraulic Power Pack | | | Pebco | | Type: Skid mounted carbon steel tank c/w heaters, pump & filters |
| 140-GT-06b | DMS Feed Bin Isolation Gate Hydraulic Oil Heater | | | Pebco | | Part of Isolation Gate Package |
| 140-GT-06c | DMS Feed Bin Isolation Gate Hydraulic Oil Pump | | | Pebco | | Part of Isolation Gate Package |
| 140-GT-07 | DMS Stockpile Main Gate | | | | | |
| 140-GT-08 | DMS Stockpile Emergency Gate | | | | | |
| 140-HP-02 | Primary DMS 1 Correct Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 12.5 m³ |

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|---|---|---|---|---|---|---|
| 140-HP-03 | Primary DMS 1 Dilute Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 5 m³ |
| 140-HP-04 | Secondary DMS Mixing Box | | | Chesterfield | Mixing Box | Construction: 6 mm carbon steel lined with 6 mm thick rubber (12 mm on feed launder) |
| 140-HP-05 | Secondary DMS Correct Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 3.5 m³ |
| 140-HP-07 | Scavenger DMS Mixing Box | | | Chesterfield | Mixing Box | Construction: 6 mm carbon steel lined with 6 mm thick rubber (12 mm on feed launder) |
| 140-HP-08 | Scavenger DMS Correct Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 4.3 m³ |
| 140-HP-11 | DMS Effluent Hopper | | | SP Fabrications | Cylindrical Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 10 m³ |
| 140-HP-12 | Scavenger DMS Dilute Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 2 m³ |
| 140-HP-13 | Secondary DMS Dilute Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 2 m³ |
| 140-HP-15 | Primary DMS 2 Correct Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 12.5 m³ |
| 140-HP-16 | Primary DMS 2 Dilute Medium Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 5 m³ |
| 140-HP-17 | Primary DMS Correct Medium Storage Hopper | | | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 37 m³ |
| 140-HP-18 | Primary DMS Correct Medium Storage Distribution Box | | | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-HP-19 | Sec/Sav DMS Correct Medium Storage Hopper (Future) | | | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 14m³ |
| 140-HP-20 | Sec/Scav DMS Correct Medium Storage Distribution Box (Future) | | | | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 140-HP-21 | DMS Stockpile Reclaim Hopper | | | | | |
| 140-HP-31 | Primary DMS Mixing Box | TWL | New replaces HP-01 | | Mixing Box | Construction: 6 mm carbon steel lined with 6 mm thick rubber with 20mm thick ceramic liners on high wear areas |
| 140-HT-01 | Wet Plant Maintenance Crane | | | Street Cranes | Street ZX084-4SoEM5O063 | Type: Single girder bridge crane<br>WLL: 10 t<br>Span: 18.88 m<br>Travel: 88 m<br>Lift: 19.2 m |
| 140-HT-03 | DMS Feed Bin Davit Crane | | | Alpha Lifting Services | Verlinde Eurostyle VAT | Type: Wall mounted jib crane (Manual)<br>WLL: 2 t<br>Radius: 4.7 m<br>Slew Angle: 180° |
| 140-HT-04 | DMS Floats Bin Davit Crane | | | Alpha Lifting Services | Verlinde Eurostyle VAT | Type: Wall mounted jib crane (Manual)<br>WLL: 2 t<br>Radius: 4.8 m<br>Slew Angle: 180° |
| 140-MC-04 | DMS & Milling Area MCC | | | Eaton | Power Xpert CX | Specification: 400V, 3200A, 50kA / 1sec, Form 4b, IP31 |
| 140-MG-01 | DMS Feed Tramp Metal Magnet | | | | | |
| 140-MT-01 | Primary DMS 1 Magnetic Separator | | | Eriez Magnetics | HMDA 36.120 SL | Type: Counter current wet drum magnetic separator<br>Feed Rate: 65.0 dry tph (259.0 m³/h)<br>Size: 914 mm ø x 3048 mm W<br>Magnetic Field Strength: 950 Gauss @ 50mm |
| 140-MT-02 | Primary DMS 2 Magnetic Separator | | | Eriez Magnetics | HMDA 36.120 SL | Type: Counter current wet drum magnetic separator<br>Feed Rate: 65.0 dry tph (259.0 m³/h)<br>Size: 914 mm ø x 3048 mm W<br>Magnetic Field Strength: 950 Gauss @ 50mm |
| 140-MT-03 | Secondary DMS Magnetic Separator | | | Eriez Magnetics | HMDA 36.48 SL | Type: Counter current wet drum magnetic separator<br>Feed Rate: 22.6 dry tph (89.1 m³/h)<br>Size: 914 mm ø x 1219 mm W<br>Magnetic Field Strength: 950 Gauss @ 50mm |

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|---|---|---|---|---|---|---|
| 140-MT-04 | Scavenger DMS Magnetic Separator | | | Eriez Magnetics | HMDA 36.48 SL | Type: Counter current wet drum magnetic separator<br>Feed Rate: 22.1 dry tph (89.0 m³/h)<br>Size: 914 mm ø x 1219 mm W<br>Magnetic Field Strength: 950 Gauss @ 50mm |
| 140-MT-05 | Primary DMS 1 Demagnetising Coil | | | Eriez Magnetics | Eriez 6DRW | Throughput: 60 tph (26 m³/h)<br>Size: DN150 |
| 140-MT-06 | Primary DMS 2 Demagnetising Coil | | | Eriez Magnetics | Eriez 6DRW | Throughput: 60 tph (26 m³/h)<br>Size: DN150 |
| 140-MT-07 | Secondary DMS Demagnetising Coil | | | Eriez Magnetics | Eriez 4DRW | Throughput: 23 tph (10 m³/h)<br>Size: DN100 |
| 140-MT-08 | Scavenger DMS Demagnetising Coil | | | Eriez Magnetics | Eriez 4DRW | Throughput: 23 tph (10 m³/h)<br>Size: DN100 |
| 140-PF-04 | DMS & Milling Area MCC Power Factor Correction | | | | | Rating: 300kVAr |
| 140-PN-10 | DMS & Milling Area Switchroom Communications Panel | | | | | |
| 140-PP-01 | Primary DMS 1 Cyclone Feed Pump | | | Metso | HR250 ENR-S C5 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 1502 - 1727 tph at 75 %w/w<br>Duty: 759 - 873 m³/h @ 26.2 - 26.5 m TDH<br>Consumed Power: 245.3 kW |
| 140-PP-02 | Primary DMS 2 Cyclone Feed Pump | | | Metso | HR250 ENR-S C5 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 1502 - 1727 tph at 75 %w/w<br>Duty: 759 - 873 m³/h @ 26.2 - 26.5 m TDH<br>Consumed Power: 245.3 kW |
| 140-PP-03 | Primary DMS 1 Correct Medium Pump | | | Metso | XR300 ENR-S C5D85 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 1523 - 1828 tph at 74 %w/w<br>Duty: 756 - 907 m³/h @ 11.7 - 13.1 m TDH<br>Consumed Power: 137.5 kW |
| 140-PP-04 | Primary DMS 2 Correct Medium Pump | | | Metso | XR300 ENR-S C5D85 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 1523 - 1828 tph at 74 %w/w<br>Duty: 756 - 907 m³/h @ 11.7 - 13.1 m TDH<br>Consumed Power: 137.5 kW |
| 140-PP-05 | Primary DMS 1 Densifier Feed Pump | | | Metso | HR100 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 229 - 275 tph at 74 %w/w<br>Duty: 114 - 136 m³/h @ 32.8 - 34.1 m TDH<br>Consumed Power: 56.7 kW |
| 140-PP-06 | Primary DMS 2 Densifier Feed Pump | | | Metso | HR100 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 229 - 275 tph at 74 %w/w<br>Duty: 114 - 136 m³/h @ 32.8 - 34.1 m TDH<br>Consumed Power: 56.7 kW |
| 140-PP-07 | Primary DMS 1 Dilute Medium Pump | | | Metso | HR200 ENR-S C5 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 62.3 - 74.8 tph at 64 %w/w<br>Duty: 267 - 320 m³/h @ 20.3 - 21.3 m TDH<br>Consumed Power: 57.5 kW |
| 140-PP-08 | Primary DMS 2 Dilute Medium Pump | | | Metso | HR200 ENR-S C5 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 62.3 - 74.8 tph at 64 %w/w<br>Duty: 267 - 320 m³/h @ 20.3 - 21.3 m TDH<br>Consumed Power: 57.5 kW |
| 140-PP-09 | DMS Effluent Pump 1 | | | Metso | HR250 ENR-S C5 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 6.7 - 8 tph at 1 %w/w<br>Duty: 666 - 799 m³/h @ 32.6 - 33.5 m TDH<br>Consumed Power: 93.5 kW |
| 140-PP-10 | DMS Effluent Pump 2 | | | Metso | HR250 ENR-S C5 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 6.7 - 8 tph at 1 %w/w<br>Duty: 666 - 799 m³/h @ 32.6 - 33.5 m TDH<br>Consumed Power: 93.5 kW |
| 140-PP-11 | Secondary DMS Cyclone Feed Pump | | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 496 - 595 tph at 82.44 %w/w<br>Duty: 183 - 219 m³/h @ 25.7 - 26.1 m TDH<br>Consumed Power: 82.6 kW |

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| 140-PP-12 | Secondary DMS Correct Medium Pump | | | Metso | HR200 ENR-S C5D85 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 503 - 604 tph at 82 %w/w<br>Duty: 183 - 220 m³/h @ 7.0 - 7.9 m TDH<br>Consumed Power: 26.9 kW |
| 140-PP-13 | Secondary DMS Densifier Feed Pump | | | Metso | HR75 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 75.4 - 90.5 tph at 82 %w/w<br>Duty: 27 - 33 m³/h @ 26.1 - 26.7 m TDH<br>Consumed Power: 17.4 kW |
| 140-PP-14 | Secondary DMS Dilute Medium Pump | | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 23.4 - 28.08 tph at 77.5 %w/w<br>Duty: 105 - 126 m³/h @ 18.5 - 19.6 m TDH<br>Consumed Power: 32.6 kW |
| 140-PP-15 | Scavenger DMS Cyclone Feed Pump | | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 485 - 582 tph at 82 %w/w<br>Duty: 182 - 218 m³/h @ 27.7 - 28.9 m TDH<br>Consumed Power: 90.1 kW |
| 140-PP-16 | Scavenger DMS Correct Medium Pump | | | Metso | HR200 ENR-S C5D85 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 497 - 596 tph at 82 %w/w<br>Duty: 181 - 217 m³/h @ 6.9 - 7.8 m TDH<br>Consumed Power: 26.2 kW |
| 140-PP-17 | Scavenger DMS Densifier Feed Pump | | | Metso | HR75 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 74.6 - 89.5 tph at 82 %w/w<br>Duty: 27 - 33 m³/h @ 26.1 - 26.7 m TDH<br>Consumed Power: 17.4 kW |
| 140-PP-18 | Scavenger DMS Dilute Medium Pump | | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 7.41 - 8.89 tph at 77.9 %w/w<br>Duty: 98 - 118 m³/h @ 18.1 - 19.1 m TDH<br>Consumed Power: 30.7 kW |
| 140-PP-19 | DMS Area Sump Pump | | | Metso | VS100 L180 O3S | Type: Vertical centrifugal sump pump<br>Duty: 90.0 m³/hr @ 19.4 m TDH<br>Consumed Power: 22.1 kW<br>Shaft Length: 1800 mm |
| 140-PP-20 | DMS Floats Bin Area Sump Pump | | | Metso | VS50 L150 O5S | Type: Vertical centrifugal sump pump<br>Duty: 40.0 m³/hr @ 19.4 m TDH<br>Consumed Power: 6.5 kW<br>Shaft Length: 1500 mm |
| 140-PP-21 | DMS Feed Bin Area Sump Pump | | | Metso | VS50 L120 O5S | Type: Vertical centrifugal sump pump<br>Duty: 20.0 m³/hr @ 15 m TDH<br>Consumed Power: 4.3 kW<br>Shaft Length: 1200 mm |
| 140-PP-22 | Primary DMS Correct Medium Storage Transfer Pump | | | Metso | HR100 LNR-S C4 TRB | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: xxx tph at xx %w/w<br>Duty: xx m³/h @ xx m TDH<br>Consumed Power: xx kW |
| 140-PP-23 | Primary DMS Correct Medium Storage Sump Pump | | | Metso | VS50 L150 O5HC | Type: Vertical centrifugal sump pump<br>Duty: xx m³/h @ xx m TDH<br>Consumed Power: xx kW<br>Shaft Length: 1500 mm |
| 140-PP-24 | Sec/Scav DMS Correct Medium Storage Transfer Pump (Future) | | | Metso | HR75 LNR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: xxx tph at xx %w/w<br>Duty: xx m³/h @ xx m TDH<br>Consumed Power: xx kW |
| 140-PP-25 | Sec/Scav DMS Correct Medium Storage Sump Pump (Future) | | | Metso | VS50 L150 O5HC | Type: Vertical centrifugal sump pump<br>Duty: xx m³/h @ xx m TDH<br>Consumed Power: xx kW<br>Shaft Length: 1500 mm |
| 140-PP-26 | DMS Stockpile Sump Pump | | | | | |

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|---|---|---|---|---|---|---|
| 140-SA-01 | Primary DMS Feed Primary Sampler | | | Multotec | Multotec 800-BEBD-30 | Type: Belt end cross cut sampler<br>Cut size: 4.42 kg (soft) 5.76 kg (hard)<br>Cut frequency: 10 per hour |
| 140-SA-02 | Primary DMS Feed Secondary Sampler | | | Multotec | Multotec 2/40-RPD-2/30 | Type: Vertical rotating plate divider<br>Cut size: 0.22 kg (soft) 0.29 kg (hard)<br>Cut frequency: 30 per primary cut |
| 140-SA-03 | Secondary DMS Sinks Sampler | | | Multotec | Multotec 600-SECC-36 | Type: Screen end cross cut sampler<br>Cut size: 0.018 kg (soft) 0.017 kg (hard)<br>Cut frequency: 20 per hour |
| 140-SA-04 | Scavenger DMS Floats Sampler | | | Multotec | Multotec 1200-SECC-36 | Type: Screen end cross cut sampler<br>Cut size: 0.4051 kg (soft) 0.7155 kg (hard)<br>Cut frequency: 6 per hour |
| 140-SA-05 | Primary DMS Floats Primary Sampler | | | Multotec | Multotec 800-BEBD-30 | Type: Belt end cross cut sampler<br>Cut size: 4.42 kg (soft) 5.76 kg (hard)<br>Cut frequency: 10 per hour |
| 140-SA-06 | Primary DMS Floats Secondary Sampler | | | Multotec | Multotec 2/40-RPD-2/30 | Type: Vertical rotating plate divider<br>Cut size: 0.22 kg (soft) 0.29 kg (hard)<br>Cut frequency: 30 per primary cut |
| 140-SA-11 | Primary DMS Sinks Primary Sampler | TWL | New | Consep | H&S 1360BD Linear Cross Cut Sampler | Type: Screen end linear sampler |
| 140-SA-12 | Primary DMS Sinks Secondary Sampler | TWL | New | Consep | Consep H&S 1230 Sliding Plate Sampler | Type: Sliding plate cross stream |
| 140-SA-13 | Secondary DMS Floats Primary Sampler | TWL | New | Consep | Consep H&S 1230 Sliding Plate Sampler | Type: Sliding plate cross stream |
| 140-SA-14 | Secondary DMS Floats Secondary Sampler | TWL | New | Consep | Consep H&S 1230 Sliding Plate Sampler | Type: Sliding plate cross stream |
| 140-SN-01 | DMS Feed Preparation Screen | | | Don Valley Engineering | HG 24.3/48.76/59.76/I + Isolating Frame | Type: Single deck horizontal screen w/ isolation frame<br>Size: 2.4 x 4.8 m<br>Solids Throughput: 308 tph (soft) 401 tph (hard)<br>Drive Type: Linear cardan shaft geared exciter<br>Aperture: 0.5 mm<br>Screen Panel Material: Polyurethane |
| 140-SN-02 | Primary DMS 1 Sinks Screen | | | Don Valley Engineering | HG 24.3/48.76/59.76/I + Isolating Frame | Type: Single deck horizontal screen w/ isolation frame<br>Size: 2.4 x 4.8 m<br>Solids Throughput: 16.0 tph plus 225.1 $m^3/h$ granite slurry (soft) 29.8 tph plus 217.8 $m^3/h$ granite slurry (hard)<br>Drive Type: Linear cardan shaft geared exciter<br>Aperture: 0.4 mm |
| 140-SN-03 | Primary DMS 2 Sinks Screen | | | Don Valley Engineering | HG 24.3/48.76/59.76/I + Isolating Frame | Type: Single deck horizontal screen w/ isolation frame<br>Size: 2.4 x 4.8 m<br>Solids Throughput: 16.0 tph plus 225.1 $m^3/h$ granite slurry (soft) 29.8 tph plus 217.8 $m^3/h$ granite slurry (hard)<br>Drive Type: Linear cardan shaft geared exciter<br>Aperture: 0.4 mm |
| 140-SN-06 | Secondary DMS Screen | | | Don Valley Engineering | HG 18/48/58/I + Isolating Frame | Type: Single deck horizontal screen w/ isolation frame<br>Size: 1.80 x 4.80 m<br>Solids Throughput: 31.7 tph (soft) 58.9 tph (hard)<br>Drive Type: Twin vibrator motors<br>Aperture: 0.4 mm<br>Screen Panel Material: Polyurethane<br>Split: 2/3 floats & 1/3 sinks |
| 140-SN-07 | Scavenger DMS Screen | | | Don Valley Engineering | HG 18/48/58/I + Isolating Frame | Type: Single deck horizontal screen w/ isolation frame<br>Size: 1.80 x 4.80 m<br>Solids Throughput: 31.7 tph (soft) 58.9 tph (hard)<br>Drive Type: Twin vibrator motors<br>Aperture: 0.4 mm<br>Screen Panel Material: Polyurethane<br>Split: 2/3 floats & 1/3 sinks |

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| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 140-SN-08 | Primary DMS 1 Floats Density Bead Basket | | | SP Fabrications | Fabricated | Type: Woven wire basket<br>Construction: Stainless Steel (Grade 304)<br>Aperture: 0.4 mm |
| 140-SN-09 | Primary DMS Sinks Density Bead Basket | | | SP Fabrications | Fabricated | Type: Woven wire basket<br>Construction: Stainless Steel (Grade 304)<br>Aperture: 0.4 mm |
| 140-SN-10 | Primary DMS 2 Floats Density Bead Basket | | | SP Fabrications | Fabricated | Type: Woven wire basket<br>Construction: Stainless Steel (Grade 304)<br>Aperture: 0.4 mm |
| 140-SN-12 | Secondary DMS Floats Density Bead Basket | | | SP Fabrications | Fabricated | Type: Woven wire basket<br>Construction: Stainless Steel (Grade 304)<br>Aperture: 0.4 mm |
| 140-SN-13 | Secondary DMS Sinks Density Bead Basket | | | SP Fabrications | Fabricated | Type: Woven wire basket<br>Construction: Stainless Steel (Grade 304)<br>Aperture: 0.4 mm |
| 140-SN-14 | Scavenger DMS Floats Density Bead Basket | | | SP Fabrications | Fabricated | Type: Woven wire basket<br>Construction: Stainless Steel (Grade 304)<br>Aperture: 0.4 mm |
| 140-SN-15 | Scavenger DMS Sinks Density Bead Basket | | | SP Fabrications | Fabricated | Type: Woven wire basket<br>Construction: Stainless Steel (Grade 304)<br>Aperture: 0.4 mm |
| 140-SN-21 | Primary DMS 1 Floats Screen | TWl | New replaces SN-04 | Vibramech | | Type: Single deck banana screen w/ isolation frame<br>Size: 3.6 x 7.3 m |
| 140-SN-22 | Primary DMS 2 Floats Screen | TWL | New replaces SN-05 | Vibramech | | Type: Single deck banana screen w/ isolation frame<br>Size: 3.6 x 7.3 m |
| 140-TX-04 | DMS Area Transformer | | | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 2000 kVA |
| 140-WT-01 | DMS Bin Feed Conveyor Weightometer | | | Centistic | Thermo Ramsay 10-22 | Type: Dual idler weigh scale<br>Accuracy: ±0.5% |
| 140-WT-02 | DMS Feed Conveyor Weightometer | | | Centistic | Thermo Ramsay 10-22 | Type: Dual idler weigh scale<br>Accuracy: ±0.5% |
| 140-WT-03 | Primary DMS Floats Weightometer | | | Centistic | Thermo Ramsay 10-14 | Type: Four idler weigh scale<br>Accuracy: ±0.25% (OIML Class 0.5) |
| 140-WT-04 | Secondary DMS Feed Conveyor Weightometer | | | | Thermo Ramsay 10-101R | Type: Single idler weigh scale<br>Accuracy: ±1% |
| 140-WT-05 | DMS Bin Feed Conveyor 1 Weightometer | | | | | |
| **AREA 150** | **PRIMARY MILLING** | **Yes** | | | | |
| 150-BN-01 | Primary Mill Scats Bin | | | | Fabricated | Type: Skip bin (Suitable for forklift)<br>Capacity: TBC $m^3$ |
| 150-CH-01 | Primary Mill Sizing Screen Feed Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 150-CH-02 | Primary Mill Sizing Screen Upper Deck Oversize Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 150-CH-03 | Primary Mill Sizing Screen Lower Deck Oversize Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 150-CH-04 | Primary Mill Sizing Screen Underpan | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 150-CH-05 | Primary Mill Feed Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 150-CH-06 | Primary Mill Trommel Undersize Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 150-CH-07 | Primary Mill Trommel Oversize Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |

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|---|---|---|---|---|---|---|
| 150-CH-08 | DMS Fines Magnetics Discharge Launder | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 150-CH-09 | DMS Fines Non Magnetics Discharge Launder | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 150-HP-01 | Primary Mill Discharge Hopper | | | SP Fabrications | Square Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 2.6 m³ |
| 150-HP-02 | DMS Fines Hopper | | | SP Fabrications | Cylindrical Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 3.7 m³ |
| 150-KI-01 | Ball Loading Kibble | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel unlined<br>Capacity: 1 t |
| 150-ML-01 | Primary Mill | | | Ersel Heavy Machinery | ø2850 x 4250 Ball Mill | Type: Overflow Ball Mill<br>Shell Diameter: 2.85 m<br>EGL: 3.90 m<br>Drive: Pinion<br>Liner Type: Rubber<br>Speed: 16.8 rpm (75 % CS) |
| 150-ML-01a | Primary Mill Feed Chute | | | Ersel Heavy Machinery | Fabricated | Type: Trolley mounted feed chute<br>Construction: 6 mm carbon steel lined with 20 mm thick Ni-hard 4 |
| 150-ML-01b | Ring & Pinion Gear Lubrication System | | | Ersel Heavy Machinery | Lincoln | Type: Grease<br>Tank: 180 L drum<br>Pump: Air operated drum pump |
| 150-ML-01c | Mill Motor Cooling Fan | | | Ersel Heavy Machinery | WEG | Part of Primary Mill Package |
| 150-ML-01d | Mill Hydraulic Brake | | | Ersel Heavy Machinery | | Part of Primary Mill Package |
| 150-ML-01e | Mill Jacking Cradle | | | Chesterfield | Fabricated | Construction: Carbon steel cradle |
| 150-MT-01 | DMS Fines Magnetic Separator | | | Eriez Magnetics | HMDA 36.108 SL | Type: Counter current wet drum magnetic separator<br>Feed Rate: 23.9 dry tph (soft) 63.3 dry tph (hard)<br>Size: 914 mm ø x 2743 mm W<br>Magnetic Field Strength: 1150 Gauss @ 50mm |
| 150-MT-01a | DMS Fines Magnetic Flocculator | | | Eriez Magnetics | 6-180 | Type: Permanent magnetic flocculator<br>Feed Rate: 23.9 dry tph (soft) 63.3 dry tph (hard) |
| 150-PP-01 | Primary Mill Discharge Pump 1 | | | Metso | HR200 ENR-S C5HC | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 160 - 192 tph at 50 %w/w<br>Duty: 211 - 253 m³/h @ 15.1 - 16 m TDH<br>Consumed Power: 25.4 kW |
| 150-PP-02 | Primary Mill Discharge Pump 2 | | | Metso | HR200 ENR-S C5HC | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 160 - 192 tph at 50 %w/w<br>Duty: 211 - 253 m³/h @ 15.1 - 16 m TDH<br>Consumed Power: 25.4 kW |
| 150-PP-03 | DMS Fines Pump 1 | check | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 64 - 76.8 tph at 24 %w/w<br>Duty: 223 - 268 m³/h @ 17.3 - 18.3 m TDH<br>Consumed Power: 22.5 kW |
| 150-PP-04 | DMS Fines Pump 2 | check | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 64 - 76.8 tph at 24 %w/w<br>Duty: 223 - 268 m³/h @ 17.3 - 18.3 m TDH<br>Consumed Power: 22.5 kW |
| 150-PP-05 | Primary Mill Area Sump Pump | | | Metso | VS100 L180 O3S | Type: Vertical centrifugal sump pump<br>Duty: 90.0 m³/hr @ 20.1 m TDH<br>Consumed Power: 14.6 kW<br>Shaft Length: 1800 mm |
| 150-SA-01 | Primary Mill Sizing Screen Feed Sampler | | | Outotec | PSA DN150 | Rubber lined pressure pipe sampler DN150mm. DN50mm sample flange |

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|---|---|---|---|---|---|---|
| 150-SN-01 | Primary Mill Sizing Screen | | | Don Valley Engineering | DHG 18/50/61/II + Isolating Frame | Type: Double deck horizontal screen w/ isolation frame<br>Size: 1.8 x 5.0 m<br>Solids Throughput: 82.5 tph (soft) 159.4 tph (hard)<br>Drive Type: Linear cardan shaft geared exciter<br>Top Deck Aperture: 1.7 mm<br>Bottom Deck Aperture: 0.5 mm<br>Screen Panel Material: Polyurethane |
| 150-SN-02 | Primary Mill Trommel | | | Ersel Heavy Machinery | | Type: Trommel screen<br>Size: 0.73 m x 1.83 m<br>Aperture: 8 x 8 mm<br>Screen Panel Material: Polyurethane |
| **AREA 160** | **FINES GRAVITY SEPARATION** | **Yes** | | | | |
| 160-AG-01 | Fines Storage Tank Agitator | | | Mixtec | 4080M | Type: Dual impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 20.77 rpm |
| 160-CH-04 | Fine Rougher Spirals Distributor | | | Mineral Technologies | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 160-CH-05 | Rougher Spirals Discharge Launder | | | Chesterfield | Fabricated | Construction: 10 mm HDPE launder in a carbon steel frame with 6 mm rubber lined carbon steel discharge sections |
| 160-CH-06 | Middling Spirals Discharge Launder | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 160-CH-07 | Fine Cleaner Spirals Discharge Launder | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 160-CH-12 | Fines Feed Sampler Box | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 160-CH-13 | Fine rougher Tables Sample Box | | | | | |
| 160-CH-14 | Rougher Table 1 & 2 Tails & Middlings Sample Box | | | Centristic | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 160-CH-15 | Deslime Cyclones Distributor | | | | | |
| 160-CH-16 | Primary Hydrosizer Boil Box | | | | | |
| 160-CH-17 | Fine Middlings Spirals Discharge Launder | | | | | |
| 160-CH-18 | Coarse Cleaner Spirals Discharge Launder | | | | | |
| 160-CH-21 | Fines Feed Transfer Boil Box | Yes | New<br>Bolted to 160-CH-12 | | Fabricated | Construction: 6 mm carbon steel lined with 6mm rubber and 20 mm thick<br>Ceramic liners high wear areas |
| 160-CY-02 | Deslime Cyclone Cluster 2 | | | Multotec | D11-25/10 Distributor c/w Walkway with<br>HC250-15-0 Cyclones c/w 120 HS Spigot | Duty: 506 $m^3/h$<br>Cut Size: 44 µm (soft) 33 µm (soft)<br>Cyclone Size: 250 mm<br>Operating Pressure: 65 kPa<br>Arrangement: 7 Operating, 3 Standby |
| 160-CY-06 | Deslime Cyclone Cluster 1 | | | | | |
| 160-CY-07 | Primary Hydrosizer Overflow Dewatering Cyclone | | | | | |
| 160-GC-03 | Coarse Rougher Spirals | | | | | |
| 160-GC-04 | Coarse Middlings Spirals | | | Mineral Technologies | MG6.3 | Type: Triple start spiral separator<br>Quantity: 10<br>No. of Turns: 6 |

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|---|---|---|---|---|---|---|
| 160-GC-05 | Fine Cleaner Spirals | | | Mineral Technologies | MG6.3 | Type: Triple start spiral separator<br>Quantity: 4<br>No. of Turns: 6 |
| 160-GC-06 | Fine Rougher Spirals Bank 1 | | | | | |
| 160-GC-07 | Fine Rougher Spirals Bank 2 | | | | | |
| 160-GC-08 | Fine Middlings Spirals | | | | | |
| 160-GC-09 | Coarse Cleaner Spirals | | | | | |
| 160-HP-01 | Fine Spirals Feed Hopper | | | Chesterfield | Cylindrical Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 5 m³ |
| 160-HP-02 | Fines Tailings Hopper | | | Chesterfield | Cylindrical Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 2 m³ |
| 160-HP-03 | Multi-spigot hydrosizer feed hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 0.5 m³ |
| 160-HP-04 | Fine Middlings Tables Middlings and Tailings Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 0.5 m³ |
| 160-HP-06 | Table Concentrate Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 0.5 m³ |
| 160-HP-07 | Coarse & Medium Middlings Tables Middlings and Tails Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 0.5 m³ |
| 160-HP-09 | Coarse Rougher Spirals Feed Hopper | | | Chesterfield | Cylindrical Sloped Bottom Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 8 m³ |
| 160-HP-10 | Coarse Spirals Middlings Hopper | | | | | |
| 160-HT-01 | Fines Area Crane | | | Street Cranes | Street ZX084-4SoEM5O063 | Type: Single girder bridge crane<br>WLL: 10 t<br>Span: 18.88 m<br>Travel: 35 m<br>Lift: 25 m |
| 160-HY-01 | Primary Hydrosizer | | | | | |
| 160-HY-02 | Multi-Spigot Hydrosizer | | | | | |
| 160-PP-03 | Coarse Rougher Spirals Feed Pump 1 | | | | | |
| 160-PP-04 | Coarse Rougher Spirals Feed Pump 2 | | | | | |
| 160-PP-5 | Fine Rougher Spirals Feed Pump 1 | | | | | |
| 160-PP-6 | Fine Rougher Spirals Feed Pump 2 | | | | | |

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|---|---|---|---|---|---|---|
| 160-PP-07 | Fines Tailings Pump 1 | check | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 29 - 34.8 tph at 27 %w/w<br>Duty: 89 - 107 m³/h @ 14.4 - 15 m TDH<br>Consumed Power: 9.3 kW |
| 160-PP-08 | Fines Tailings Pump 2 | check | | Metso | HR150 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 29 - 34.8 tph at 27 %w/w<br>Duty: 89 - 107 m³/h @ 14.4 - 15 m TDH<br>Consumed Power: 9.3 kW |
| 160-PP-09 | Multi-Spigot Hydrosizer Feed Pump 1 | | | | | |
| 160-PP-10 | Multi-Spigot Hydrosizer Feed Pump 2 | | | | | |
| 160-PP-11 | Fine Middlings & Tailings Pump 1 | | | | | |
| 160-PP-12 | Fine Middlings & Tailings Pump 2 | | | | | |
| 160-PP-13 | Coarse & Medium Middlings & Tailings Pump 1 | | | | | |
| 160-PP-14 | Coarse & Medium Middlings & Tailings Pump 2 | | | | | |
| 160-PP-15 | Table Concentrate Pump 1 | | | | | |
| 160-PP-16 | Table Concentrate Pump 2 | | | | | |
| 160-PP-17 | Fines Gravity Area Sump Pump | | | Metso | VS100 L180 O3S | Type: Vertical centrifugal sump pump<br>Duty: 90.0 m³/hr @ 17.8 m TDH<br>Consumed Power: 13.8 kW<br>Shaft Length: 1800 mm |
| 160-PP-18 | Coarse Spirals Middlings Pump 1 | | | | | |
| 160-PP-19 | Coarse Spirals Middlings Pump 2 | | | | | |
| 160-PP-20 | Multi-Spigot Hydrosizer Teeter Pump | | | | | |
| 160-PP-31 | Deslime Cyclone Feed Pump 1 | Yes | New replaces PP-01 | Weir Pty Ltd | Warman Pump 10x8-AH - High Chrome | Type: Horizontal centrifugal slurry pump<br>Duty: 600m³/h @ 30.7 m TDH<br>Max Duty : 780m3/h @ 34.3 TDH |

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|---|---|---|---|---|---|---|
| 160-PP-32 | Deslime Cyclone Feed Pump 2 | Yes | New replaces PP-02 | Weir Pty Ltd | Warman Pump 10x8-AH - High Chrome | Type: Horizontal centrifugal slurry pump<br>Duty: 600m³/h @ 30.7 m TDH<br>Max Duty : 780m3/h @ 34.3 TDH |
| 160-SA-01 | Fines Feed Primary Sampler | | | Multotec | Multotec 2000/1600-LS-20 | Type: DN 600 launder sampler<br>Cut size: 10.98 L (soft) 9.29 L (hard)<br>Cut frequency: 6 per hour |
| 160-SA-02 | Fines Feed Secondary Sampler | Yes | Re install after steelwork mods | Multotec | Multotec 50-CVS-2/20 | Type: DN 50 secondary rotary vezin<br>Cut size: 0.439 L (soft) 0.37 L (hard)<br>Cut frequency: 30 per primary cut |
| 160-SA-03 | Table concentrate sampler | | | Multotec | Multotec 50-TVS-4/30 | Type: DN 50 rotary vezin<br>Cut size: 0.027 L (soft) 0.018 L (hard)<br>Cut frequency: 12 per hour |
| 160-TB-1 | Coarse Rougher Table 1 | | | | | |
| 160-TB-2 | Medium Rougher Table 1 | | | | | |
| 160-TB-3 | Fine Rougher Table 1 | | | | | |
| 160-TB-4 | Fine Rougher Table 2 | | | | | |
| 160-TB-5 | Fine Middlings Table 1 | | | | | |
| 160-TB-6 | Medium Middlings Table | | | | | |
| 160-TB-7 | Coarse Rougher Table 2 | | | | | |
| 160-TB-8 | Medium Rougher Table 2 | | | | | |
| 160-TB-9 | Fine Rougher Table 3 | | | | | |
| 160-TB-10 | Fine Rougher Table 4 | | | | | |
| 160-TB-11 | Fine Middlings Table 2 | | | | | |
| 160-TB-12 | Coarse Middlings Table | | | | | |

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|---|---|---|---|---|---|---|
| 160-TK-01 | Fines Storage Tank | | | Land and Marine Engineering | Fabricated | Type: Flat bottom tank<br>Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Capacity: 1700 m³<br>Size: 14.34 m ø x 14.0 m H |
| 160-TK-02 | Fines Feed Sample Swirl Tank | Yes | Re install after steelwork mods | Multotec | Fabricated | Type: Swirl tank<br>Construction: 6 mm stainless steel (Grade 304)<br>Capacity: 20 L |
| **AREA 180** | **CONCENTRATE REGRIND AND FLOTATION** | **Yes** | | | | |
| 180-AG-01 | Flotation Conditioning Tank Agitator | | | Mixtec | 1057 | Type: Single impellor axial flow<br>Construction: Carbon steel, rubber lined<br>Speed: 222 rpm |
| 180-AR-01 | Concentrate Filtrate Receiver | | | Andritz | Andritz Delkor Vacuum Receiver | Type: Dished end receiver<br>Capacity: 0.46 m³<br>Size: 800 mm ø x 1200 mm H |
| 180-BN-01 | Concentrate Regrind Mill Scats Bin | | | | Fabricated | Type: Skip bin (Suitable for forklift)<br>Capacity: TBC m³ |
| 180-CH-01 | Concentrate Regrind Mill Feed Launder | TWL | Top section replaced for new feeder | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 180-CH-02 | Concentrate Filter Feed Launder | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 180-CH-04 | DMS Concentrate Feeder Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 180-CH-06 | Flotation Cell Collection Launder | | | Chesterfield | Fabricated | Construction: 10 mm HDPE launder in a carbon steel frame with 6 mm rubber lined carbon steel feed & discharge sections |
| 180-CH-07 | Concentrate Regrind Mill Trommel Oversize Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel unlined |
| 180-CH-08 | Concentrate Regrind Mill Trommel Undersize Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 180-CH-11 | Concentrate Filter Discharge Chute | TWL | New replaces CH-03 | | | Construction: 6 mm carbon steel lined with 20mm thick ceramic liners |
| 180-CH-12 | DMS Concentrate Feeder Head Chute | TWL | new chute required for replacement feeder | | | Construction: 6 mm carbon steel lined with 20mm thick ceramic liners |
| 180-CH-13 | Concentrate Filter Discharge Feeder Tail End Drain Chute | TWL | new chute required for replacement feeder | | | Construction: 6 mm carbon steel lined with 12 mm thick UHMWPE |
| 180-CH-14 | Concentrate Filter Discharge Feeder Head Chute | TWL | new chute required for replacement feeder | | | Construction: 6 mm carbon steel lined with 12 mm thick UHMWPE |
| 180-CY-01 | Flotation Feed Dewatering Cyclone | | | Salter | SC1030/0/60/30-P | 10" Cyclone, 60mm vortex finder and 30mm spigot<br>Operating Pressure: 140 kPa |
| 180-CY-02 | Flotation Area Clean up Cyclone | | | Multotec | FC75-5-0/A-A/18 c/w 180 o/e (7-HS) | Duty: 7.9 m³/h<br>Cut Size: 7 µm<br>Cyclone Size: 75 mm<br>Operating Pressure: 75 kPa |
| 180-FC-01 | Flotation Cell 1 | | | Outotec | OK1.5 | Construction: Mild steel, rubber lined<br>Capacity: 1.5 m³<br>Aspiration: Forced |
| 180-FC-02 | Flotation Cell 2 | | | Outotec | OK1.5 | Construction: Mild steel, rubber lined<br>Capacity: 1.5 m³<br>Aspiration: Forced |
| 180-FC-03 | Flotation Cell 3 | | | Outotec | OK1.5 | Construction: Mild steel, rubber lined<br>Capacity: 1.5 m³<br>Aspiration: Forced |
| 180-FE-11 | DMS Concentrate Feeder | TWL | New replaces FE-01 | CustomTek | 600 mm belt width | Type: Belt feeder |

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|---|---|---|---|---|---|---|
| 180-FE-12 | Concentrate Filter Discharge Feeder | TWL | New replaces FE-02 | CustomTek | 600 mm belt width | Type: Belt feeder |
| 180-FR-01 | Concentrate Filter | | | Andritz | Andritz Delkor 4M2HVBF | Type: Vacuum belt filter<br>Filter Area: 4.0 m²<br>Duty: 1.51 tph (soft) 1.59 tph (hard)<br>Capacity: 2.5 tph<br>Residual Cake Moisture: 10% |
| 180-HP-01 | Concentrate Regrind Mill Discharge Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 0.5 m³ |
| 180-HP-02 | DMS Concentrate Storage Hopper | TWL | Bottom section replaced for new feeder | SP Fabrications | Feed Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 5.6 m³ (15 t) |
| 180-HP-03 | Flotation Tailings Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 1 m³ |
| 180-HP-04 | Flotation Feed Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 0.5 m³ |
| 180-ML-02 | Concentrate Regrind Mill | | | Ersel Heavy Machinery | ø1500 x 1540 Ball Mill | Type: Overflow Ball Mill<br>Shell Diameter: 1.50 m<br>EGL: 1.45 m<br>Drive: Pinion<br>Liner Type: Rubber<br>Speed: 25.69 rpm (70 % CS) |
| 180-ML-02a | Concentrate Regrind Mill Ring Gear Lubrication Pump | | | Ersel Heavy Machinery | Lincoln | Type: Grease<br>Tank: 180 L drum<br>Pump: Electric drum pump |
| 180-ML-02b | Concentrate Regrind Mill Bearing Lubrication Pump | | | Ersel Heavy Machinery | Lincoln | Type: Grease<br>Tank: 180 L drum<br>Pump: Electric drum pump |
| 180-ML-02c | Concentrate Regrind Mill Motor Cooling Fan | | | Ersel Heavy Machinery | | Type: Motor Cooling Fan |
| 180-ML-02d | Concentrate Regrind Mill Motor Hydraulic Brake | | | Ersel Heavy Machinery | | Type: Hydraulic Brake |
| 180-PP-01 | Concentrate Regrind Mill Discharge Pump 1 | | | Metso | HR50 ENR-S O4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 5.0 - 6.0 tph at 50 %w/w<br>Duty: 6.1 - 7.4 m³/h @ 14.7 - 15.9 m TDH<br>Consumed Power: 2.6 kW |
| 180-PP-02 | Concentrate Regrind Mill Discharge Pump 2 | | | Metso | HR50 ENR-S O4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 5.0 - 6.0 tph at 50 %w/w<br>Duty: 6.1 - 7.4 m³/h @ 14.7 - 15.9 m TDH<br>Consumed Power: 2.6 kW |
| 180-PP-03 | Flotation Feed Pump 1 | | | Metso | HR75 ENR-S O4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 1.9 - 2.5 tph at 18 %w/w<br>Duty: 39 - 51 m³/h @ 39 - 48.1 m TDH<br>Consumed Power: 13 kW |
| 180-PP-04 | Flotation Feed Pump 2 | | | Metso | HR75 ENR-S O4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 1.9 - 2.5 tph at 18 %w/w<br>Duty: 39 - 51 m³/h @ 39 - 48.1 m TDH<br>Consumed Power: 13 kW |
| 180-PP-05 | Flotation Tailings Pump 1 | | | Metso | HR75 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 0.02 - 0.025 tph at 0.1 %w/w<br>Duty: 44 - 50 m³/h @ 19.7 - 22.4 m TDH<br>Consumed Power: 5 kW |
| 180-PP-06 | Flotation Tailings Pump 2 | | | Metso | HR75 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 0.02 - 0.025 tph at 0.1 %w/w<br>Duty: 44 - 50 m³/h @ 19.7 - 22.4 m TDH<br>Consumed Power: 5 kW |

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|---|---|---|---|---|---|---|
| 180-PP-07 | Flotation Area Sump Pump | | | Metso | VS50 L150 O5S | Type: Vertical centrifugal sump pump<br>Duty: 40 m³/h @ 22.5 m TDH<br>Consumed power: 8.0 kW<br>Shaft Length: 1500 mm |
| 180-PP-08 | Concentrate Filtrate Pump | | | Andritz | Carver Model 855 OH 1" x 8 | Type: Flange mounted pump<br>Duty: 3 m³/h @ 20.8 m TDH |
| 180-PP-09 | Concentrate Filter Vacuum Pump | | | Andritz | Process Vacuum Z180 2BE1203 | Type: Liquid Ring Vacuum Pump<br>Duty: 1000 Nm³/h @ 50 - 75 kPa gauge |
| 180-PP-10 | Concentrate Filter Seal Water Pump | | | Crest Process Engineering | KSB Movitec V 2/3 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 29 l/min @ 14.8 m TDH<br>Consumed Power: 0.13 kW |
| 180-SA-02 | Flotation Concentrate Sampler | | | Multotec | Multotec 50NB-TVS-2/30 | Type: DN 50 rotary vezin<br>Cut size: 0.144 L (soft) 0.144 L (hard)<br>Cut frequency: 6 per hour |
| 180-SA-11 | DMS Concentrate Sampler | TWL | New | Consep | H&S 1330-4300 Linear Sampler | Type: Belt cross cut sampler |
| 180-SN-01 | Concentrate Regrind Sizing Screen | | | Derrick Corporation | Derrick 2SG48-60R-1STK | Type: Single deck stack sizer screen<br>Size: 1.2 x 1.5 m<br>Solids Throughput: 4.6 tph (soft) 4.9 tph (hard)<br>Drive Type: Twin vibrator motors<br>Aperture: 450 µm<br>Screen Panel Material: Polyurethane |
| 180-SN-02 | Concentrate Regrind Mill Trommel | | | Ersel Heavy Machinery | | Type: Trommel screen<br>Size: 0.54 m ø x 0.891 m L<br>Aperture: 8 mm<br>Screen Panel Material: Polyurethane |
| 180-SS-01 | Flotation Area Safety Shower | | | | | Type: Combination safety shower and eyewash station |
| 180-TK-01 | Flotation Conditioning Tank | | | Chesterfield | Fabricated | Type: Flat bottom tank<br>Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Capacity: 1.0 m³<br>Size: 1.10 m ø x 1.35 m H |
| 180-TK-02 | Flotation and Filtration Constant Density Tank | | | SP Fabrications | Fabricated | Type: Constant density tank<br>Construction: 4 mm stainless steel (Grade 304)<br>Capacity: 0.65 m³ |
| 180-TK-03 | Concentrate Filter Vacuum Seal Water Tank | | | Chesterfield | Fabricated | Type: Flat bottom tank<br>Construction: 6 mm carbon steel<br>Capacity: 250L<br>Size: 0.8 m ø x 0.8 m H |
| 180-WT-01 | DMS Concentrate Feeder Weightometer | TWL | New | CustomTek | Pat of feeder supply | |
| 180-WT-02 | Concentrate Filter Discharge Feeder Weightometer | TWL | New | CustomTek | Pat of feeder supply | |
| **AREA 200** | **CONCENTRATE PROCESSING** | **Yes** | | | | |
| 200-AG-01 | Reaction Tank 1 Agitator | | | Siltbuster Process Solutions | Part of 200-WS-02 | Type: Single impellor axial flow<br>Construction: 316 Stainless steel<br>Speed: ? rpm |
| 200-AG-02 | Reaction Tank 2 Agitator | | | Siltbuster Process Solutions | Part of 200-WS-02 | Type: Single impellor axial flow<br>Construction: 316 Stainless steel<br>Speed: ? rpm |
| 200-AR-01 | Tin Filtrate Receiver | | | Andritz | Andritz Delkor Vacuum Receiver | Type: Dished end receiver<br>Capacity: 0.192 m³<br>Size: 500 mm ø x 800 mm H |
| 200-AT-01 | Concentrate Pre Dryer Feed Hopper Bin Activator | | | Drytech International | | Part of Pre Dryer Kiln Package |
| 200-BD-01 | Concentrate Handling & Reagents Area Switchroom | | | Eaton | Container | Type: Transportable Building<br>Size: 2 x 40' High Cube Shipping Container |

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|---|---|---|---|---|---|---|
| 200-BE-01 | Kiln Feed Bucket Elevator | | | Cleeve Materials Handling | Type 150 Bucket Elevator | Capacity: 1.5 tph (duty) 2.0 tph (max)<br>Vertical Rise: 11.0 m<br>Belt Width: 170 mm<br>Bucket Volume: 0.65 L<br>Bucket Pitch: 333 mm<br>Speed: 1.19 m/s<br>Take-up: Screw |
| 200-BE-02 | LIMS Feed Bucket Elevator | | | Cleeve Materials Handling | Type 150 Bucket Elevator | Capacity: 1.5 tph (duty) 2.0 tph (max)<br>Vertical Rise: 19.0 m<br>Belt Width: 170 mm<br>Bucket Volume: 0.65 L<br>Bucket Pitch: 333 mm<br>Speed: 1.19 m/s<br>Take-up: Screw |
| 200-BE-03 | Tungsten Blending Bucket Elevator | | | Cleeve Materials Handling | Type 150 Bucket Elevator | Capacity: 4.0 tph (duty) 6.0 tph (max)<br>Vertical Rise: 12.0 m<br>Belt Width: 170 mm<br>Bucket Volume: 0.65 L<br>Bucket Pitch: 333 mm<br>Speed: 1.19 m/s<br>Take-up: Screw |
| 200-BE-04 | Concentrate Scavenger Bucket Elevator | | | Cleeve Materials Handling | Type 150 Bucket Elevator | Capacity: 2.0 tph (duty) 2.5 tph (max)<br>Vertical Rise: 9.5 m<br>Belt Width: 170 mm<br>Bucket Volume: 0.65 L<br>Bucket Pitch: 333 mm<br>Speed: 1.19 m/s<br>Take-up: Screw |
| 200-BL-01 | Tungsten Concentrate Bag Loader | | | Cleeve Materials Handling | Model A FIBC Filling Machine | Type: FIBC filling machine w/ load cells and controller<br>Construction: Mild steel |
| 200-BL-02 | Tin Concentrate Bag Loader | | | Cleeve Materials Handling | Model A FIBC Filling Machine | Type: FIBC filling machine w/ load cells and controller<br>Construction: Mild steel |
| 200-BN-01 | Tungsten Concentrate Storage Bin | | | Cleeve Materials Handling | Batch Weigh Hopper | Construction: 6mm stainless steel (Grade 304) c/w load cells<br>Live Capacity: 2.0 $m^3$ |
| 200-BN-02 | Tin Concentrate Storage Bin | | | Cleeve Materials Handling | Batch Weigh Hopper | Construction: 6mm stainless steel (Grade 304) c/w load cells<br>Live Capacity: 2.0 $m^3$ |
| 200-BN-03 | Tungsten Blending Bin 1 | | | Cleeve Materials Handling | Weigh Hopper | Construction: 6mm stainless steel (Grade 304) c/w load cells<br>Live Capacity: 1.5 $m^3$ |
| 200-BN-04 | Tungsten Blending Bin 2 | | | Cleeve Materials Handling | Weigh Hopper | Construction: 6mm stainless steel (Grade 304) c/w load cells<br>Live Capacity: 1.5 $m^3$ |
| 200-BN-05 | Tungsten Blending Bin 3 | | | Cleeve Materials Handling | Weigh Hopper | Construction: 6mm stainless steel (Grade 304) c/w load cells<br>Live Capacity: 1.5 $m^3$ |
| 200-CH-01 | LIMS Feeder Feed Chute | | | SP Fabrications | Fabricated | Construction: 6mm stainless steel (Grade 304) |
| 200-CH-02 | LIMS Feed Chute | | | SP Fabrications | Fabricated | Construction: 6mm stainless steel (Grade 304) |
| 200-CH-03 | Tin Concentrate Filter Discharge Chute | | | Chesterfield | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 200-CH-08 | Tin Concentrate Filter Feed Launder | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 200-CH-09 | Concentrate Pre Dryer Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally, Primed Internally |
| 200-CH-10 | LIMS Magnetics Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-11 | LIMS Non Magnetics Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-12 | Concentrate Distributor | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel ~~lined with 6 mm thick rubber~~ |
| 200-CH-13 | Coarse HIMS 1 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-14 | Coarse HIMS 2 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |

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| 200-CH-15 | Coarse HIMS 3 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-16 | Coarse HIMS 4 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-17 | Fine HIMS 1 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-18 | Fine HIMS 2 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-19 | Fine HIMS 3 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-20 | Fine HIMS 4 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-21 | Fine HIMS 5 Non Mags Discharge Chute | | | SP Fabrications | Fabricated | Construction: 4 mm stainless steel (Grade 304) |
| 200-CH-22 | Tin Tailings Sampler Feed Box | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel lined with 6 mm thick rubber |
| 200-CH-23 | Concentrate Scavenger Drum Tipping Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel ~~lined with 6 mm thick rubber~~ |
| 200-CH-26 | Tungsten Blending Distributor Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel ~~lined with 6 mm thick rubber~~ |
| 200-CH-27 | Tungsten Blending Drum Tipping Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel ~~lined with 6 mm thick rubber~~ |
| 200-CH-28 | Concentrate Scavenger Distributor Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel ~~lined with 6 mm thick rubber~~ |
| 200-CH-29 | Furnace Gas Discharge Stack | | | | Fabricated | Construction: Sch 10 Stainless steel (Grade 304) |
| 200-CH-30 | Concentrate Reduction Kiln Feed Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally, Primed Internally |
| 200-CH-31 | Concentrate Reduction Kiln Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally, Primed Internally |
| 200-CH-32 | Tungsten Blending Bin 1 Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6mm stainless steel (Grade 304) |
| 200-CH-33 | Tungsten Blending Bin 2 Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6mm stainless steel (Grade 304) |
| 200-CH-34 | Tungsten Blending Bin 3 Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6mm stainless steel (Grade 304) |
| 200-CH-35 | Tungsten Concentrate Sampler Feed Chute | | | SP Fabrications | Fabricated | Construction: 6mm stainless steel (Grade 304) |
| 200-CH-36 | Tungsten Concentrate Sampler Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally System 1 |
| 200-CH-37 | Tungsten Concentrate Sampler Sample Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally System 1 |
| 200-CH-38 | Tin Concentrate Sampler Feed Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally System 1 |
| 200-CH-39 | Tin Concentrate Sampler Discharge Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally System 1 |
| 200-CH-40 | Tin Concentrate Sampler Sample Chute | | | SP Fabrications | Fabricated | Construction: 6 mm carbon steel, Painted Externally System 1 |
| 200-CH-41 | Concentrate Pre Dryer Bag House Discharge Duct | | | SP Fabrications | Fabricated | Construction: Sch 10 Stainless steel (Grade 304) |
| 200-CH-42 | Tin Concentrate Dryer Exhaust Fan Discharge Stack | | | SP Fabrications | Fabricated | Construction: Sch 10 carbon Steel, Hot dipped galvanised |
| 200-CH-43 | Tin Concentrate Dryer Furnace Gas Discharge Duct | | | SP Fabrications | Fabricated | Construction: Sch 10 carbon Steel, Hot dipped galvanised |
| 200-CO-01 | Off Gas Scrubber Cooler | | | Total Process Cooling UK | DVT-30-8SUW Dry Air Blast Cooler | Type: Air cooled heat exchanger |
| 200-CY-01 | Reduction Kiln Offgas Cyclone | | | Drytech International | | Part of Reduction Kiln Package<br>Materials: 304 SS |
| 200-DB-01 | Concentrate Handling & Reagents 400V L+SP Distribution Board | | | | | Rating: 300kVAr |
| 200-DC-01 | Concentrate Pre Dryer Baghouse | | | Drytech International | | Type: Online reverse pulse baghouse<br>Duty: ? Am³/h |

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|---|---|---|---|---|---|---|
| 200-DC-02 | Tin Dryer Baghouse | | | Drytech International | Donaldson DLM V20/10 | Type: Online reverse pulse baghouse<br>Duty: ? Am³/h |
| 200-DC-03 | Tungsten Blending Dust Collector | | | Dustcheck | SFJC6-1.6-10 FS | Type: Insertable dust collector<br>Duty: 1000 Am³/h |
| 200-DC-04 | Concentrate Scavenger Dust Collector | | | Dustcheck | SFJC6-1.6-10 FS | Type: Insertable dust collector<br>Duty: 1000 Am³/h |
| 200-DC-05 | Off Gas Scrubber Baghouse | | | Macrotek | Model MWW-84-49 Baghouse | Type: Insertable dust collector<br>Duty: 2,585 Am³/h @ 63 deg C<br>Materials: 316 SS, PP/PTFE bags |
| 200-DC-06 | Concentrate Area Dust Collector | | | Camfil | GS10 Pyramid gold series dust collector | 12000 m³/h @ 4.5 kPa Pstat |
| 200-DM-01 | Tramp Drum 1 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-02 | Product Drum 1 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-03 | Product Drum 2 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-04 | Product Drum 3 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-05 | Product Drum 4 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-06 | Product Drum 5 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-07 | Product Drum 6 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-08 | Tramp Drum 2 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-09 | Tramp Drum 3 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-10 | Product Drum 7 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-11 | Product Drum 8 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-12 | Product Drum 9 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-13 | Product Drum 10 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-14 | Product Drum 11 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-15 | Product Drum 12 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-16 | Tramp Drum 4 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-17 | Tramp Drum 5 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-18 | Product Drum 13 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-19 | Product Drum 14 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-20 | Product Drum 15 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-21 | Product Drum 16 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-22 | Product Drum 17 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-23 | Product Drum 18 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-24 | Product Drum 19 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-25 | Product Drum 20 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |

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|---|---|---|---|---|---|---|
| 200-DM-26 | Product Drum 21 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-27 | Product Drum 22 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-28 | Product Drum 23 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-29 | Product Drum 24 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-30 | Product Drum 25 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-31 | Product Drum 26 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-32 | Product Drum 27 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-33 | Product Drum 28 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-34 | Product Drum 29 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DM-35 | Product Drum 30 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 201-DM-38 | Product Drum 38 | | | | | Type: Standard Steel Drum<br>Capacity: 200 L |
| 200-DR-01 | Concentrate Pre Dryer | | | Drytech International | | Type: Diesel fired indirect rotary dryer with feed spirals and lifters<br>Size: 1.1 m ø x 9.0 m L<br>Feed Rate: 1.51 tph (soft) 1.59 tph (hard)<br>Capacity: 2.12 tph<br>Residual Moisture: 0.1% |
| 200-DR-01a | Concentrate Pre Dryer Burner 1 | | | Drytech International | Weishaupt WL30 package burner | Part of Pre Dryer Package |
| 200-DR-01b | Concentrate Pre Dryer Burner 2 | | | Drytech International | Weishaupt WL30 package burner | Part of Pre Dryer Package |
| 200-DR-01c | Concentrate Pre Dryer Burner 3 | | | Drytech International | Weishaupt WL30 package burner | Part of Pre Dryer Package |
| 200-DR-02 | Tin Concentrate Dryer | | | Drytech International | | Type: Diesel fired rotary dryer<br>Size: 0.6 m ø x 5.0 m L<br>Feed Rate: 267 kg/h (soft) 322 kg/h (hard)<br>Capacity: 588 kg/h<br>Residual Moisture: 0.1% |
| 200-DR-02a | Tin Concentrate Dryer Burner 1 | | | Drytech International | Weishaupt WL10/2 | Part of Tin Dryer Package |
| 200-DR-02b | Tin Concentrate Dryer Burner 2 | | | Drytech International | Weishaupt WL10/2 | Part of Tin Dryer Package |
| 200-FA-02 | Off Gas Scrubber Exhaust Fan 1 | | | Macrotek | New York Blower Model 2108S | Type: Centrifugal direct drive fan<br>Duty: 2,973 Am³/h @ 6.2 kPag<br>Materials: 316 SS |
| 200-FA-03 | Off Gas Scrubber Exhaust Fan 2 | | | Macrotek | New York Blower Model 2108S | Type: Centrifugal direct drive fan<br>Duty: 2,973 Am³/h @ 6.2 kPag<br>Materials: 316 SS |
| 200-FA-04 | Tin Dryer Exhaust Fan | | | Drytech International | | Type: Centrifugal direct drive fan<br>Duty: ? Am³/h |
| 200-FA-05 | Reduction Kiln Incinerator Fan | | | Drytech International | | Type: Centrifugal direct drive fan<br>Duty: ? Am³/h |
| 200-FA-06 | Concentrate Area Dust Collector Fan | | | Camfil | Fan Systems - WITT Group, model RSZ10/450/560/1 | Type: Centrifugal direct drive fan with discharge silencer<br>Duty: 12,000 Am³/h @4,500 mmwg static pressure |
| 200-FE-01 | Concentrate Pre Dryer Feed Screw Feeder | | | Drytech International | | Type: Screw feeder<br>Capacity: 2,400 kg/h<br>Size: 200 mm ø x 2.2 m L<br>Materials: 304 SS |
| 200-FE-02 | Concentrate Pre Dryer Discharge Screw Feeder | | | Drytech International | | Type: Screw feeder<br>Capacity: 2,400 kg/h<br>Size: 200 mm ø x 5 m L<br>Materials: 304 SS |

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|---|---|---|---|---|---|---|
| 200-FE-03 | Reduction Kiln Feed Screw Feeder | | | Drytech International | | Type: Screw feeder<br>Capacity: 2,400 kg/h<br>Size: 200 mm ø x 2.2 m L<br>Materials: 304 SS |
| 200-FE-04 | Reduction Kiln Discharge Screw Feeder | | | Drytech International | | Type: Screw feeder c/w bearing cooling<br>Capacity: 2,400 kg/h<br>Size: 200 mm ø x 3.2 m L<br>Materials: 304 SS |
| 200-FE-05 | LIMS Feeder | | | Eriez Magnetics | Dual HC66 Feeders | Type: Vibrating pan feeder<br>Design Capacity: 1.49 dry tph (soft) 1.56 dry tph (hard)<br>Drive Type: Electromechanical |
| 200-FE-06 | Fine Tin Concentrate Feeder | | | Applied Vibration | TMT 12800/ø273 15/7 | Type: Tube feeder<br>Capacity: 72 kg/h<br>Size: 273 mm ø x 12800 mm L |
| 200-FE-07 | Coarse Tin Concentrate Feeder | | | Applied Vibration | TMT 10400/ø273 15/11 | Type: Tube feeder<br>Capacity: 72 kg/h<br>Size: 273 mm ø x 10400 mm L |
| 200-FE-08 | Tungsten Blending Feeder | | | Applied Vibration | TMT 6100/ø273 15/11 | Type: Tube feeder<br>Capacity: 95 kg/h<br>Size: 273 mm ø x 6100 mm L |
| 200-FE-09 | Tin Dryer Screw Feeder | | | Drytech International | | Type: Screw feeder<br>Capacity: ? kg/h<br>Size: ? m ø x ? m L |
| 200-FE-11 | LIMS Feed Tube Feeder | | | Applied Vibration | TMT 5875/ø273 15/11 | Type: Tube feeder<br>Capacity: 30 kg/h<br>Size: 273 mm ø x 5875 mm L |
| 200-FE-13 | Reduction Kiln Discharge Screw Feeder 2 | | | Drytech International | | Type: Screw feeder c/w cooling jacket<br>Capacity: 2,400 kg/h<br>Size: 200 mm ø x 5.2 m L<br>Materials: 304 SS |
| 200-FE-14A | Tin Dryer Feed Hopper Live Bottom Screw 1 & 2 | | | Drytech International | F313H35 F62.8 gearbox. Direct drive screw 1, with chain drive arrangement for screw 2 | Stainless steel screw with hard wearing flight tips |
| 200-FE-14B | Tin Dryer Feed Hopper Live Bottom Screw 3 & 4 | | | Drytech International | F313H35 F62.8 gearbox. Direct drive screw 3, with chain drive arrangement for screw 4 | Stainless steel screw with hard wearing flight tips |
| 200-FR-01 | Tin Concentrate Filter | | | Andritz | Andritz Delkor 1M2HVBF | Type: Vacuum belt filter<br>Filter Area: 1.0 $m^2$<br>Duty: 0.52 tph (soft) 0.66 tph (hard)<br>Capacity: 0.77 tph<br>Residual Cake Moisture: 10% |
| 200-FR-02 | Off Gas Scrubber Baghouse HEPA Filter | | | Macrotek | | Materials: PTFE |
| 200-HE-01 | Off Gas Scrubber Duct Heater | | | Macrotek | Caloritech WXH-36 duct heater | Type: Inline duct heater<br>Capacity: 36 kW |
| 200-GE-01 | Emergency Generator | | | Addicott Electrics | SDMO J44K 3ph 415V diesel generator | 40 kVA prime |
| 200-HP-01 | Fine Tin Concentrate Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 1.6 $m^3$ |
| 200-HP-02 | Coarse Tin Concentrate Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 1.6 $m^3$ |
| 200-HP-04 | Tin Dryer Feed Hopper | | | Drytech International | Feed Hopper | Construction: 6 mm carbon steel UHMWPE lined<br>Live Capacity: 3.0 $m^3$ |
| 200-HP-05 | Tin Table Tailings Hopper | | | Chesterfield | Conical Hopper | Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 1 $m^3$ |
| 200-HP-06 | Reduction Kiln Feed Hopper | | | Drytech International | Feed Hopper | Construction: 6 mm carbon steel<br>Live Capacity: 2.5 $m^3$ |
| 200-HP-07 | Concentrate Pre Dryer Feed Hopper | | | Drytech International | Feed Hopper | Construction: 6 mm carbon steel<br>Live Capacity: 1.5 $m^3$ |
| 200-HP-08 | Arsenic Precipitate Hopper | | | Siltbuster Process Solutions | Part of 200-WS-02 | Type: Flat bottom tank<br>Construction: Glass flake lined carbon steel<br>Capacity: 1 $m^3$<br>Size: 1 m W x 1 m L x 1 m H |

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|---|---|---|---|---|---|---|
| 200-HX-01 | Off Gas Scrubber Heat Exchanger | | | Macrotek | Tranter GXD-042-H-4-NR-47-2079194 | Type: Plate Heat Exchanger<br>Materials: 316 SS Plates, NBR Seals |
| 200-KN-01 | Concentrate Reduction Kiln | | | Drytech International | | Type: Indirect fired rotary kiln<br>Size: 1.1 m ø x 13 m L<br>Feed Rate: 1.51 tph (soft) 1.59 tph (hard)<br>Capacity: 2.0 tph<br>Operating Temperature: 700 °C<br>Materials: 253 MA heat tube |
| 200-KN-01a | Reduction Kiln Burner 1 | | | Drytech International | Weishaupt WL40 package burner | Part of Reduction Kiln Package |
| 200-KN-01b | Reduction Kiln Burner 2 | | | Drytech International | Weishaupt WL40 package burner | Part of Reduction Kiln Package |
| 200-KN-01c | Reduction Kiln Burner 3 | | | Drytech International | Weishaupt WL40 package burner | Part of Reduction Kiln Package |
| 200-KN-01d | Reduction Kiln Burner 4 | | | Drytech International | Weishaupt WL30 package burner | Part of Reduction Kiln Package |
| 200-KN-01e | Reduction Kiln Burner 5 | | | Drytech International | Weishaupt WL30 package burner | Part of Reduction Kiln Package |
| 200-KN-01f | Reduction Kiln Burner 6 | | | Drytech International | Weishaupt WL30 package burner | Part of Reduction Kiln Package |
| 200-KN-01g | Reduction Kiln Incinerator | | | Drytech International | | Part of Reduction Kiln Package |
| 200-MC-05 | Concentrate Handling & Reagents Area MCC | | | Eaton | Power Xpert CX | Specification: 400V, 3200A, 50kA / 1sec, Form 4b, IP31 |
| 200-MT-01 | Low Intensity Magnetic Separator | | | Eriez Magnetics | DFA50 36.40 | Type: Dry drum magnetic separator<br>Feed Rate: 1.49 dry tph (soft) 1.56 dry tph (hard)<br>Size: 925 mm ø x 1040 mm W<br>Magnetic Field Strength: 550 Gauss |
| 200-MT-02 | Fine HIMS 1 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.14 dry tph (soft) 0.14 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-MT-03 | Fine HIMS 2 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.14 dry tph (soft) 0.14 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-MT-04 | Fine HIMS 3 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.14 dry tph (soft) 0.14 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-MT-05 | Fine HIMS 4 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.14 dry tph (soft) 0.14 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-MT-06 | Fine HIMS 5 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.14 dry tph (soft) 0.14 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-MT-07 | Coarse HIMS 1 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.17 dry tph (soft) 0.22 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |

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|---|---|---|---|---|---|---|
| 200-MT-08 | Coarse HIMS 2 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.17 dry tph (soft) 0.22 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-MT-09 | Coarse HIMS 3 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.17 dry tph (soft) 0.22 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-MT-10 | Coarse HIMS 4 | | | Eriez Magnetics | VOG3.400S | Type: Rapid disc magnetic seperator<br>Feed Rate: 0.17 dry tph (soft) 0.22 dry tph (hard)<br>Capacity: 0.5 tph<br>Disc Diameter: 570 mm<br>Magnetic Field Strength: 0 - 1.8 Tesla |
| 200-PF-05 | Concentrate Handling & Reagents Area MCC Power Factor Correction | | | | | Rating: 300kVAr |
| 200-PN-11 | Concentrate Handling & Reagents Area Switchroom Communications Panel | | | | | |
| 200-PP-01 | Reduction Kiln Diesel Pump | | | Midland Pump | Midland pump, model LPT1 | Type: Positive displacement<br>Duty: 1 l/min @ 50Hz c/w internal pressure relief |
| 200-PP-02 | Off Gas Scrubber Stage 1 Recirculation Pump 1 | | | Macrotek | Titan ST 2x3x6 | Type: ANSI centrifugal pump, c/w double mechanical seal<br>Duty: 31 $m^3$/hr @ 30 m<br>Materials: 316 SS |
| 200-PP-03 | Off Gas Scrubber Stage 1 Recirculation Pump 2 | | | Macrotek | Titan ST 2x3x6 | Type: ANSI centrifugal pump, c/w double mechanical seal<br>Duty: 31 $m^3$/hr @ 30 m<br>Materials: 316 SS |
| 200-PP-04 | Arsenic Precipitate Pump 1 | | | Siltbuster Process Solutions | IR PD15E-FES-PTT | Type: Air operated twin diaphragm pump<br>Duty: 150 l/min @ 40 m TDH<br>Air Consumption: 93.4 $m^3$/h |
| 200-PP-05 | Arsenic Precipitate Pump 2 | | | Siltbuster Process Solutions | IR PD15E-FES-PTT | Type: Air operated twin diaphragm pump<br>Duty: 150 l/min @ 40 m TDH<br>Air Consumption: 93.4 $m^3$/h |
| 200-PP-06 | Fine Tin Concentrate Pump ~~1~~ | | | Metso | HR50 ENR-S O4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 0.13 - 0.16 tph at 25 %w/w<br>Duty: 0.42 - 0.51 $m^3$/h @ 18.3 - 18.8 m TDH<br>Consumed Power: 1.9 kW |
| 200-PP-08 | Coarse Tin Concentrate Pump ~~1~~ | | | Metso | HR50 ENR-S O4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 0.16 - 0.19 tph at 25 %w/w<br>Duty: 0.52 - 0.63 $m^3$/h @ 20.7 - 22.3 m TDH<br>Consumed Power: 2.4 kW |
| 200-PP-12 | Tin Tailings Pump 1 | | | Metso | HR75 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 0.10 - 0.11 tph at 0.2 %w/w<br>Duty: 29.1 - 31.4 $m^3$/h @ 16.3 - 16.9 m TDH<br>Consumed Power: 2.5 kW |
| 200-PP-13 | Tin Tailings Pump 2 | | | Metso | HR75 ENR-S C4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 0.10 - 0.11 tph at 0.2 %w/w<br>Duty: 29.1 - 31.4 $m^3$/h @ 16.3 - 16.9 m TDH<br>Consumed Power: 2.5 kW |
| 200-PP-14 | Tin Filtrate Pump | | | Andritz | Carver Model 855 OH 1" x 8 | Type: Flange mounted pump<br>Duty: 3 $m^3$/h @ 20.8 m TDH |
| 200-PP-15 | Tin Filter Vacuum Pump | | | Andritz | Process Vacuum 2BE1103 | Type: Wet Ring Vacuum Pump<br>Duty: 250 $Nm^3$/h @ 50 - 75 kPa gauge |
| 200-PP-16 | Tin Filter Seal Water Pump | | | Crest Process Engineering | KSB Movitec V 2/3 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 15.5 l/min @ 17.3 m TDH<br>Consumed Power: 0.18 kW |
| 200-PP-17 | Concentrate Area Sump Pump | | | Metso | VS50 L150 O5S | Type: Vertical centrifugal sump pump<br>Duty: 40 $m^3$/h @ 18.7 m TDH<br>Consumed power: 6.0 kW<br>Shaft Length: 1500 mm |

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|---|---|---|---|---|---|---|
| 200-PP-18 | Diesel Supply Pump 1 | | | S Koronka | Tuthill 1017 Gear Pump. Part of 200-WS-03 | Type: Diesel pump<br>Duty: 2800 L/h @ 600 kPag |
| 200-PP-19 | Diesel Supply Pump 2 | | | S Koronka | Tuthill 1017 Gear Pump. Part of 200-WS-03 | Type: Diesel pump<br>Duty: 2800 L/h @ 600 kPag |
| 200-PP-20 | Off Gas Scrubber Stage 2 Recirculation Pump 1 | | | Macrotek | Titan ST 1x1.5x6 | Type: ANSI centrifugal pump, c/w double mechanical seal<br>Duty: 3.4 m3/hr @ 20 m<br>Materials: 316 SS |
| 200-PP-21 | Off Gas Scrubber Stage 2 Recirculation Pump 2 | | | Macrotek | Titan ST 1x1.5x6 | Type: ANSI centrifugal pump, c/w double mechanical seal<br>Duty: 3.4 m3/hr @ 20 m<br>Materials: 316 SS |
| 200-PP-22 | Off Gas Scrubber Cooler Recirculation Pump | | | Crest Process Engineering | KSB MTC V 65/5D-5.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 5.56 - 6.11 l/s @ 49.7 - 50.8 m TDH<br>Consumed Power: 4.7 kW |
| 200-RV-02 | Reduction Kiln Cyclone Underflow Rotary Valve | | | Drytech International | | Type: Rotary Valve<br>Capacity: 2,400 kg/h<br>Size: 250 mm<br>Materials: 304 SS |
| 200-RV-03 | Reduction Kiln Discharge Rotary Valve | | | Rotolok Ltd | 15.55SSS108RV | Type: Rotary Valve<br>Capacity: 2,400 kg/h<br>Size: 150 mm<br>Cast Iron |
| 200-RV-04 | Tungsten Concentrate Rotary Valve | | | Cleeve Materials Handling | DMN ??? | Construction: Cast iron body<br>Capacity: 6000 kg/h |
| 200-RV-05 | Tin Concentrate Rotary Valve | | | Cleeve Materials Handling | DMN ??? | Construction: Cast iron body<br>Capacity: 6000 kg/h |
| 200-RV-06 | Tin Dryer Rotary Valve | | | Drytech International | | Construction: ?<br>Capacity: ? kg/h |
| 200-RV-08 | Blending Bin 1 Rotary Valve | | | Cleeve Materials Handling | DMN ??? | Construction: Cast iron body<br>Capacity: 6000 kg/h |
| 200-RV-09 | Blending Bin 2 Rotary Valve | | | Cleeve Materials Handling | DMN ??? | Construction: Cast iron body<br>Capacity: 6000 kg/h |
| 200-RV-10 | Blending Bin 3 Rotary Valve | | | Cleeve Materials Handling | DMN ??? | Construction: Cast iron body<br>Capacity: 6000 kg/h |
| 200-RV-12 | Reduction Kiln Feed Rotary Valve | | | Drytech International | | Type: Rotary Valve<br>Capacity: 2,400 kg/h<br>Size: 250 mm<br>Materials: 304 SS |
| 200-RV-13 | Tungsten Blending Drum Tipping Chute Rotary Valve | | | Cleeve Materials Handling | DMN ??? | Construction: Cast iron body<br>Capacity: 6000 kg/h |
| 200-RV-14 | Concentrate Scavenger Drum Tipping Chute Rotary Valve | | | Cleeve Materials Handling | DMN ??? | Construction: Cast iron body<br>Capacity: 6000 kg/h |
| 200-RV-15 | Off Gas Scrubber Baghouse Discharge Rotary Valve | | | Macrotek | DN 150 | Construction: TBA<br>Capacity: TBA |
| 200-RV-16 | Concentrate Area Dust Collector Rotary Valve | | | Camfil | DL250/1 IP56 | Cast iron body, with polyurethane rotor blades |
| 200-SA-01 | Tin Tailings Sampler | | | Multotec | Multotec 50NB-TVS-2/30 | Type: DN 50 rotary vezin<br>Cut size: 0.148 L (soft) 0.185 L (hard)<br>Cut frequency: 20 per hour |
| 200-SA-02 | Tungsten Concentrate Sampler | | | Multotec | Multotec 100-DVS-2/50 | Type: DN 50 rotary vezin<br>Cut size: ? L (soft) ? L (hard)<br>Cut frequency: ? per hour |
| 200-SA-03 | Tin Concentrate Sampler | | | Multotec | Multotec 100-DVS-2/50 | Type: DN 50 rotary vezin<br>Cut size: ? L (soft) ? L (hard)<br>Cut frequency: ? per hour |
| 200-SN-01 | Concentrate Sizing Screen | | | Derrick Corporation | Derrick SG36-90D-3 | Type: Single deck high frequency dry screen<br>Size: 0.9 x 2.25 m<br>Solids Throughput: 1.2 tph (soft) 1.22 tph (hard)<br>Drive Type: Single vibrator motor<br>Aperture: 150 µm<br>Screen Panel Material: Wire Mesh |
| 200-SS-01 | Off Gas Scrubbing Area Safety Shower | | | | | Type: Combination safety shower and eyewash station |

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|---|---|---|---|---|---|---|
| 200-TB-01 | Fine Tin Table | | | Holman Wilfley | 8000SD | Type: Single Deck Linear Table<br>Feed Rate: 0.13 tph (soft) 0.16 tph (hard)<br>Maximum Capacity: 2.5 tph<br>Deck Area: 1.6 x 4.9 m |
| 200-TB-02 | Coarse Tin Table | | | Holman Wilfley | 8000SD | Type: Single Deck Linear Table<br>Feed Rate: 0.16 tph (soft) 0.20 tph (hard)<br>Maximum Capacity: 2.5 tph<br>Deck Area: 1.6 x 4.9 m |
| 200-TK-01 | Reaction Tank 1 | | | Siltbuster Process Solutions | Part of 200-WS-02 | Type: Flat bottom tank<br>Construction: Glass flake lined carbon steel<br>Capacity: 1 m³<br>Size: 1 m W x 1 m L x 1 m H |
| 200-TK-02 | Reaction Tank 2 | | | Siltbuster Process Solutions | Part of 200-WS-02 | Type: Flat bottom tank<br>Construction: Glass flake lined carbon steel<br>Capacity: 1 m³<br>Size: 1 m W x 1 m L x 1 m H |
| 200-TK-04 | Tin Filter Vacuum Seal Water Tank | | | Chesterfield | Fabricated | Type: Flat bottom tank<br>Construction: 6 mm carbon steel<br>Capacity: 250L<br>Size: 0.8 m ø x 0.8 m H |
| 200-TK-05 | Diesel Storage Tank | | | S Koronka | Part of 200-WS-03 | Type: Self bunded containerised diesel tank<br>Live Capacity: 60 m³ |
| 200-TK-06 | Tin Filtration Constant Density Tank | | | SP Fabrications | Fabricated | Type: Constant density tank<br>Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Capacity: 1.0 m³<br>Size: 1.25 m ø x 1.25 m H |
| 200-TX-07 | Concentrate Handling & Reagents Area Transformer | | | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 2000 kVA |
| 200-WS-01 | Off Gas Scrubbing System | | | Macrotek | MP-36-8 | Type: 2 Stage Packed Bed/Spray Tower Scrubber c/w pre-quench<br>Construction: Stainless Steel (Grade 316)<br>Size: 900 mm D x 12,000 mm H<br>Gas Throughput: 2,857 kg/h @ 920 deg C<br>Flowrate: 10,104 Am³/h |
| 200-WS-01a | Off Gas Scrubbing System Exhaust Stack | | | Macrotek | MSK-10-30 | Construction: Stainless Steel (Grade 316)<br>Size: 300mm Ø x 30 m H<br>Exit Temperature: 63 °C |
| 200-WS-02 | Scrubber Effluent Treatment Plant | | | Siltbuster Process Solutions | | Skid mounted reaction and neutralisation tank, c/w tanks, agitators, discharge pumps, instrumentation and control panel |
| 200-WS-03 | Diesel Supply Skid | | | S Koronka | | Skid mounted diesel storage and pumping system |
| **AREA 210** | **TAILINGS THICKENING** | | | | | |
| 210-CH-01 | Tailings Thickener Feed Box | | | Chesterfield | Fabricated | Construction: 6mm carbon steel lined with 6 mm thick rubber |
| 210-CH-02 | Final Tailings Sampler Feed Box | | | Chesterfield | Fabricated | Construction: 6mm carbon steel lined with 6 mm thick rubber |
| 210-CH-03 | Tailings Thickener Overflow Launder and Trash Screen | | | | Fabricated | Construction: 6mm carbon steel unlined |
| 210-HP-01 | Tailings Thickener Underflow Hopper | | | Chesterfield | Cylindrical Sloped Bottom Hopper | Construction: 6mm carbon steel lined with 6 mm thick rubber<br>Live Capacity: 5 m³ |
| 210-PP-01 | Tailings Disposal Pump 1A | check | | Metso | HR200 LNR-S C5HC | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 242 - 290 tph at 57 %w/w<br>Duty: 280 - 335 m³/h @ 65 - 90 m TDH<br>Consumed Power: 94.6 kW<br>First stage of two stage pumping |
| 210-PP-02 | Tailings Disposal Pump 2A | check | | Metso | HR200 LNR-S C5HC | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 242 - 290 tph at 57 %w/w<br>Duty: 280 - 335 m³/h @ 65 - 90 m TDH<br>Consumed Power: 94.6 kW<br>First stage of two stage pumping |

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|---|---|---|---|---|---|---|
| 210-PP-03 | Tailings Disposal Pump 1B | check | | Metso | HR200 LNR-S C5HC | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 242 - 290 tph at 57 %w/w<br>Duty: 280 - 335 m³/h @ 65 - 90 m TDH<br>Consumed Power: 94.6 kW<br>Second stage of two stage pumping |
| 210-PP-04 | Tailings Disposal Pump 2B | check | | Metso | HR200 LNR-S C5HC | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 242 - 290 tph at 57 %w/w<br>Duty: 280 - 335 m³/h @ 65 - 90 m TDH<br>Consumed Power: 94.6 kW<br>Second stage of two stage pumping |
| 210-PP-05 | Tailings Area Sump Pump | | | Metso | VS100 L180 O3S | Type: Vertical centrifugal sump pump<br>Duty: 90 m³/h @ 15.5 m TDH<br>Shaft Length: 1800 mm<br>Consumed power: 12.3 kW |
| 210-PP-06 | Decant Return Water Pump | | | Crest Process Engineering | Flygt BS2400.402 | Type: Submersible centrifugal pump (1000 V)<br>Duty: 31 - 69 l/s @ 50.6 - 50 .8 m TDH<br>Consumed Power: 60.4 kW |
| 210-PP-07 | MWF Underdrainage Pump | | | Crest Process Engineering | Flygt NP 3153 181 | Type: Submersible centrifugal pump<br>Duty: 10 l/s @ 35 m TDH<br>Consumed Power: 8.96 kW |
| 210-PP-08 | MWF Underdrainage Pump 2 | | | Crest Process Engineering | Flygt NP 3153 182 | Type: Submersible centrifugal pump<br>Duty: 10 l/s @ 35 m TDH<br>Consumed Power: 8.96 kW |
| 210-SA-01 | Final Tailings Primary Sampler | | | Multotec | Multotec 250-TIO-20/4/20 | Type: DN 250 primary vezin sampler<br>Cut size: 2.70 L (soft) 1.97 L (hard)<br>Cut frequency: 10 per hour |
| 210-SA-02 | Final Tailings Secondary Sampler | | | Multotec | Multotec 250-TIO-20/4/20 | Type: DN 50 secondary rotary vezin<br>Cut size: 0.216 L (soft) 0.158 L (hard)<br>Cut frequency: 30 per primary cut |
| 210-SA-03 | Tailings Thickener Clarometer | | | Haith | Haith Clarometer auto sampler | Auto Sampler |
| 210-TH-01 | Tailings Thickener | | | Andritz | Andritz Delkor / HR25/210 | Type: High rate thickener<br>Construction: Welded<br>Drive Type: Hydraulic<br>Diameter: 25 m<br>Underflow Density: 57 %w/w |
| 210-TK-01 | Final Tailings Sample Swirl Tank | | | Multotec | Fabricated | Type: Swirl Tank<br>Construction: 6 mm carbon steel<br>Capacity: 10 - 15 L |
| **AREA 360** | **REAGENTS** | **Yes** | | | | |
| 360-AG-01 | Ferrosilicon Mixing Tank Agitator | | | Mixtec | 1067 | Type: Single impellor axial flow<br>Construction:  Carbon steel, rubber lined<br>Speed: 112 rpm |
| 360-AG-02 | Flocculant Mixing Agitator 1 | | | Roymec Technologies | Mixtec 1037 | Type: Single impellor axial flow<br>Construction: 316 Stainless steel<br>Speed: 118 rpm |
| 360-AG-03 | Flocculant Mixing Agitator 2 | | | Roymec Technologies | Mixtec 1037 | Type: Single impellor axial flow<br>Construction: 316 Stainless steel<br>Speed: 118 rpm |
| 360-AG-04 | Xanthate Mixing Tank Agitator | | | Mixtec | 1037 | Type: Single impellor axial flow<br>Construction: 316 Stainless steel<br>Speed: 277 rpm |
| 360-AG-05 | Lime Mixing and Storage Tank Agitator | | | Mixtec | 1037 | Type: Single impellor axial flow<br>Construction: 316 Stainless steel<br>Speed: 277 rpm |
| 360-AG-07 | Copper Sulphate Mixing Tank Agitator | | | Mixtec | 1037 | Type: Single impellor axial flow<br>Construction: 316 Stainless steel<br>Speed: 277 rpm |
| 360-CH-01 | Flocculant Bag Enclosure | | | Roymec Technologies | Fabricated | Construction: Steel framed and cladded structure |

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|---|---|---|---|---|---|---|
| 360-CH-02 | Ferrosilicon Bag Enclosure | | | SP Fabrications | Fabricated | Construction: 6mm galvanised steel c/w bag breaker |
| 360-CH-03 | Xanthate Bag Enclosure | | | SP Fabrications | Fabricated | Construction: 6mm galvanised steel c/w bag breaker |
| 360-CH-05 | Copper Sulphate Bag Enclosure | | | SP Fabrications | Fabricated | Construction: 6mm galvanised steel c/w bag breaker |
| 360-DC-01 | Ferrosilicon Dust Collector | | | Dustcheck | SFJC6-1.6-10 FS | Type: Insertable dust collector<br>Duty: 1000 Am³/h |
| 360-DC-03 | Xanthate Dust Collector | | | Dustcheck | SFJC6-1-06 FS | Type: Insertable dust collector (ATEX)<br>Duty: 400 Am³/h |
| 360-FE-01 | Ferrosilicon Screw Feeder | | | Inquip | WAM S41.16.090 | Type: Screw feeder<br>Capacity: 10000 kg/h<br>Size: 120 mm ø x 2000 mm L |
| 360-FE-02 | Flocculant Screw Feeder | | | Roymec Technologies | | Type: Screw feeder<br>Capacity: 20 kg/h<br>Size: 120 mm ø x 2000 mm L |
| 360-HP-01 | Flocculant Feed Hopper | | | Roymec Technologies | Feed Hopper | Construction: 6mm carbon steel c/w bag breaker<br>Live Capacity: 3 m³ |
| 360-HT-01 | Ferrosilicon Bag Hoist | | | Alpha Lifting Services | Stahl ST2010-8/2 Hoist and trolley | Type: Wire rope hoist<br>WLL: 1.5 t<br>Travel: 3.5 m<br>Lift: 6 m |
| 360-HT-02 | Flocculant Bag Hoist | | | Roymec Technologies | Elephant Lifting | Type: Wire rope hoist<br>WLL: 1 t<br>Travel: ? m<br>Lift: ? m |
| 360-HT-03 | Lime Bag Hoist | | | Alpha Lifting Services | Stahl ST2010-8/2 Hoist and trolley | Type: Wire rope hoist<br>WLL: 1.5 t<br>Travel: 6.0 m<br>Span: 5.0 m<br>Lift: 6.2 m |
| 360-MS-01 | Flocculant Wetting Cone | | | Roymec Technologies | Techwet | Construction: Stainless steel (Grade 304)<br>Capacity: 20 kg/h<br>Water Usage: 6.67 m³/h |
| 360-PP-01 | Dense Medium Ferrosilicon Pump | | | Metso | HR50 ENR-S O4 | Type: Horizontal centrifugal slurry pump<br>Solids Flow Rate: 10 - 12 tph at 82 %w/w<br>Duty: 3.6 - 4.4 m³/h @ 34.5 - 42.7 m TDH<br>Consumed Power: 17.7 kW |
| 360-PP-02 | Flocculant Dosing Pump 1 | | | Roymec Technologies | Cyclone Industries Monoflo C23KC11RMA | Type: Progressive Cavity<br>Duty: 1.4 - 4.8 m³/h @ ? m TDH |
| 360-PP-03 | Flocculant Dosing Pump 2 | | | Roymec Technologies | Cyclone Industries Monoflo C23KC11RMA | Type: Progressive Cavity<br>Duty: 1.4 - 4.8 m³/h @ ? m TDH |
| 360-PP-04 | Xanthate Dosing Pump 1 | | | Crest Process Engineering | EXtronic EXBb 0308 NP3 | Type: Electrically operated diaphragm pump (ATEX)<br>Duty: 3.0 l/hr @ 15 m TDH |
| 360-PP-05 | Xanthate Dosing Pump 2 | | | Crest Process Engineering | EXtronic EXBb 0308 NP3 | Type: Electrically operated diaphragm pump (ATEX)<br>Duty: 3.0 l/hr @ 15 m TDH |
| 360-PP-06 | Lime Recirculation Pump 1 | | | Crest Process Engineering | Bredel 40 | Type: Peristaltic hose pump ~~(ATEX)~~<br>Duty: 1800 l/hr @ 30 m TDH |
| 360-PP-07 | Flocculant Dosing Pump 3 | | | Crest Process Engineering | | Type: Progressive Cavity<br>Duty: 1000 l/hr @ 30 m TDH |
| 360-PP-09 | Copper Sulphate Dosing Pump 1 | | | Crest Process Engineering | Grundfos DDA 7.5 - 16 | Type: Electrically operated diaphragm pump<br>Duty: 2.0 l/hr @ 5 m TDH |
| 360-PP-10 | Copper Sulphate Dosing Pump 2 | | | Crest Process Engineering | Grundfos DDA 7.5 - 16 | Type: Electrically operated diaphragm pump<br>Duty: 2.0 l/hr @ 5 m TDH |
| 360-PP-11 | Frother Dosing Pump | | | Crest Process Engineering | Grundfos DDA 7.5 - 16 | Type: Electrically operated diaphragm pump<br>Duty: 0.015 l/hr @ 15 m TDH |
| 360-PP-13 | Flocculant Area Sump Pump | | | Metso | VS50 L150 O5S | Type: Vertical centrifugal sump pump<br>Duty: 40 m³/h @ 15.6 m TDH<br>Shaft Length: 1500 mm<br>Consumed power: 4.1 kW |

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| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 360-PP-14 | Xanthate Area Sump Pump | | | Crest Process Engineering | IR PD15E-FES-PTT | Type: Air operated twin diaphragm pump<br>Duty: 150 l/min @ 40 m TDH<br>Air Consumption: 93.4 m³/h |
| 360-PP-15 | Copper Sulphate Area Sump Pump | | | Crest Process Engineering | IR PD15E-FES-PTT | Type: Air operated twin diaphragm pump<br>Duty: 150 l/min @ 40 m TDH<br>Air Consumption: 93.4 m³/h |
| 360-PP-16 | Lime Area Sump Pump | | | Crest Process Engineering | IR PD15E-FES-PTT | Type: Air operated twin diaphragm pump<br>Duty: 150 l/min @ 40 m TDH<br>Air Consumption: 93.4 m³/h |
| 360-PP-17 | Water Treatment Plant Reagents Sump Pump | | | Crest Process Engineering | IR PD15E-FES-PTT | Type: Air operated twin diaphragm pump<br>Duty: 150 l/min @ 40 m TDH<br>Air Consumption: 93.4 m³/h |
| 360-PP-19 | Lime Recirculation Pump 2 | | | Crest Process Engineering | Bredel 40 | Type: Peristaltic hose pump ~~(ATEX)~~<br>Duty: 1800 l/hr @ 30 m TDH |
| 360-SS-01 | Frother Area Safety Shower | | | | | Type: Combination safety shower and eyewash station |
| 360-SS-02 | Reagent Area Safety Shower 1 | | | | | Type: Combination safety shower and eyewash station |
| 360-SS-03 | Reagent Area Safety Shower 2 | | | | | Type: Combination safety shower and eyewash station |
| 360-SS-04 | Reagent Area Safety Shower 3 | | | | | Type: Combination safety shower and eyewash station |
| 360-SS-06 | Ferrosilicon Mixing Area Safety Shower | | | | | Type: Combination safety shower and eyewash station |
| 360-TK-01 | Ferrosilicon Mixing Tank | | | Chesterfield | Fabricated | Type: Conical bottom suction tank<br>Construction: 6 mm carbon steel lined with 6 mm thick rubber<br>Capacity: 2.0 m³ |
| 360-TK-02 | Flocculant Mixing and Storage Tank | | | Roymec Technologies | Fabricated | Type: Rectangular flat bottom tank<br>Construction: 6mm carbon steel<br>Capacity: 7.5 m³ (2 x 2.5 m³ mixing amd 1 x 2.5 m³ storage) |
| 360-TK-03 | Xanthate Mixing Tank | | | | Fabricated | Type: Round tank with 10deg sloping floor<br>Construction: 6mm carbon steel<br>Capacity: 0.25 m³ |
| 360-TK-04 | Xanthate Storage Tank | | | | Fabricated | Type: Round tank with sloping floor for drainage<br>Construction: 6mm carbon steel<br>Capacity: 0.45 m³ |
| 360-TK-05 | Lime Mixing/Storage Tank | | | | Fabricated | Type: Round tank with 10deg sloping floor<br>Construction: 6mm carbon steel<br>Capacity: 7 m³ |
| 360-TK-09 | Copper Sulphate Mixing Tank | | | | Fabricated | Type: Round tank with 10deg sloping floor<br>Construction: 6mm stainless steel (316L)<br>Capacity: 0.25 m³ |
| 360-TK-10 | Copper Sulphate Storage Tank | | | | Fabricated | Type: Round tank with sloping floor for drainage<br>Construction: 6mm stainless steel (316L)<br>Capacity: 0.45 m³ |
| 360-WS-01 | Flocculant Wetting Cone | | | Roymec Technologies | Techwet | |
| **AREA 370** | **ELECTRICAL POWER AND RETICULATION** | **Yes** | | | | |
| 370-BD-01 | Hemerdon Site 33 kV Substation | | | | | Type: Transportable Building<br>Size: 2 x 40' High Cube Shipping Container |
| 370-TX-07 | 33 kV / 11 kV Site Transformer | | | Schneider | ONAN Power Transformer | Voltage: 33kV / 11kV<br>Size: 6 MVA |
| 370-SB-01 | Hemerdon Site 33kV Switchboard | | | | | |
| 370-SB-02 | Hemerdon Site 11kV Switchboard | | | Lucy Switchgear | VCE2A | Specification: 6 modules , 630A, 20kA / 1sec |
| 370-SB-03 | Gravity & DMS Area 11kV Switchboard | | | Lucy Switchgear | VCE2A / SSE6A | Specification: 3 modules , 630A, 20kA / 1sec |
| 370-SB-04 | Refining & Services Area 11kV Switchboard | | | Lucy Switchgear | VCE2A / SSE6A | Specification: 3 modules , 630A, 20kA / 1sec |
| **AREA 390** | **WATER STORAGE & RETICULATION** | **Yes** | | | | |

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| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 390-PP-03 | Raw Water Pump 1 | | | Crest Process Engineering | KSB MCPK 80-200 | Type: End suction back pullout centrifugal pump<br>Duty: 34 - 37 l/s @ 55.3 - 56.5 m TDH<br>Consumed Power: 26.57 kW |
| 390-PP-04 | Raw Water Pump 2 | | | Crest Process Engineering | KSB MCPK 80-200 | Type: End suction back pullout centrifugal pump<br>Duty: 34 - 37 l/s @ 55.3 - 56.5 m TDH<br>Consumed Power: 26.57 kW |
| 390-PP-05 | Gland Water Pump 1 | | | Crest Process Engineering | KSB MTC V 50/3D-4.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 10-11 l/s @ 82.7 - 85.4 m TDH<br>Consumed Power: 12.7 kW |
| 390-PP-06 | Gland Water Pump 2 | | | Crest Process Engineering | KSB MTC V 50/3D-4.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 10-11 l/s @ 82.7 - 85.4 m TDH<br>Consumed Power: 12.7 kW |
| 390-PP-07 | Process Water Pump 1 | | | Crest Process Engineering | Apex ISO 350x300-550 | Type: End suction back pullout centrifugal pump<br>Duty: 300 - 335 l/s @ 60 - 62 m TDH<br>Consumed Power: 256 kW |
| 390-PP-08 | Process Water Pump 2 | | | Crest Process Engineering | Apex ISO 350x300-550 | Type: End suction back pullout centrifugal pump<br>Duty: 300 - 335 l/s @ 60 - 62 m TDH<br>Consumed Power: 256 kW |
| 390-PP-09 | Process Water Pump 3 | | | Crest Process Engineering | Apex ISO 350x300-550 | Type: End suction back pullout centrifugal pump<br>Duty: 300 - 335 l/s @ 60 - 62 m TDH<br>Consumed Power: 256 kW |
| 390-PP-13 | Loughter Mill Transfer Pump 1 | | | Crest Process Engineering | Caprari P8C/5/30/9A | Type: Centrifugal vertical shaft multi-stage turbine pump<br>Duty: 30 - 33 l/s @ 179.9 - 183.5 m TDH<br>Consumed Power: 71.7 kW |
| 390-PP-14 | Loughter Mill Transfer Pump 2 | | | Crest Process Engineering | Caprari P8C/5/30/9A | Type: Centrifugal vertical shaft multi-stage turbine pump<br>Duty: 30 - 33 l/s @ 179.9 - 183.5 m TDH<br>Consumed Power: 71.7 kW |
| 390-PP-15 | Tory Pond Transfer Pump 1 | | | Crest Process Engineering | KSB MTC V 100/2-7.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 30 - 33 l/s @ 140.3 - 144.4 m TDH<br>Consumed Power: 60.3 kW |
| 390-PP-16 | Tory Pond Transfer Pump 2 | | | Crest Process Engineering | KSB MTC V 100/2-7.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 30 - 33 l/s @ 140.3 - 144.4 m TDH<br>Consumed Power: 60.3 kW |
| 390-PP-17 | North Smallhanger Pond Transfer Pump | | | Crest Process Engineering | KSB MTC V 50/2B-4.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 10 - 11 l/s @ 59.8 - 61.9 m TDH<br>Consumed Power: 9.9 kW |
| 390-PP-18 | South Smallhanger Pond Transfer Pump | | | Crest Process Engineering | KSB MTC V 50/2B-4.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 10 - 11 l/s @ 59.9 - 62.0 m TDH<br>Consumed Power: 9.9 kW |
| 390-PP-19 | Tailings Gland Seal Water Pump 1 | | | Crest Process Engineering | KSB MTC V32/4B-2.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 1.5 l/s @ 100 m TDH<br>Consumed Power: 4.05 kW |
| 390-PP-20 | Tailings Gland Seal Water Pump 2 | | | Crest Process Engineering | KSB MTC V32/4B-2.1 | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 1.5 l/s @ 100 m TDH<br>Consumed Power: 4.05 kW |
| 390-PP-21 | Water Treatment Plant Transfer Pump 1 | | | Crest Process Engineering | KSB MCPK 100-200 | Type: End suction back pullout centrifugal pump<br>Duty: 22 - 33 l/s @ 8.1 - 15.1 m TDH<br>Consumed Power: 6.5 kW |
| 390-PP-22 | Water Treatment Plant Transfer Pump 2 | | | Crest Process Engineering | KSB MCPK 100-200 | Type: End suction back pullout centrifugal pump<br>Duty: 22 - 33 l/s @ 8.1 - 15.1 m TDH<br>Consumed Power: 6.5 kW |
| 390-PP-23 | Water Treatment Plant Area Sump Pump | | | Metso | VS50 L150 O5S | Type: Vertical centrifugal sump pump<br>Duty: 40 $m^3/h$ @ 15.0 m TDH<br>Shaft Length: 1500 mm<br>Consumed power: 4.8 kW |
| 390-PP-24 | LHDC Feed Pump | | | Crest Process Engineering | | Type: Centrifugal vertical shaft multi-stage pump<br>Duty: 5.5 l/s @ 20.4 m TDH<br>Consumed Power: 1.9 kW |

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| Equipment No. | Item Description | Restart Project | Comment | Supplier / Vendor | Make / Model / Type | Duty & Detailed Specification |
|---|---|---|---|---|---|---|
| 390-TK-02 | Raw Water Tank | | | Land and Marine Engineering | Fabricated | Type: Flat bottom tank<br>Construction: Carbon steel<br>Capacity: 150 m³<br>Size: 4.5 m ø x 10.0 m H |
| 390-TK-03 | Gland Water Tank | | | Forbes | HDPE 5,000 litre Water Tank | Type: Preformed flat bottom tank<br>Construction: HDPE<br>Capacity: 5 kL<br>Size: 1.85 m ø x 2.348 m H |
| 390-TK-04 | Process Water Tank | | | Land and Marine Engineering | Fabricated | Type: Flat bottom tank<br>Construction: Carbon steel<br>Capacity: 2800 m³<br>Size: 23.0 m ø x 8.3 m H |
| 390-WP-01 | Water Treatment Plant | | | Siltbuster Process Solutions | | Design capacity 80 m³/h<br>Maximum capacity 120 m³/h |
| **AREA 420** | **COMPRESSED AIR SERVICES** | **Yes** | | | | |
| 420-AB-01 | Flotation Blower 1 | | | Drew & Co | Busch / Samos / SB 0310 B0 | Type: Side channel blower<br>Duty: 5.26 m³/min FAD @ 24 kPag |
| 420-AB-02 | Flotation Blower 2 | | | Drew & Co | Busch / Samos / SB 0310 B0 | Type: Side channel blower<br>Duty: 5.26 m³/min FAD @ 24 kPag |
| 420-AC-01 | High Pressure Air Compressor 1 | | | Drew & Co | Atlas Copco GA 75 | Type: Rotary screw compressor<br>Duty: 12.43 m³/min FAD @ 850 kPa |
| 420-AC-02 | High Pressure Air Compressor 2 | | | Drew & Co | Atlas Copco GA 75 | Type: Rotary screw compressor<br>Duty: 12.43 m³/min FAD @ 850 kPa |
| 420-AC-03 | High Pressure Air Compressor 3 | | | Drew & Co | Atlas Copco GA 75 Plus | Type: Rotary screw compressor<br>Duty: 15 m³/min FAD @ 750 kPa |
| 420-AC-03 | High Pressure Air Compressor 3 | | | Drew & Co | Atlas Copco GA 75 Plus | Type: Rotary screw compressor<br>Duty: 15 m³/min FAD @ 750 kPa |
| 420-AC-11 | Ore Sorter Air Compressor 1 | Yes | New | Atlas Copco | Atlas Copco GA160VSD+FF | Type: Rotary screw compressor<br>Duty: 31.2 m³/min FAD @ 800 kPa |
| 420-AC-12 | Ore Sorter Air Compressor 2 | Yes | New | Atlas Copco | Atlas Copco GA160VSD+FF | Type: Rotary screw compressor<br>Duty: 31.2 m³/min FAD @ 800 kPa |
| 420-AC-13 | Ore Sorter Air Compressor 3 | Yes | New | Atlas Copco | Atlas Copco GA160VSD+FF | Type: Rotary screw compressor<br>Duty: 31.2 m³/min FAD @ 800 kPa |
| 420-AD-01 | Air Drier | | | Drew & Co | Atlas Copco CD 250 + Desiccant Dryer | Type: Desiccant - sillica gel and molecular sieve<br>Duty: 14.99 m³/min FAD @ 1450 kPa |
| 420-AD-11 | Ore Sorter Air Drier 1 | Yes | New | Atlas Copco | Atlas Copco CD970 + Desiccant Dryer | |
| 420-AD-12 | Ore Sorter Air Drier 2 | Yes | New | Atlas Copco | Atlas Copco CD970 + Desiccant Dryer | |
| 420-AR-01 | Plant Air Receiver | | | Drew & Co | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1100 kPa |
| 420-AR-02 | Instrument Air Receiver | | | Drew & Co | Atlas Copco LV 500 | Capacity: 500 L<br>Design Pressure: 1100 kPa |
| 420-AR-03 | Reduction Kiln Air Receiver | | | Drew & Co | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1100 kPa |
| 420-AR-11 | Pebble Ore Sorter 1 Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1200 kPa |
| 420-AR-12 | Pebble Ore Sorter 2 Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1200 kPa |
| 420-AR-13 | Pebble Ore Sorter 3 Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1200 kPa |
| 420-AR-14 | Pebble Ore Sorter 4 Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1200 kPa |
| 420-AR-15 | Standby Ore Sorter Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1200 kPa |
| 420-AR-16 | Cobble Ore Sorter 1 Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1200 kPa |
| 420-AR-17 | Cobble Ore Sorter 2 Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 2000 | Capacity: 2000 L<br>Design Pressure: 1200 kPa |
| 420-AR-18 | Ore Sorter Area Air Receiver | Yes | New | Atlas Copco | Atlas Copco LV 1000 | Capacity: 1000 L<br>Design Pressure: 1200 kPa |

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|---|---|---|---|---|---|---|
| 420-FR-01 | Dryer Inlet Filter 1 | | | Drew & Co | Atlas Copco DD | Filter micron rating: 1 µm |
| 420-FR-02 | Dryer Inlet Filter 2 | | | Drew & Co | Atlas Copco PD | Filter micron rating: 1 µm |
| 420-FR-03 | Dryer Discharge Filter | | | Drew & Co | Atlas Copco DDp | Filter micron rating: 0.01 µm |
| 420-FR-11 | Ore Sorter Air Drier 1 Inlet Filter | Yes | New | Atlas Copco | UD1100+ :0.0004mg/m3 | |
| 420-FR-12 | Ore Sorter Air Drier 2 Inlet Filter | Yes | New | Atlas Copco | UD1100+ :0.0004mg/m3 | |
| 420-FR-13 | Ore Sorter Air Drier 1 Outlet Filter | Yes | New | Atlas Copco | DDp1100+ : 99.93% 0.01um | |
| 420-FR-14 | Ore Sorter Air Drier 2 Outlet Filter | Yes | New | Atlas Copco | DDp1100+ : 99.93% 0.01um | |
| **AREA 430** | **ADMINISTRATION OFFICES & BUILDINGS** | **Yes** | | | | |
| 430-BD-01 | Administration Building | | | Wernick Buildings | | Type: Modular transportable building<br>Size: 46 m x 18.5 m |
| 430-BD-02 | Amenities Building | | | Wernick Buildings | | Type: Modular transportable building<br>Size: 12.6 m x 12 m |
| 430-BD-03 | Plant Control Room | | | Wernick Buildings | | Type: Transportable building<br>Size: 12.0 x 3.0 m |
| 430-BD-04 | Mining Contractor's Workshop | | | BY OTHERS | BY OTHERS | BY OTHERS |
| 430-PN-01 | Communications Hut Communications Panel | | | | | |
| 430-PN-02 | Administration Building Communications Panel | | | | | |
| 430-PN-03 | Workshop & Stores Communications Panel | | | | | |
| 430-PN-04 | Gatehouse Communications Panel | | | | | |
| 430-PN-05 | Mining Contractor Communications Panel | | | | | |
| 430-PP-01 | Plant Area Sewerage Pump | | | Drainstore Ltd | Compatta 32 | Type: Vortex pump<br>Duty: 4 l/s @ 6 m TDH |
| 430-PP-02 | Amenities Sewerage Pump | | | Drainstore Ltd | Compatta 32 | Type: Vortex pump<br>Duty: 4 l/s @ 6 m TDH |
| 430-PP-03 | Administration Sewerage Pump | | | Drainstore Ltd | Compatta 32 | Type: Vortex pump<br>Duty: 4 l/s @ 6 m TDH |
| 430-TK-01 | Crushing Area Sewerage Tank | | | TBC | | Type: Septic tank and leach drain<br>Construction: ?<br>Capacity: ? |
| 430-TX-06 | Mining Contractor Area Transformer | | | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 400 kVA |
| 430-TX-08 | Administration Area Transformer | | | Bowers Electricals | ONAN Distribution Transformer | Voltage: 11kV / 415 V at no load (400 V on load)<br>Size: 400 kVA |
| 430-WP-01 | Plant Sewerage Treatment Plant | | | Conder Environmental Solutions | SAF150N20 | Type: Modular sewerage treatment plant<br>Capacity: ? m³/day |
| **AREA 440** | **WORKSHOP & STORES** | **Yes** | | | | |
| 440-BD-01 | Workshop & Stores | | | Scorpion Engineering Construction | | Type: Steel framed building<br>Size: 50 m x 13 m x 4.5 m |
| **AREA 460** | **METALLURGICAL LABORATORY** | **Yes** | | | | |
| 460-BD-01 | Laboratory | | | Scorpion/Wernick | | Type: Transportable office building w/ steel framed test section<br>Size: 34 m x 9 m |
| 460-PN-06 | Laboratory Communications Panel | | | | | |

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Hemerdon Mine Weather Station
8/4/20 12:00 AM : 1 Week

| | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P |
|---|---|---|---|---|---|---|---|
| Date & Tim | Temp - °C | High Temp | Low Temp | High Hum | Low Hum - | Avg Wind S | Prevailing |
| ######## | 11 | 12 | 11 | 90 | 89 | 5 | NW |
| ######## | 12 | 12 | 11 | 91 | 90 | 9 | NW |
| ######## | 12 | 12 | 12 | 90 | 90 | 12 | NW |
| ######## | 12 | 12 | 12 | 90 | 89 | 8 | NW |
| ######## | 12 | 12 | 12 | 90 | 89 | 3 | NW |
| ######## | 11 | 12 | 11 | 91 | 90 | 4 | NNW |
| ######## | 11 | 11 | 11 | 91 | 90 | 6 | NNE |
| ######## | 11 | 11 | 11 | 90 | 90 | 7 | NNE |
| ######## | 11 | 11 | 11 | 91 | 90 | 8 | NE |
| ######## | 11 | 11 | 11 | 92 | 91 | 9 | NNE |
| ######## | 11 | 11 | 11 | 91 | 90 | 7 | N |
| ######## | 11 | 11 | 11 | 91 | 91 | 5 | NNE |
| ######## | 11 | 11 | 11 | 90 | 90 | 5 | NNE |
| ######## | 11 | 11 | 11 | 90 | 90 | 2 | N |
| ######## | 11 | 11 | 11 | 90 | 90 | 0 | N |
| ######## | 11 | 11 | 11 | 91 | 90 | 0 | N |
| ######## | 11 | 11 | 11 | 91 | 90 | 0 | N |
| ######## | 11 | 11 | 11 | 91 | 90 | 0 | |
| ######## | 11 | 11 | 11 | 91 | 90 | 0 | |
| ######## | 11 | 11 | 11 | 91 | 90 | 0 | |
| ######## | 11 | 11 | 11 | 92 | 91 | 0 | |
| ######## | 11 | 11 | 11 | 92 | 91 | 0 | |
| ######## | 11 | 11 | 11 | 91 | 90 | 0 | |
| ######## | 10 | 11 | 10 | 92 | 90 | 0 | NE |
| ######## | 10 | 10 | 10 | 93 | 92 | 0 | |
| ######## | 10 | 10 | 10 | 94 | 93 | 0 | |
| ######## | 11 | 11 | 10 | 94 | 94 | 0 | |
| ######## | 11 | 11 | 11 | 94 | 92 | 0 | NE |
| ######## | 12 | 12 | 11 | 93 | 91 | 1 | ENE |
| ######## | 12 | 12 | 12 | 92 | 88 | 0 | |
| ######## | 13 | 13 | 12 | 90 | 84 | 0 | ESE |
| ######## | 14 | 14 | 13 | 85 | 82 | 2 | S |
| ######## | 14 | 14 | 14 | 82 | 81 | 3 | WSW |
| ######## | 15 | 15 | 14 | 84 | 81 | 2 | SW |
| ######## | 15 | 15 | 15 | 84 | 81 | 4 | SW |
| ######## | 15 | 15 | 15 | 84 | 83 | 4 | SSW |
| ######## | 15 | 15 | 15 | 85 | 83 | 5 | SW |
| ######## | 16 | 16 | 15 | 85 | 82 | 7 | SSW |
| ######## | 15 | 16 | 15 | 83 | 80 | 9 | SSW |
| ######## | 16 | 16 | 15 | 84 | 78 | 8 | SW |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ######## | 17 | 17 | 16 | 80 | 77 | 11 | SW |
| ######## | 16 | 17 | 16 | 78 | 73 | 13 | SW |
| ######## | 17 | 17 | 16 | 73 | 70 | 12 | SW |
| ######## | 17 | 17 | 17 | 73 | 70 | 12 | SW |
| ######## | 17 | 18 | 17 | 73 | 70 | 12 | SW |
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| ######## | 18 | 19 | 18 | 94 | 92 | 0 | |
| ######## | 18 | 18 | 18 | 95 | 94 | 0 | |
| ######## | 18 | 18 | 18 | 96 | 95 | 0 | |
| ######## | 17 | 18 | 17 | 97 | 96 | 0 | |
| ######## | 17 | 17 | 17 | 98 | 97 | 0 | |
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| ######## | 23 | 24 | 23 | 78 | 71 | 4 | W |
| ######## | 24 | 24 | 23 | 80 | 66 | 2 | WNW |
| ######## | 25 | 25 | 24 | 72 | 62 | 3 | WNW |
| ######## | 25 | 26 | 25 | 69 | 62 | 3 | W |
| ######## | 25 | 25 | 25 | 70 | 59 | 2 | W |
| ######## | 25 | 26 | 25 | 64 | 56 | 4 | SE |
| ######## | 24 | 25 | 24 | 70 | 58 | 5 | S |
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| ######## | 22 | 22 | 22 | 81 | 75 | 1 | S |
| ######## | 23 | 23 | 22 | 84 | 81 | 0 | WSW |
| ######## | 23 | 23 | 23 | 82 | 74 | 1 | WSW |
| ######## | 24 | 24 | 23 | 78 | 71 | 4 | ENE |
| ######## | 24 | 24 | 24 | 73 | 70 | 5 | ENE |
| ######## | 25 | 25 | 24 | 73 | 69 | 5 | ENE |
| ######## | 26 | 26 | 25 | 72 | 66 | 4 | ENE |
| ######## | 27 | 27 | 26 | 70 | 56 | 4 | ESE |
| ######## | 28 | 28 | 27 | 60 | 51 | 4 | E |
| ######## | 28 | 28 | 28 | 59 | 47 | 3 | ESE |
| ######## | 29 | 29 | 28 | 58 | 45 | 3 | ESE |
| ######## | 27 | 29 | 27 | 53 | 42 | 1 | SE |
| ######## | 26 | 27 | 26 | 60 | 51 | 3 | S |
| ######## | 26 | 26 | 25 | 58 | 54 | 4 | S |
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| ######## | 27 | 28 | 27 | 66 | 56 | 10 | W |
| ######## | 27 | 27 | 27 | 69 | 65 | 13 | NW |

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| ######## | 24 | 27 | 24 | 71 | 68 | 21 | NW |
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| ######## | 20 | 20 | 20 | 81 | 79 | 15 | NNW |
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| ######## | 20 | 20 | 20 | 73 | 71 | 10 | NNW |
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| ######## | 19 | 19 | 19 | 77 | 73 | 16 | N |
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| ######## | 17 | 17 | 17 | 90 | 89 | 12 | NNW |
| ######## | 17 | 17 | 17 | 89 | 88 | 12 | N |
| ######## | 17 | 17 | 17 | 88 | 88 | 8 | N |
| ######## | 17 | 17 | 17 | 89 | 88 | 10 | NNW |

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| ######## | 25 | 25 | 25 | 80 | 75 | 11 | WNW |
| ######## | 25 | 25 | 25 | 78 | 76 | 14 | WNW |
| ######## | 26 | 26 | 25 | 77 | 75 | 14 | WNW |
| ######## | 26 | 26 | 26 | 76 | 74 | 14 | WNW |
| ######## | 26 | 26 | 26 | 75 | 72 | 15 | WNW |
| ######## | 26 | 26 | 26 | 75 | 72 | 15 | WNW |
| ######## | 26 | 26 | 26 | 75 | 73 | 14 | NW |
| ######## | 27 | 27 | 27 | 73 | 70 | 12 | NW |
| ######## | 27 | 27 | 27 | 71 | 67 | 14 | NW |
| ######## | 28 | 28 | 27 | 71 | 66 | 14 | NW |
| ######## | 28 | 28 | 28 | 68 | 65 | 12 | NW |
| ######## | 28 | 28 | 28 | 68 | 64 | 14 | NW |
| ######## | 28 | 28 | 28 | 68 | 64 | 13 | NW |
| ######## | 28 | 28 | 28 | 67 | 64 | 15 | NW |
| ######## | 28 | 28 | 28 | 68 | 65 | 16 | NW |
| ######## | 27 | 28 | 27 | 69 | 66 | 18 | NW |
| ######## | 27 | 27 | 27 | 70 | 67 | 20 | NW |
| ######## | 27 | 27 | 27 | 72 | 70 | 17 | NW |
| ######## | 26 | 27 | 26 | 73 | 71 | 20 | NW |

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|---|---|---|---|---|---|---|---|
| ######## | 26 | 26 | 26 | 75 | 72 | 19 | NW |
| ######## | 25 | 26 | 25 | 75 | 73 | 17 | NW |
| ######## | 25 | 25 | 25 | 76 | 74 | 18 | NW |
| ######## | 24 | 25 | 24 | 77 | 75 | 17 | NW |
| ######## | 24 | 24 | 24 | 77 | 76 | 16 | NW |
| ######## | 23 | 24 | 23 | 78 | 76 | 17 | WNW |
| ######## | 23 | 23 | 23 | 80 | 78 | 19 | NW |
| ######## | 22 | 23 | 22 | 81 | 80 | 19 | NNW |
| ######## | 22 | 22 | 22 | 82 | 81 | 18 | NNW |
| ######## | 22 | 22 | 22 | 83 | 82 | 17 | NNW |
| ######## | 22 | 22 | 22 | 84 | 83 | 13 | NNW |
| ######## | 21 | 22 | 21 | 85 | 84 | 14 | NNW |
| ######## | 21 | 21 | 21 | 85 | 84 | 6 | NW |
| ######## | 20 | 21 | 20 | 88 | 85 | 12 | NNW |
| ######## | 20 | 20 | 20 | 90 | 88 | 10 | N |
| ######## | 19 | 20 | 19 | 90 | 89 | 7 | NW |
| ######## | 19 | 19 | 19 | 91 | 90 | 7 | NW |
| ######## | 19 | 19 | 19 | 92 | 90 | 9 | NW |
| ######## | 19 | 19 | 19 | 92 | 90 | 17 | N |
| ######## | 18 | 19 | 18 | 91 | 90 | 15 | NNE |
| ######## | 19 | 19 | 18 | 91 | 90 | 12 | N |
| ######## | 18 | 19 | 18 | 90 | 90 | 7 | NW |
| ######## | 18 | 18 | 18 | 92 | 90 | 8 | NW |
| ######## | 18 | 18 | 18 | 92 | 91 | 15 | NNW |
| ######## | 18 | 18 | 18 | 91 | 90 | 17 | N |
| ######## | 19 | 19 | 18 | 91 | 90 | 13 | NNW |
| ######## | 18 | 19 | 18 | 90 | 90 | 12 | NW |
| ######## | 18 | 19 | 18 | 91 | 90 | 12 | NW |
| ######## | 18 | 19 | 18 | 90 | 90 | 17 | N |
| ######## | 18 | 19 | 18 | 90 | 90 | 14 | NNW |
| ######## | 19 | 19 | 18 | 90 | 90 | 11 | NW |
| ######## | 19 | 19 | 19 | 90 | 89 | 11 | NNW |
| ######## | 19 | 19 | 19 | 89 | 89 | 10 | NNW |
| ######## | 19 | 19 | 19 | 89 | 89 | 5 | NW |
| ######## | 19 | 19 | 19 | 89 | 89 | 5 | NW |
| ######## | 19 | 19 | 19 | 89 | 88 | 2 | NW |
| ######## | 18 | 19 | 18 | 89 | 88 | 1 | WNW |
| ######## | 18 | 18 | 18 | 89 | 88 | 3 | WNW |
| ######## | 18 | 18 | 18 | 90 | 88 | 6 | NNW |
| ######## | 18 | 18 | 18 | 89 | 89 | 6 | NNW |
| ######## | 18 | 18 | 18 | 90 | 89 | 3 | N |
| ######## | 19 | 19 | 18 | 90 | 89 | 13 | N |
| ######## | 19 | 19 | 19 | 89 | 88 | 7 | NW |
| ######## | 19 | 19 | 19 | 90 | 88 | 7 | NNW |
| ######## | 18 | 19 | 18 | 89 | 88 | 2 | NNW |
| ######## | 18 | 18 | 18 | 90 | 89 | 0 | NNW |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ######## | 17 | 18 | 17 | 90 | 89 | 1 | NNW |
| ######## | 17 | 17 | 17 | 92 | 90 | 0 | |
| ######## | 16 | 17 | 16 | 92 | 90 | 2 | NW |
| ######## | 16 | 16 | 16 | 92 | 90 | 2 | NW |
| ######## | 16 | 16 | 16 | 95 | 92 | 0 | |
| ######## | 15 | 16 | 15 | 95 | 94 | 0 | |
| ######## | 16 | 16 | 15 | 96 | 95 | 0 | NW |
| ######## | 16 | 16 | 16 | 97 | 94 | 0 | NW |
| ######## | 16 | 16 | 16 | 95 | 93 | 0 | NW |
| ######## | 17 | 17 | 16 | 94 | 92 | 2 | WNW |
| ######## | 18 | 18 | 17 | 93 | 90 | 0 | |
| ######## | 19 | 19 | 18 | 91 | 89 | 0 | |
| ######## | 20 | 20 | 19 | 89 | 86 | 0 | |
| ######## | 21 | 21 | 20 | 87 | 82 | 3 | WNW |
| ######## | 20 | 21 | 20 | 82 | 80 | 4 | WNW |
| ######## | 19 | 20 | 19 | 86 | 82 | 5 | WSW |
| ######## | 19 | 19 | 19 | 86 | 85 | 3 | WSW |
| ######## | 21 | 21 | 19 | 87 | 83 | 2 | W |
| ######## | 21 | 21 | 21 | 85 | 82 | 4 | WSW |
| ######## | 21 | 21 | 21 | 83 | 81 | 4 | WSW |
| ######## | 21 | 21 | 20 | 86 | 83 | 5 | WSW |
| ######## | 21 | 21 | 20 | 84 | 83 | 7 | WSW |
| ######## | 21 | 21 | 21 | 86 | 83 | 6 | W |
| ######## | 22 | 22 | 21 | 85 | 82 | 5 | W |
| ######## | 23 | 23 | 22 | 84 | 81 | 6 | W |
| ######## | 23 | 23 | 23 | 83 | 79 | 6 | W |
| ######## | 24 | 24 | 23 | 81 | 76 | 8 | NW |
| ######## | 25 | 25 | 24 | 78 | 71 | 7 | NNW |
| ######## | 26 | 26 | 25 | 73 | 69 | 7 | NW |
| ######## | 26 | 26 | 26 | 72 | 68 | 9 | NW |
| ######## | 26 | 26 | 25 | 71 | 68 | 9 | WNW |
| ######## | 26 | 26 | 26 | 73 | 67 | 8 | NW |
| ######## | 26 | 26 | 26 | 71 | 67 | 8 | WNW |
| ######## | 26 | 26 | 26 | 74 | 70 | 8 | W |
| ######## | 26 | 26 | 26 | 74 | 71 | 10 | WNW |
| ######## | 27 | 27 | 26 | 74 | 71 | 9 | NW |
| ######## | 28 | 28 | 27 | 72 | 69 | 11 | NW |
| ######## | 28 | 28 | 28 | 71 | 67 | 11 | WNW |
| ######## | 27 | 28 | 27 | 70 | 68 | 11 | WNW |
| ######## | 28 | 28 | 27 | 72 | 69 | 11 | WNW |
| ######## | 28 | 28 | 28 | 69 | 67 | 10 | W |
| ######## | 27 | 28 | 27 | 68 | 65 | 9 | WSW |
| ######## | 26 | 27 | 26 | 71 | 66 | 9 | SW |
| ######## | 26 | 27 | 26 | 73 | 68 | 8 | SSW |
| ######## | 26 | 26 | 26 | 72 | 69 | 7 | SSW |
| ######## | 26 | 26 | 26 | 74 | 70 | 3 | SW |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ######## | 26 | 26 | 26 | 74 | 71 | 4 | SW |
| ######## | 25 | 26 | 25 | 76 | 72 | 5 | S |
| ######## | 25 | 25 | 25 | 76 | 74 | 5 | SSW |
| ######## | 25 | 25 | 25 | 79 | 74 | 5 | SSE |
| ######## | 25 | 25 | 25 | 77 | 75 | 2 | S |
| ######## | 26 | 26 | 25 | 77 | 72 | 6 | W |
| ######## | 27 | 27 | 26 | 72 | 70 | 13 | NW |
| ######## | 26 | 27 | 26 | 73 | 71 | 14 | NW |
| ######## | 26 | 26 | 26 | 73 | 71 | 15 | WNW |
| ######## | 26 | 26 | 26 | 73 | 72 | 14 | NW |
| ######## | 26 | 26 | 26 | 74 | 72 | 11 | NNW |
| ######## | 25 | 26 | 25 | 76 | 73 | 8 | E |
| ######## | 24 | 25 | 24 | 79 | 75 | 7 | SE |
| ######## | 24 | 24 | 24 | 79 | 78 | 4 | SSE |
| ######## | 23 | 24 | 23 | 80 | 78 | 4 | SSE |
| ######## | 23 | 23 | 23 | 82 | 80 | 1 | SSE |
| ######## | 22 | 23 | 22 | 83 | 81 | 2 | SE |
| ######## | 22 | 22 | 22 | 84 | 83 | 1 | SE |
| ######## | 21 | 22 | 21 | 84 | 83 | 8 | N |
| ######## | 21 | 21 | 21 | 86 | 84 | 10 | NNW |
| ######## | 20 | 21 | 20 | 86 | 85 | 11 | NNW |
| ######## | 20 | 20 | 20 | 86 | 86 | 12 | N |
| ######## | 19 | 20 | 19 | 88 | 86 | 8 | NNE |
| ######## | 19 | 19 | 19 | 89 | 88 | 7 | NNE |
| ######## | 18 | 19 | 18 | 90 | 88 | 10 | N |
| ######## | 18 | 18 | 18 | 91 | 90 | 14 | N |
| ######## | 18 | 18 | 18 | 90 | 89 | 1 | E |
| ######## | 18 | 18 | 18 | 90 | 89 | 7 | WNW |
| ######## | 17 | 18 | 17 | 93 | 90 | 9 | WNW |
| ######## | 17 | 17 | 17 | 94 | 91 | 8 | NW |
| ######## | 17 | 17 | 17 | 94 | 92 | 9 | WNW |
| ######## | 17 | 17 | 17 | 94 | 93 | 10 | NW |
| ######## | 17 | 17 | 17 | 94 | 93 | 10 | NW |
| ######## | 18 | 18 | 17 | 94 | 90 | 17 | N |
| ######## | 19 | 19 | 18 | 90 | 89 | 11 | N |
| ######## | 18 | 19 | 18 | 89 | 86 | 1 | WNW |
| ######## | 18 | 18 | 18 | 90 | 88 | 0 | SW |
| ######## | 18 | 18 | 18 | 90 | 90 | 3 | WSW |
| ######## | 18 | 18 | 18 | 91 | 90 | 3 | WNW |
| ######## | 18 | 18 | 18 | 91 | 91 | 5 | WNW |
| ######## | 18 | 18 | 18 | 91 | 89 | 5 | W |
| ######## | 18 | 18 | 18 | 90 | 89 | 4 | WNW |
| ######## | 18 | 18 | 18 | 91 | 90 | 6 | NW |
| ######## | 18 | 18 | 18 | 92 | 91 | 4 | WNW |
| ######## | 18 | 18 | 18 | 92 | 92 | 6 | WNW |
| ######## | 18 | 18 | 18 | 93 | 92 | 1 | WNW |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ######## | 18 | 18 | 18 | 93 | 92 | 2 | WNW |
| ######## | 18 | 18 | 18 | 93 | 93 | 1 | WNW |
| ######## | 18 | 18 | 18 | 94 | 93 | 2 | NW |
| ######## | 18 | 18 | 18 | 94 | 94 | 2 | NW |
| ######## | 18 | 18 | 18 | 95 | 94 | 3 | NW |
| ######## | 19 | 19 | 18 | 96 | 93 | 12 | N |
| ######## | 19 | 19 | 19 | 92 | 90 | 22 | N |
| ######## | 19 | 19 | 19 | 90 | 89 | 8 | NE |
| ######## | 20 | 20 | 19 | 89 | 87 | 6 | NNW |
| ######## | 19 | 20 | 19 | 89 | 87 | 0 | W |
| ######## | 19 | 19 | 19 | 91 | 89 | 4 | W |
| ######## | 18 | 19 | 18 | 92 | 91 | 2 | WSW |
| ######## | 19 | 19 | 18 | 93 | 92 | 1 | WSW |
| ######## | 18 | 19 | 18 | 92 | 91 | 5 | WSW |
| ######## | 18 | 18 | 18 | 92 | 91 | 9 | WNW |
| ######## | 19 | 19 | 18 | 92 | 91 | 12 | WNW |
| ######## | 19 | 19 | 19 | 92 | 90 | 10 | NW |
| ######## | 20 | 20 | 19 | 90 | 86 | 14 | NW |
| ######## | 20 | 20 | 20 | 86 | 85 | 19 | NW |
| ######## | 20 | 20 | 20 | 86 | 85 | 19 | NW |
| ######## | 20 | 20 | 20 | 87 | 86 | 10 | NW |
| ######## | 20 | 20 | 20 | 88 | 87 | 11 | WNW |
| ######## | 20 | 20 | 19 | 89 | 87 | 8 | WNW |
| ######## | 20 | 20 | 20 | 90 | 89 | 5 | NNW |
| ######## | 22 | 22 | 20 | 90 | 83 | 6 | NNW |
| ######## | 23 | 23 | 22 | 85 | 83 | 5 | ENE |
| ######## | 24 | 24 | 23 | 84 | 77 | 5 | NW |
| ######## | 24 | 24 | 24 | 79 | 76 | 8 | WNW |
| ######## | 25 | 25 | 24 | 81 | 74 | 2 | N |
| ######## | 23 | 25 | 23 | 79 | 75 | 6 | WNW |
| ######## | 22 | 23 | 22 | 82 | 80 | 12 | WNW |
| ######## | 21 | 22 | 21 | 86 | 82 | 13 | WNW |
| ######## | 21 | 21 | 21 | 91 | 87 | 8 | WNW |
| ######## | 20 | 21 | 20 | 92 | 90 | 4 | W |
| ######## | 20 | 20 | 20 | 94 | 92 | 7 | WNW |
| ######## | 20 | 20 | 20 | 96 | 94 | 16 | N |
| ######## | 21 | 21 | 20 | 96 | 95 | 16 | NNE |
| ######## | 22 | 22 | 21 | 96 | 90 | 14 | WNW |
| ######## | 22 | 22 | 22 | 94 | 92 | 6 | WNW |
| ######## | 23 | 23 | 22 | 93 | 89 | 5 | WSW |
| ######## | 24 | 24 | 23 | 91 | 84 | 2 | SSW |
| ######## | 24 | 24 | 24 | 88 | 85 | 7 | SW |
| ######## | 26 | 26 | 24 | 89 | 79 | 8 | WNW |
| ######## | 26 | 26 | 26 | 79 | 72 | 12 | N |
| ######## | 26 | 26 | 26 | 78 | 74 | 16 | N |
| ######## | 25 | 26 | 25 | 77 | 70 | 9 | N |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ######## | 25 | 25 | 25 | 78 | 73 | 4 | SE |
| ######## | 25 | 25 | 25 | 79 | 75 | 6 | E |
| ######## | 25 | 26 | 25 | 80 | 72 | 7 | ESE |
| ######## | 24 | 25 | 24 | 81 | 74 | 7 | SSE |
| ######## | 24 | 24 | 23 | 84 | 82 | 7 | S |
| ######## | 23 | 24 | 23 | 87 | 84 | 7 | SSW |
| ######## | 24 | 24 | 23 | 87 | 82 | 3 | S |
| ######## | 24 | 24 | 24 | 83 | 81 | 4 | SW |
| ######## | 24 | 24 | 24 | 83 | 81 | 4 | W |
| ######## | 25 | 25 | 24 | 84 | 79 | 5 | W |
| ######## | 25 | 25 | 25 | 80 | 78 | 7 | WSW |
| ######## | 24 | 25 | 24 | 79 | 77 | 8 | W |
| ######## | 24 | 24 | 24 | 81 | 78 | 8 | W |
| ######## | 23 | 24 | 23 | 82 | 80 | 9 | W |
| ######## | 23 | 23 | 23 | 83 | 81 | 7 | WSW |
| ######## | 23 | 23 | 22 | 85 | 83 | 6 | WSW |
| ######## | 23 | 23 | 23 | 84 | 82 | 5 | W |
| ######## | 22 | 23 | 22 | 84 | 83 | 5 | W |
| ######## | 22 | 22 | 22 | 86 | 84 | 4 | W |
| ######## | 21 | 22 | 21 | 87 | 86 | 5 | W |
| ######## | 21 | 21 | 21 | 88 | 87 | 4 | WSW |
| ######## | 21 | 21 | 21 | 89 | 88 | 5 | WSW |
| ######## | 21 | 21 | 21 | 90 | 89 | 4 | W |
| ######## | 21 | 21 | 20 | 91 | 90 | 2 | W |
| ######## | 20 | 21 | 20 | 92 | 91 | 2 | W |
| ######## | 20 | 20 | 20 | 93 | 92 | 4 | WNW |
| ######## | 20 | 20 | 20 | 94 | 93 | 7 | NNW |
| ######## | 20 | 20 | 20 | 94 | 94 | 7 | N |
| ######## | 19 | 20 | 19 | 95 | 94 | 6 | NW |
| ######## | 19 | 19 | 19 | 96 | 95 | 7 | WNW |
| ######## | 19 | 19 | 19 | 96 | 96 | 4 | NW |
| ######## | 19 | 19 | 19 | 96 | 96 | 13 | N |
| ######## | 18 | 19 | 18 | 97 | 96 | 10 | N |
| ######## | 18 | 18 | 18 | 97 | 97 | 12 | N |
| ######## | 18 | 18 | 18 | 97 | 97 | 6 | NW |

| Outside Vantage P High Wind | Outside Vantage P Rain - mm | Outside Vantage Pro2, Wireless High Rain Rate - mm/h |
|---|---|---|
| 8 | 0 | 0 |
| 16 | 0 | 0 |
| 18 | 0 | 0 |
| 16 | 0 | 0 |
| 8 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 11 | 0 | 0 |
| 13 | 0 | 0 |
| 13 | 0 | 0 |
| 11 | 0 | 0 |
| 8 | 0 | 0 |
| 8 | 0 | 0 |
| 5 | 0 | 0 |
| 3 | 0 | 0 |
| 3 | 0 | 0 |
| 3 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 3 | 0 | 0 |
| 2 | 0 | 0 |
| 0 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 3 | 0 | 0 |
| 3 | 0 | 0 |
| 3 | 0 | 0 |
| 6 | 0 | 0 |
| 10 | 0 | 0 |
| 6 | 0 | 0 |
| 8 | 0 | 0 |
| 8 | 0 | 0 |
| 8 | 0 | 0 |
| 13 | 0 | 0 |
| 18 | 0 | 0 |
| 16 | 0 | 0 |

| | | |
|---|---|---|
| 19 | 0 | 0 |
| 24 | 0 | 0 |
| 24 | 0 | 0 |
| 23 | 0 | 0 |
| 23 | 0 | 0 |
| 29 | 0 | 0 |
| 27 | 0 | 0 |
| 24 | 0 | 0 |
| 24 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 29 | 0 | 0 |
| 35 | 0 | 0 |
| 32 | 0 | 0 |
| 29 | 0 | 0 |
| 27 | 0 | 0 |
| 31 | 0 | 0 |
| 29 | 0 | 0 |
| 29 | 0 | 0 |
| 34 | 0 | 0 |
| 29 | 0 | 0 |
| 27 | 0 | 0 |
| 31 | 0 | 0 |
| 31 | 0 | 0 |
| 34 | 0 | 0 |
| 31 | 0 | 0 |
| 31 | 0 | 0 |
| 35 | 0 | 0 |
| 37 | 0 | 0 |
| 35 | 0 | 0 |
| 26 | 0 | 0 |
| 26 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 27 | 0 | 0 |
| 34 | 0 | 0 |
| 34 | 0 | 0 |
| 27 | 0 | 0 |
| 29 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 19 | 0 | 0 |
| 21 | 0 | 0 |
| 23 | 0 | 0 |
| 31 | 0 | 0 |
| 24 | 0 | 0 |

| | | |
|---|---|---|
| 29 | 0 | 0 |
| 29 | 0 | 0 |
| 27 | 0 | 0 |
| 26 | 0 | 0 |
| 24 | 0 | 0 |
| 24 | 0 | 0 |
| 26 | 0 | 0 |
| 21 | 0 | 0 |
| 24 | 0 | 0 |
| 24 | 0 | 0 |
| 31 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0.3 | 0.3 |
| 21 | 0 | 0.3 |
| 27 | 0 | 0 |
| 24 | 0.3 | 0.3 |
| 26 | 0 | 0.3 |
| 26 | 0 | 0 |
| 24 | 0 | 0 |
| 26 | 0 | 0 |
| 24 | 0.3 | 0.3 |
| 24 | 0 | 0.3 |
| 29 | 0 | 0 |
| 26 | 0 | 0 |
| 26 | 0 | 0 |
| 31 | 0 | 0 |
| 23 | 0 | 0 |
| 29 | 0 | 0 |
| 26 | 0 | 0 |
| 26 | 0 | 0 |
| 26 | 0 | 0 |
| 26 | 0 | 0 |
| 23 | 0.3 | 0.3 |
| 24 | 0 | 0.3 |
| 29 | 0 | 0 |
| 24 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 21 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 26 | 0 | 0 |
| 24 | 0 | 0 |
| 29 | 0 | 0 |
| 26 | 0 | 0 |
| 26 | 0 | 0 |

| | | |
|---|---|---|
| 27 | 0 | 0 |
| 29 | 0 | 0 |
| 29 | 0 | 0 |
| 31 | 0 | 0 |
| 29 | 0 | 0 |
| 31 | 0 | 0 |
| 23 | 0 | 0 |
| 27 | 0 | 0 |
| 32 | 0 | 0 |
| 29 | 0 | 0 |
| 29 | 0 | 0 |
| 37 | 0 | 0 |
| 34 | 0 | 0 |
| 34 | 0 | 0 |
| 37 | 0 | 0 |
| 31 | 0 | 0 |
| 35 | 0 | 0 |
| 27 | 0 | 0 |
| 35 | 0 | 0 |
| 37 | 0 | 0 |
| 27 | 0.5 | 2.5 |
| 27 | 0.5 | 2.5 |
| 32 | 1 | 15.5 |
| 37 | 2 | 19.8 |
| 34 | 1.8 | 23.6 |
| 27 | 1.3 | 10.7 |
| 37 | 0.5 | 9.7 |
| 39 | 0.3 | 1.5 |
| 39 | 0.3 | 1.5 |
| 29 | 0.3 | 1.5 |
| 35 | 0.3 | 2.3 |
| 35 | 0.5 | 2.3 |
| 34 | 0.3 | 2.3 |
| 32 | 0.3 | 1.3 |
| 27 | 0 | 1.3 |
| 31 | 0 | 0 |
| 31 | 0.3 | 0.3 |
| 27 | 0.3 | 1 |
| 35 | 0 | 1 |
| 39 | 0.3 | 0.3 |
| 32 | 0 | 0.3 |
| 34 | 0 | 0 |
| 35 | 0.3 | 0.3 |
| 35 | 0 | 0.3 |
| 29 | 0 | 0 |
| 21 | 0.3 | 0.3 |

| | | |
|---|---|---|
| 31 | 0 | 0.3 |
| 29 | 0.3 | 0.3 |
| 23 | 0 | 0.3 |
| 26 | 0 | 0.3 |
| 16 | 0 | 0 |
| 14 | 0 | 0 |
| 18 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 21 | 0.3 | 0.3 |
| 14 | 0 | 0.3 |
| 11 | 0 | 0 |
| 13 | 0 | 0 |
| 13 | 0 | 0 |
| 11 | 0.3 | 0.3 |
| 11 | 0 | 0.3 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 5 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 3 | 0 | 0 |
| 5 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 8 | 0 | 0 |
| 8 | 0 | 0 |
| 8 | 0 | 0 |
| 6 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 8 | 0 | 0 |
| 0 | 0 | 0 |
| 6 | 0 | 0 |
| 6 | 0 | 0 |
| 6 | 0 | 0 |
| 6 | 0 | 0 |
| 10 | 0 | 0 |
| 10 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0.3 | 0.3 |
| 13 | 0 | 0.3 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |

| | | |
|---|---|---|
| 13 | 1.3 | 5.1 |
| 13 | 0.5 | 5.8 |
| 13 | 0.8 | 5.6 |
| 13 | 0.8 | 5.8 |
| 14 | 0.3 | 2.8 |
| 14 | 0.3 | 1.3 |
| 21 | 0 | 0.3 |
| 16 | 0 | 0 |
| 18 | 0 | 0 |
| 16 | 0.5 | 1.8 |
| 18 | 0 | 1.8 |
| 18 | 0 | 0 |
| 23 | 0.3 | 0.3 |
| 19 | 0 | 0.3 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 24 | 0 | 0 |
| 19 | 0 | 0 |
| 21 | 0 | 0 |
| 24 | 0 | 0 |
| 23 | 0 | 0 |
| 29 | 0 | 0 |
| 26 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 11 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 13 | 0 | 0 |
| 11 | 0 | 0 |
| 16 | 0 | 0 |
| 16 | 0 | 0 |
| 16 | 0 | 0 |
| 19 | 0 | 0 |
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| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0.3 | 0.3 |
| 13 | 0 | 0.3 |
| 8 | 0 | 0 |
| 6 | 0 | 0 |
| 6 | 0 | 0 |

| | | |
|---|---|---|
| 6 | 0 | 0 |
| 6 | 0 | 0 |
| 5 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
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| 0 | 0 | 0 |
| 0 | 0 | 0 |
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| 14 | 0 | 0 |
| 11 | 0 | 0 |
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| 11 | 0 | 0 |
| 8 | 0 | 0 |
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| 13 | 0 | 0 |
| 13 | 0 | 0 |
| 6 | 0 | 0 |
| 11 | 0 | 0 |
| 11 | 0 | 0 |
| 18 | 0 | 0 |
| 24 | 0 | 0 |
| 16 | 0 | 0 |

| | | |
|---|---|---|
| 11 | 0 | 0 |
| 11 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 13 | 0 | 0 |
| 13 | 0 | 0 |
| 11 | 0 | 0 |
| 13 | 0 | 0 |
| 6 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
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| 6 | 0 | 0 |
| 8 | 0 | 0 |
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| 10 | 0 | 0 |
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| 11 | 0 | 0 |
| 13 | 0 | 0 |
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| 14 | 0 | 0 |
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|---|---|---|
| 16 | 0 | 0 |
| 32 | 0 | 0 |
| 31 | 0 | 0 |
| 34 | 0 | 0 |
| 29 | 0 | 0 |
| 21 | 0 | 0 |
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| 32 | 0 | 0 |
| 24 | 0 | 0 |
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| 21 | 0 | 0 |
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| 23 | 0 | 0 |
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| 26 | 0 | 0 |
| 23 | 0 | 0 |
| 34 | 0 | 0 |
| 23 | 0 | 0 |
| 19 | 0 | 0 |
| 23 | 0 | 0 |
| 23 | 0 | 0 |
| 21 | 0 | 0 |
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| 14 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 10 | 0 | 0 |
| 5 | 0 | 0 |
| 3 | 0 | 0 |
| 16 | 0 | 0 |
| 19 | 0 | 0 |
| 14 | 0 | 0 |
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| 24 | 0 | 0 |
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|---|---|---|
| 27 | 0 | 0 |
| 31 | 0 | 0 |
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| 31 | 0 | 0 |
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| 19 | 0 | 0 |
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| 10 | 0 | 0 |
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| 16 | 0 | 0 |
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| 19 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 6 | 0 | 0 |
| 3 | 0 | 0 |

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|---|---|---|
| 3 | 0 | 0 |
| 2 | 0 | 0 |
| 5 | 0 | 0 |
| 5 | 0 | 0 |
| 0 | 0 | 0 |
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| 2 | 0 | 0 |
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| 18 | 0 | 0 |
| 14 | 0 | 0 |
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| 14 | 0 | 0 |
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| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 6 | 0 | 0 |
| 24 | 0 | 0 |
| 21 | 0 | 0 |
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| 14 | 0 | 0 |
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| 11 | 0 | 0 |
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| 3 | 0 | 0 |
| 5 | 0 | 0 |
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| 16 | 0 | 0 |
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| 23 | 0 | 0 |
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| 19 | 0 | 0 |
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| 29 | 0 | 0 |
| 14 | 0 | 0 |
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| 16 | 0 | 0 |
| 23 | 0 | 0 |
| 27 | 0 | 0 |
| 19 | 0 | 0 |
| 10 | 0 | 0 |
| 2 | 0 | 0 |
| 6 | 0 | 0 |
| 8 | 0 | 0 |
| 11 | 0 | 0 |
| 11 | 0 | 0 |
| 14 | 0 | 0 |
| 13 | 0 | 0 |
| 10 | 0 | 0 |
| 14 | 0 | 0 |
| 6 | 0 | 0 |

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|---|---|---|
| 6 | 0 | 0 |
| 5 | 0 | 0 |
| 8 | 0 | 0 |
| 6 | 0 | 0 |
| 6 | 0 | 0 |
| 26 | 0 | 0 |
| 32 | 0 | 0 |
| 14 | 0 | 0 |
| 16 | 0 | 0 |
| 5 | 0 | 0 |
| 10 | 0 | 0 |
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| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 18 | 0 | 0 |
| 18 | 0 | 0 |
| 24 | 0 | 0 |
| 29 | 0 | 0 |
| 27 | 0 | 0 |
| 23 | 0 | 0 |
| 16 | 0 | 0 |
| 14 | 0 | 0 |
| 11 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 11 | 0 | 0 |
| 18 | 0 | 0 |
| 6 | 0 | 0 |
| 13 | 0 | 0 |
| 23 | 0 | 0 |
| 23 | 0 | 0 |
| 16 | 0.5 | 2.5 |
| 6 | 0.3 | 2.5 |
| 14 | 0.5 | 5.3 |
| 27 | 1 | 13.2 |
| 26 | 0.3 | 1.8 |
| 32 | 0 | 1.3 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 6 | 0 | 0 |
| 14 | 0 | 0 |
| 21 | 0 | 0 |
| 21 | 0 | 0 |
| 26 | 0 | 0 |
| 19 | 0 | 0 |

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|---|---|---|
| 13 | 0 | 0 |
| 13 | 0 | 0 |
| 16 | 0 | 0 |
| 11 | 0 | 0 |
| 14 | 0 | 0 |
| 13 | 0 | 0 |
| 10 | 0 | 0 |
| 10 | 0 | 0 |
| 13 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 16 | 0 | 0 |
| 14 | 0 | 0 |
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| 11 | 0 | 0 |
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| 10 | 0 | 0 |
| 6 | 0 | 0 |
| 10 | 0 | 0 |
| 8 | 0 | 0 |
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| 6 | 0 | 0 |
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| 6 | 0 | 0 |
| 10 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 21 | 0 | 0 |
| 19 | 0 | 0 |
| 19 | 0 | 0 |
| 21 | 0 | 0 |
| 13 | 0 | 0 |

Hemerdon Mine Weather Station
8/24/20 12:00 AM : 1 Day

| | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P | Outside Vantage P |
|---|---|---|---|---|---|---|---|
| Date & Tim | Temp - °C | High Temp | Low Temp | High Hum | Low Hum - | Avg Wind S | Prevailing |
| 8/24/20 12 | 14 | 14 | 14 | 96 | 95 | 9 | W |
| 8/24/20 12 | 14 | 14 | 14 | 96 | 96 | 11 | WNW |
| 8/24/20 12 | 15 | 15 | 14 | 97 | 96 | 8 | WNW |
| 8/24/20 12 | 15 | 15 | 14 | 98 | 97 | 11 | WNW |
| 8/24/20 1:( | 15 | 15 | 15 | 98 | 97 | 12 | W |
| 8/24/20 1:1 | 15 | 15 | 15 | 98 | 98 | 12 | W |
| 8/24/20 1:3 | 15 | 15 | 15 | 98 | 98 | 9 | WNW |
| 8/24/20 1:4 | 15 | 15 | 15 | 98 | 98 | 10 | WNW |
| 8/24/20 2:( | 15 | 15 | 15 | 98 | 98 | 9 | WNW |
| 8/24/20 2:1 | 15 | 15 | 15 | 98 | 98 | 9 | WNW |
| 8/24/20 2:3 | 15 | 15 | 15 | 98 | 98 | 9 | W |
| 8/24/20 2:4 | 15 | 15 | 15 | 98 | 98 | 7 | WNW |
| 8/24/20 3:( | 15 | 15 | 15 | 98 | 98 | 8 | WNW |
| 8/24/20 3:1 | 15 | 15 | 15 | 98 | 98 | 6 | W |
| 8/24/20 3:3 | 15 | 15 | 15 | 98 | 98 | 6 | WSW |
| 8/24/20 3:4 | 15 | 15 | 15 | 98 | 98 | 4 | WSW |
| 8/24/20 4:( | 15 | 15 | 15 | 98 | 98 | 5 | W |
| 8/24/20 4:1 | 15 | 15 | 15 | 98 | 98 | 6 | WSW |
| 8/24/20 4:3 | 15 | 15 | 15 | 99 | 98 | 8 | WSW |
| 8/24/20 4:4 | 15 | 15 | 15 | 99 | 98 | 11 | WSW |
| 8/24/20 5:( | 15 | 15 | 15 | 99 | 99 | 11 | W |
| 8/24/20 5:1 | 15 | 15 | 15 | 99 | 99 | 13 | WNW |
| 8/24/20 5:3 | 15 | 15 | 15 | 99 | 99 | 15 | WSW |
| 8/24/20 5:4 | 15 | 15 | 15 | 99 | 99 | 16 | W |
| 8/24/20 6:( | 16 | 16 | 15 | 99 | 99 | 16 | W |
| 8/24/20 6:1 | 16 | 16 | 15 | 99 | 99 | 16 | W |
| 8/24/20 6:3 | 16 | 16 | 16 | 99 | 99 | 15 | W |
| 8/24/20 6:4 | 16 | 16 | 16 | 99 | 99 | 12 | W |
| 8/24/20 7:( | 16 | 16 | 16 | 99 | 99 | 12 | W |
| 8/24/20 7:1 | 16 | 16 | 16 | 99 | 99 | 13 | W |
| 8/24/20 7:3 | 16 | 16 | 16 | 99 | 99 | 12 | W |
| 8/24/20 7:4 | 16 | 16 | 16 | 99 | 99 | 13 | WSW |
| 8/24/20 8:( | 16 | 16 | 16 | 99 | 99 | 13 | W |
| 8/24/20 8:1 | 16 | 16 | 16 | 99 | 98 | 12 | W |
| 8/24/20 8:3 | 16 | 16 | 16 | 98 | 98 | 13 | WNW |
| 8/24/20 8:4 | 16 | 16 | 16 | 98 | 97 | 12 | WNW |
| 8/24/20 9:( | 16 | 16 | 16 | 98 | 97 | 9 | W |
| 8/24/20 9:1 | 16 | 16 | 16 | 98 | 95 | 10 | W |
| 8/24/20 9:3 | 16 | 16 | 16 | 96 | 95 | 10 | W |
| 8/24/20 9:4 | 17 | 17 | 16 | 96 | 95 | 12 | W |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8/24/20 10 | 16 | 17 | 16 | 96 | 95 | 7 | WSW |
| 8/24/20 10 | 17 | 17 | 16 | 96 | 94 | 9 | WSW |
| 8/24/20 10 | 17 | 17 | 17 | 94 | 93 | 10 | WSW |
| 8/24/20 10 | 16 | 17 | 16 | 96 | 94 | 9 | SW |
| 8/24/20 11 | 17 | 17 | 17 | 97 | 96 | 7 | SW |
| 8/24/20 11 | 17 | 17 | 17 | 96 | 96 | 7 | SW |
| 8/24/20 11 | 17 | 17 | 17 | 97 | 95 | 9 | SW |
| 8/24/20 11 | 17 | 17 | 17 | 95 | 94 | 11 | WSW |
| 8/24/20 12 | 18 | 18 | 17 | 95 | 94 | 12 | WSW |
| 8/24/20 12 | 17 | 18 | 17 | 95 | 93 | 12 | WSW |
| 8/24/20 12 | 17 | 17 | 17 | 96 | 95 | 13 | WSW |
| 8/24/20 12 | 17 | 17 | 17 | 96 | 96 | 10 | SW |
| 8/24/20 1:0 | 17 | 17 | 17 | 96 | 95 | 11 | WSW |
| 8/24/20 1:1 | 17 | 17 | 17 | 98 | 96 | 10 | WSW |
| 8/24/20 1:3 | 16 | 17 | 16 | 98 | 97 | 11 | SW |
| 8/24/20 1:4 | 17 | 17 | 16 | 99 | 98 | 13 | SW |
| 8/24/20 2:0 | 16 | 17 | 16 | 99 | 98 | 13 | SSW |
| 8/24/20 2:1 | 16 | 16 | 16 | 99 | 98 | 14 | SSW |
| 8/24/20 2:3 | 16 | 16 | 16 | 99 | 99 | 15 | SSW |
| 8/24/20 2:4 | 16 | 16 | 16 | 99 | 99 | 12 | SSW |
| 8/24/20 3:0 | 16 | 16 | 16 | 99 | 99 | 12 | SSW |
| 8/24/20 3:1 | 17 | 17 | 16 | 99 | 99 | 14 | SW |
| 8/24/20 3:3 | 17 | 17 | 17 | 100 | 99 | 12 | SW |
| 8/24/20 3:4 | 17 | 17 | 17 | 100 | 99 | 10 | SW |
| 8/24/20 4:0 | 17 | 17 | 17 | 99 | 99 | 12 | SW |
| 8/24/20 4:1 | 17 | 17 | 17 | 100 | 99 | 10 | SW |
| 8/24/20 4:3 | 17 | 17 | 17 | 100 | 99 | 10 | WSW |
| 8/24/20 4:4 | 17 | 17 | 17 | 99 | 99 | 12 | WSW |
| 8/24/20 5:0 | 17 | 17 | 17 | 100 | 99 | 9 | SW |
| 8/24/20 5:1 | 17 | 17 | 17 | 100 | 99 | 10 | SW |
| 8/24/20 5:3 | 17 | 17 | 17 | 100 | 99 | 8 | SW |
| 8/24/20 5:4 | 17 | 17 | 17 | 100 | 99 | 9 | WSW |
| 8/24/20 6:0 | 17 | 17 | 17 | 100 | 99 | 8 | WSW |
| 8/24/20 6:1 | 17 | 17 | 17 | 100 | 99 | 7 | SW |
| 8/24/20 6:3 | 17 | 17 | 16 | 99 | 99 | 8 | SW |
| 8/24/20 6:4 | 16 | 17 | 16 | 99 | 99 | 8 | SW |
| 8/24/20 7:0 | 16 | 16 | 16 | 99 | 99 | 9 | SW |
| 8/24/20 7:1 | 16 | 16 | 16 | 99 | 99 | 8 | SW |
| 8/24/20 7:3 | 16 | 16 | 16 | 99 | 99 | 9 | SW |
| 8/24/20 7:4 | 16 | 16 | 16 | 99 | 99 | 9 | SW |
| 8/24/20 8:0 | 16 | 16 | 16 | 99 | 99 | 8 | SW |
| 8/24/20 8:1 | 16 | 16 | 16 | 99 | 99 | 6 | SW |
| 8/24/20 8:3 | 16 | 16 | 16 | 99 | 99 | 7 | SSW |
| 8/24/20 8:4 | 16 | 16 | 16 | 99 | 99 | 10 | SSW |
| 8/24/20 9:0 | 16 | 16 | 16 | 99 | 99 | 9 | SSW |
| 8/24/20 9:1 | 16 | 16 | 16 | 100 | 99 | 8 | SSW |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8/24/20 9:3 | 16 | 16 | 16 | 100 | 99 | 8 | SSW |
| 8/24/20 9:4 | 16 | 16 | 16 | 100 | 100 | 11 | SSW |
| 8/24/20 10 | 16 | 16 | 16 | 100 | 100 | 10 | SSW |
| 8/24/20 10 | 16 | 16 | 16 | 100 | 100 | 9 | SSW |
| 8/24/20 10 | 16 | 16 | 16 | 100 | 100 | 12 | S |
| 8/24/20 10 | 16 | 16 | 16 | 100 | 99 | 11 | S |
| 8/24/20 11 | 16 | 16 | 16 | 100 | 100 | 12 | SSW |
| 8/24/20 11 | 16 | 16 | 16 | 100 | 100 | 12 | SSW |
| 8/24/20 11 | 16 | 16 | 16 | 100 | 100 | 13 | SSW |
| 8/24/20 11 | 16 | 16 | 16 | 100 | 100 | 8 | S |
| 8/25/20 12 | 16 | 16 | 16 | 100 | 100 | 13 | S |

| Outside Vantage P High Wind | Outside Vantage P Rain - mm | Outside Vantage Pro2, Wireless High Rain Rate - mm/h |
|---|---|---|
| 18 | 0 | 0 |
| 18 | 0.3 | 0.3 |
| 18 | 0.3 | 3.3 |
| 21 | 0 | 1.3 |
| 21 | 0.3 | 0.3 |
| 29 | 0 | 0.3 |
| 18 | 0 | 0 |
| 18 | 0 | 0 |
| 14 | 0 | 0 |
| 19 | 0 | 0 |
| 16 | 0 | 0 |
| 14 | 0 | 0 |
| 16 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 14 | 0 | 0 |
| 11 | 0.3 | 0.3 |
| 11 | 0 | 0.3 |
| 19 | 0.3 | 0.3 |
| 21 | 0.8 | 5.8 |
| 19 | 0.5 | 5.8 |
| 19 | 0.8 | 2.8 |
| 29 | 2.5 | 22.4 |
| 26 | 0.8 | 8.1 |
| 26 | 0 | 1.8 |
| 27 | 0 | 1 |
| 27 | 0 | 0 |
| 21 | 0 | 0 |
| 21 | 0 | 0 |
| 26 | 0 | 0 |
| 21 | 0 | 0 |
| 21 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 23 | 0 | 0 |
| 23 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 23 | 0 | 0 |
| 21 | 0 | 0 |

| | | |
|---|---|---|
| 18 | 0 | 0 |
| 21 | 0 | 0 |
| 21 | 0 | 0 |
| 19 | 0 | 0 |
| 18 | 0 | 0 |
| 14 | 0 | 0 |
| 19 | 0 | 0 |
| 24 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 29 | 0 | 0 |
| 27 | 0 | 0 |
| 26 | 0.5 | 3.6 |
| 24 | 0.3 | 2 |
| 23 | 0.3 | 1.3 |
| 24 | 1 | 8.4 |
| 31 | 0 | 2.8 |
| 24 | 0.5 | 10.2 |
| 23 | 0.3 | 10.2 |
| 27 | 0 | 1.8 |
| 23 | 0 | 0 |
| 19 | 0 | 0 |
| 24 | 0 | 0 |
| 26 | 0.3 | 0.3 |
| 24 | 0 | 0.3 |
| 26 | 0 | 0.3 |
| 21 | 0 | 0 |
| 21 | 0 | 0 |
| 23 | 0 | 0 |
| 21 | 0 | 0 |
| 19 | 0 | 0 |
| 16 | 0 | 0 |
| 19 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 14 | 0 | 0 |
| 19 | 0 | 0 |
| 19 | 0 | 0 |
| 16 | 0.3 | 0.3 |
| 13 | 0 | 0.3 |
| 14 | 0.8 | 4.8 |
| 21 | 0 | 4.8 |
| 21 | 0 | 0 |
| 14 | 0 | 0 |

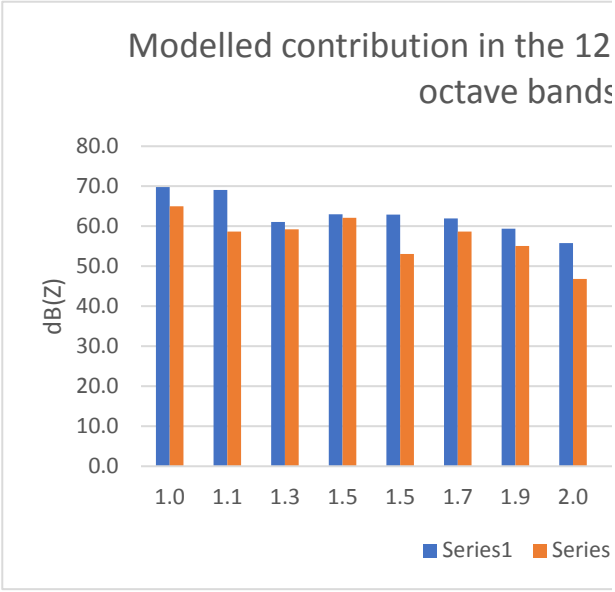
| | | |
|---|---|---|
| 16 | 0.5 | 1.5 |
| 21 | 0 | 1.5 |
| 18 | 0.3 | 1 |
| 18 | 0.3 | 1.3 |
| 27 | 0.8 | 2.3 |
| 24 | 0.5 | 2.3 |
| 21 | 0.8 | 4.3 |
| 26 | 1.3 | 9.4 |
| 24 | 1.3 | 8.9 |
| 18 | 1.3 | 10.7 |
| 26 | 1 | 13.2 |

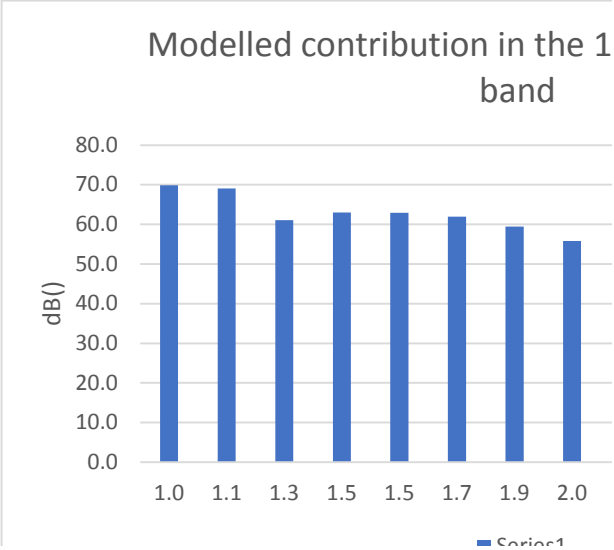
| | | WM modelled results Windwhistle Farm | | | | TW modelled results | |
|---|---|---|---|---|---|---|---|
| **Receptor** | **Distance** | **dB(Z)** | **dB(C)** | **dB(G)** | **dB(A)** | **dB(Z)** | **dB(C)** |
| Galva House | 1.0 | 77.6 | 69.1 | 85.3 | 20.9 | 79.2 | 70.7 |
| Birchland Farm | 1.1 | 74.9 | 66.4 | 82.6 | 18.2 | 77.9 | 69.4 |
| Hemerdon Lane | 1.3 | 73.2 | 64.7 | 80.9 | 16.5 | 68.9 | 60.4 |
| Windwhistle Farm | 1.5 | 70.9 | 62.4 | 78.6 | 14.2 | 73.0 | 64.5 |
| Unnamed Road | 1.5 | 70.0 | 61.5 | 77.7 | 13.3 | 71.2 | 62.7 |
| Newnham Park | 1.7 | 69.3 | 60.8 | 77.0 | 12.6 | 71.2 | 62.7 |
| Gorah Cottages | 1.9 | 66.4 | 57.9 | 74.1 | 9.7 | 68.5 | 60.0 |
| Portworthy Farmhouse | 2.0 | 66.8 | 58.3 | 74.5 | 10.1 | 62.1 | 53.6 |
| Mumford Cottage | 2.0 | 65.8 | 57.3 | 73.5 | 9.1 | 64.9 | 56.4 |
| Cornfield Gardens | 2.2 | 64.6 | 56.1 | 72.3 | 7.9 | 67.0 | 58.5 |
| Boringdon Hill | 2.2 | 64.5 | 56.0 | 72.2 | 7.8 | 64.9 | 56.4 |
| Broad Oak Cottages | 2.4 | 62.5 | 54.0 | 70.2 | 5.8 | 63.2 | 54.7 |
| Colebrook Road | 2.5 | 62.3 | 53.8 | 70.0 | 5.6 | 60.3 | 51.8 |
| Elford Crescent | 2.6 | 61.0 | 52.5 | 68.7 | 4.3 | 60.7 | 52.2 |
| Bond Street | 3.6 | 55.2 | 46.7 | 62.9 | -1.5 | 57.0 | 48.5 |

Note actual AE measured used in modelling r Note AE 0.2 for all scre

| | | |
|---|---|---|
| 6.6 | 77.6 | 71.0 |
| 10.2 | 74.9 | 64.7 |
| 8.0 | 73.2 | 65.2 |
| 2.8 | 70.9 | 68.1 |
| 10.9 | 70.0 | 59.1 |
| 4.7 | 69.3 | 64.7 |
| 5.3 | 66.4 | 61.1 |
| 14.0 | 66.8 | 52.8 |
| 4.4 | 65.8 | 61.4 |
| 2.7 | 64.6 | 61.9 |
| 10.1 | 64.5 | 54.4 |
| 6.5 | 62.5 | 56.0 |
| 5.1 | 62.3 | 57.2 |
| 5.1 | 61.0 | 56.0 |
| 4.2 | 55.2 | 51.0 |

| | |
|---|---|
| 2.7 | 55.2 |
| 5.3 | 66.4 |
| 14.0 | |

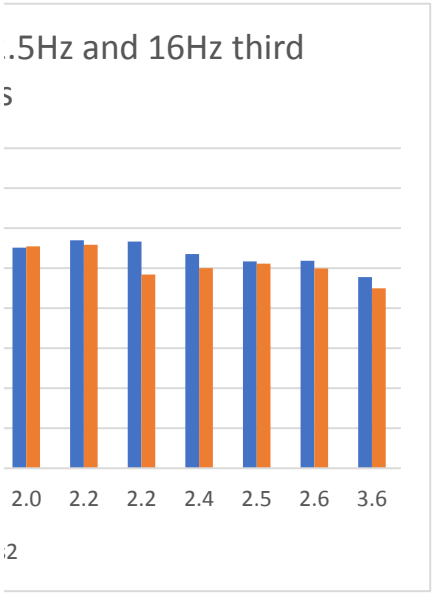


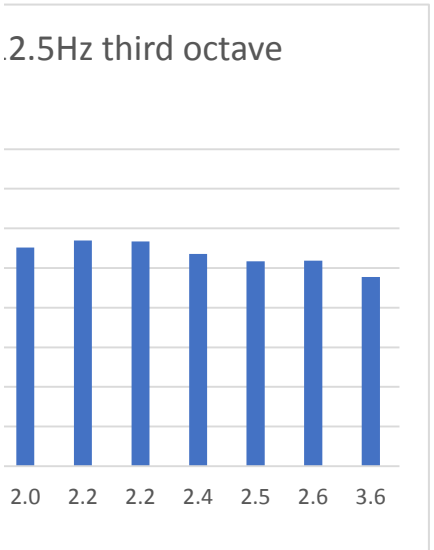



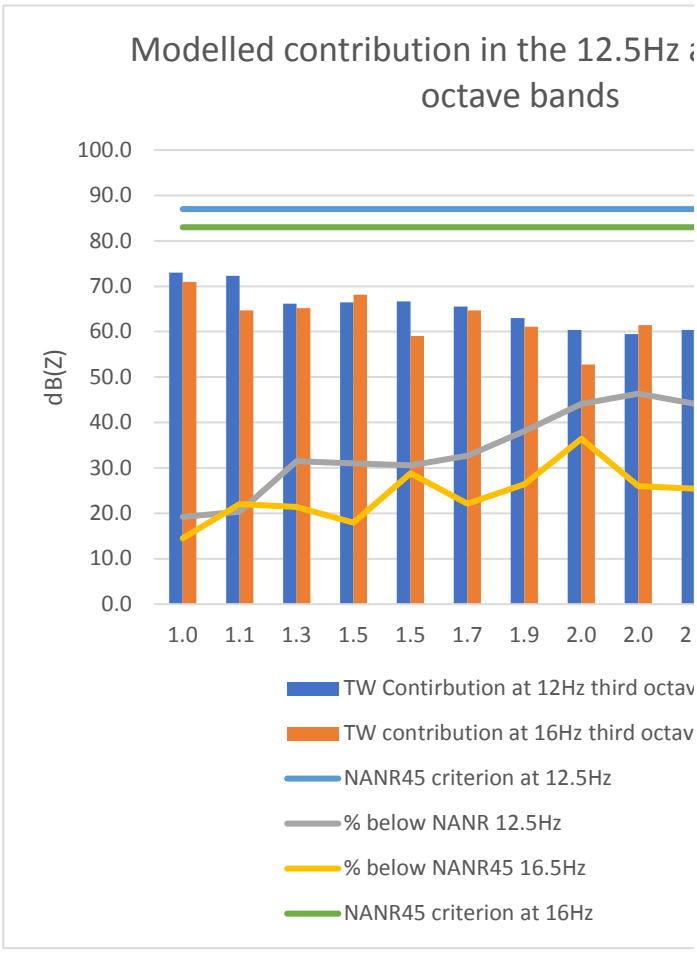
| |
|---|
| 77.6 |
| 74.9 |
| 73.2 |
| 70.9 |
| 70.0 |
| 69.3 |
| 66.4 |
| 66.8 |
| 65.8 |
| 64.6 |
| 64.5 |
| 62.5 |
| 62.3 |
| 61.0 |
| 55.2 |

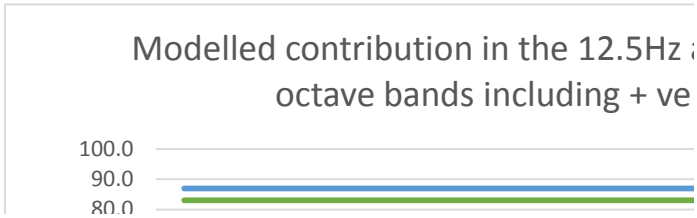
| TW modelled results - 12Hz contribution | | | | TW modelled results - 16Hz con | | | | |
|---|---|---|---|---|---|---|---|---|
| **dB(G)** | **dB(A)** | **dB(Z)** | **dB(C)** | **dB(G)** | **dB(A)** | **dB(Z)** | **dB(C)** | **dB(G)** |
| 86.9 | 22.5 | 73.0 | 61.8 | 77.0 | 9.6 | 71.0 | 62.5 | 78.7 |
| 85.6 | 21.2 | 72.3 | 61.1 | 76.3 | 8.9 | 64.7 | 56.2 | 72.4 |
| 76.6 | 12.2 | 66.2 | 55.0 | 70.2 | 2.8 | 65.2 | 56.7 | 72.9 |
| 80.7 | 16.3 | 66.4 | 55.2 | 70.4 | 3.0 | 68.1 | 59.6 | 75.8 |
| 78.9 | 14.5 | 66.7 | 55.5 | 70.7 | 3.3 | 59.1 | 50.6 | 66.8 |
| 78.9 | 14.5 | 65.6 | 54.4 | 69.6 | 2.2 | 64.7 | 56.2 | 72.4 |
| 76.2 | 11.8 | 63.0 | 51.8 | 67.0 | -0.4 | 61.1 | 52.6 | 68.8 |
| 69.8 | 5.4 | 60.4 | 49.2 | 64.4 | -3.0 | 52.8 | 44.3 | 60.5 |
| 72.6 | 8.2 | 59.5 | 48.3 | 63.5 | -4.0 | 61.4 | 52.9 | 69.1 |
| 74.7 | 10.3 | 60.4 | 49.2 | 64.4 | -3.0 | 61.9 | 53.4 | 69.6 |
| 72.6 | 8.2 | 60.4 | 49.2 | 64.4 | -3.0 | 54.4 | 45.9 | 62.1 |
| 70.9 | 6.5 | 57.2 | 46.0 | 61.2 | -6.3 | 56.0 | 47.5 | 63.7 |
| 68.0 | 3.6 | 56.5 | 45.3 | 60.5 | -6.9 | 57.2 | 48.7 | 64.9 |
| 68.4 | 4.0 | 56.2 | 45.0 | 60.2 | -7.3 | 56.0 | 47.5 | 63.7 |
| 64.7 | 0.3 | 51.5 | 40.3 | 55.5 | -11.9 | 51.0 | 42.5 | 58.7 |

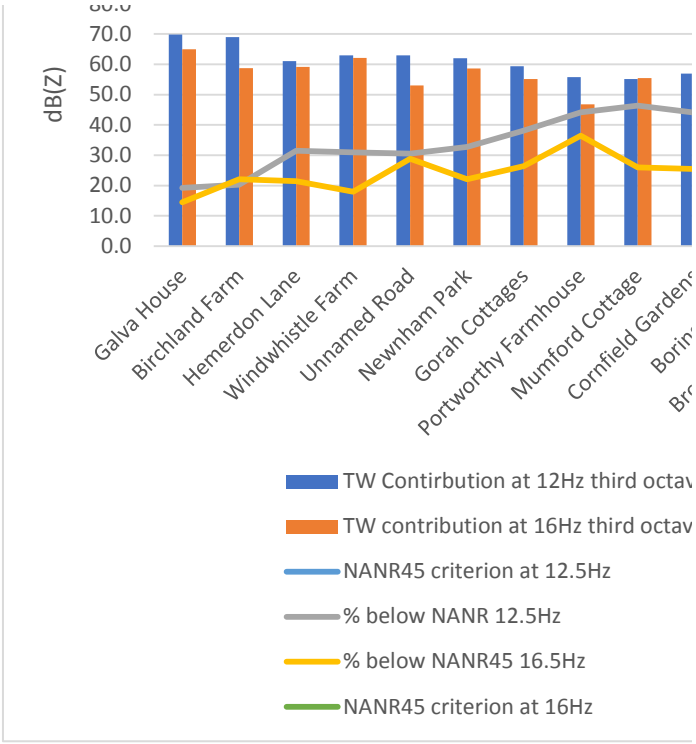
ens, all contributions w Note unmitigated



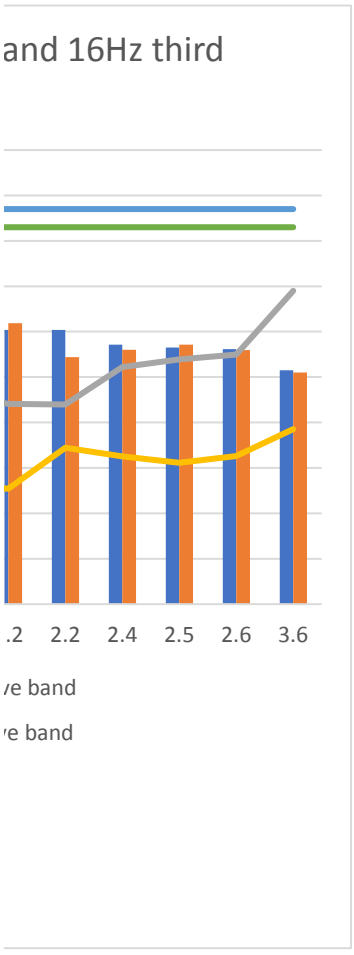



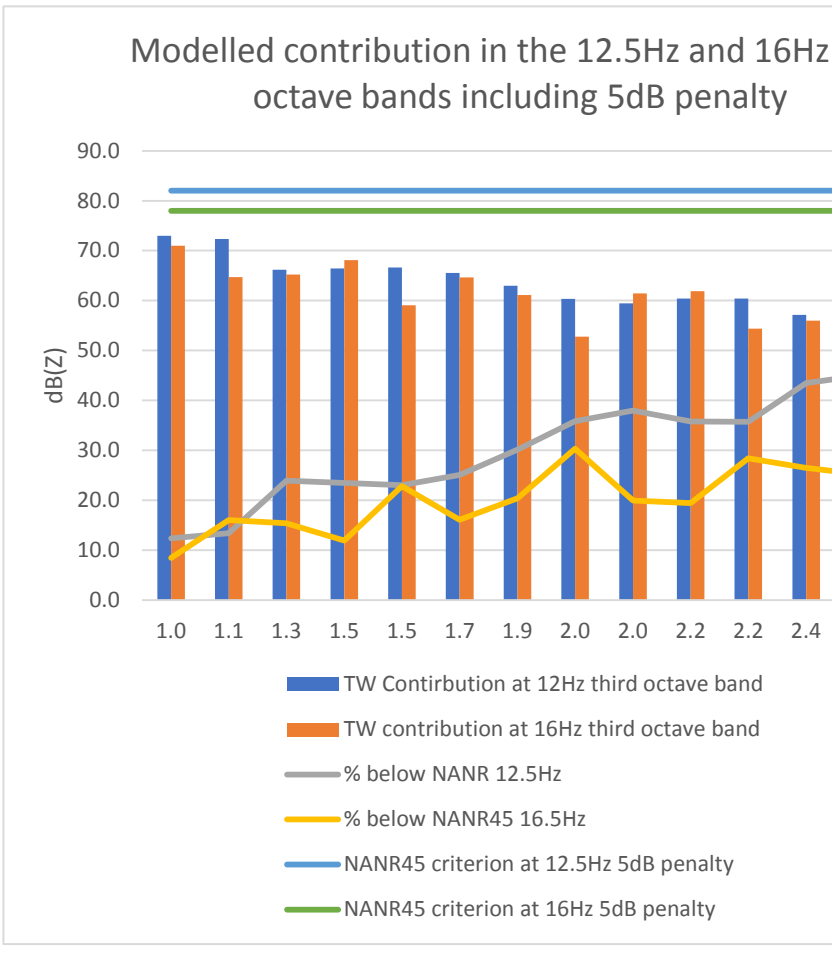

dB(Z)
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Galva House
Birchland Farm
Hemerdon Lane
Windwhistle Farm
Unnamed Road
Newnham Park
Gorah Cottages
Portworthy Farmhouse
Mumford Cottage
TW Contirbution at 12Hz third octav
TW contribution at 16Hz third octav
NANR45 criterion at 12.5Hz
% below NANR 12.5Hz
% below NANR45 16.5Hz
NANR45 criterion at 16Hz

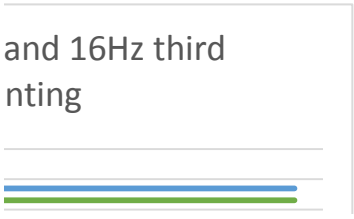
| tribution | TW modelled results - 12Hz contribution | | | TW modelled results - 16Hz contribution | | | | |
|---|---|---|---|---|---|---|---|---|
| **dB(A)** | **dB(Z)** | **dB(C)** | **dB(G)** | **dB(A)** | **dB(Z)** | **dB(C)** | **dB(G)** | **dB(A)** |
| 14.3 | 69.8 | 58.6 | 73.8 | 6.4 | 65.0 | 56.5 | 72.7 | 8.3 |
| 8.0 | 69.0 | 57.8 | 73.0 | 5.6 | 58.7 | 50.2 | 66.4 | 2.0 |
| 8.5 | 61.0 | 49.8 | 65.0 | -2.4 | 59.2 | 50.7 | 66.9 | 2.5 |
| 11.4 | 63.0 | 51.8 | 67.0 | -0.4 | 62.1 | 53.6 | 69.8 | 5.4 |
| 2.4 | 63.0 | 51.8 | 67.0 | -0.4 | 53.1 | 44.6 | 60.8 | -3.6 |
| 8.0 | 62.0 | 50.8 | 66.0 | -1.4 | 58.7 | 50.2 | 66.4 | 2.0 |
| 4.4 | 59.4 | 48.2 | 63.4 | -4.0 | 55.1 | 46.6 | 62.8 | -1.6 |
| -3.9 | 55.8 | 44.6 | 59.8 | -7.6 | 46.8 | 38.3 | 54.5 | -9.9 |
| 4.7 | 55.1 | 43.9 | 59.1 | -8.3 | 55.4 | 46.9 | 63.1 | -1.3 |
| 5.2 | 57.0 | 45.8 | 61.0 | -6.5 | 55.9 | 47.4 | 63.6 | -0.8 |
| -2.3 | 56.7 | 45.5 | 60.7 | -6.7 | 48.4 | 39.9 | 56.1 | -8.3 |
| -0.7 | 53.6 | 42.4 | 57.6 | -9.8 | 50.0 | 41.5 | 57.7 | -6.7 |
| 0.4 | 51.7 | 40.5 | 55.7 | -11.7 | 51.2 | 42.7 | 58.9 | -5.6 |
| -0.7 | 51.9 | 40.7 | 55.9 | -11.6 | 50.0 | 41.5 | 57.7 | -6.7 |
| -5.7 | 47.8 | 36.6 | 51.8 | -15.7 | 45.0 | 36.5 | 52.7 | -11.7 |

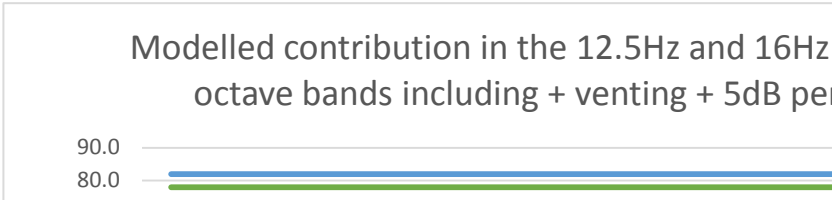
Note vented

Note vented

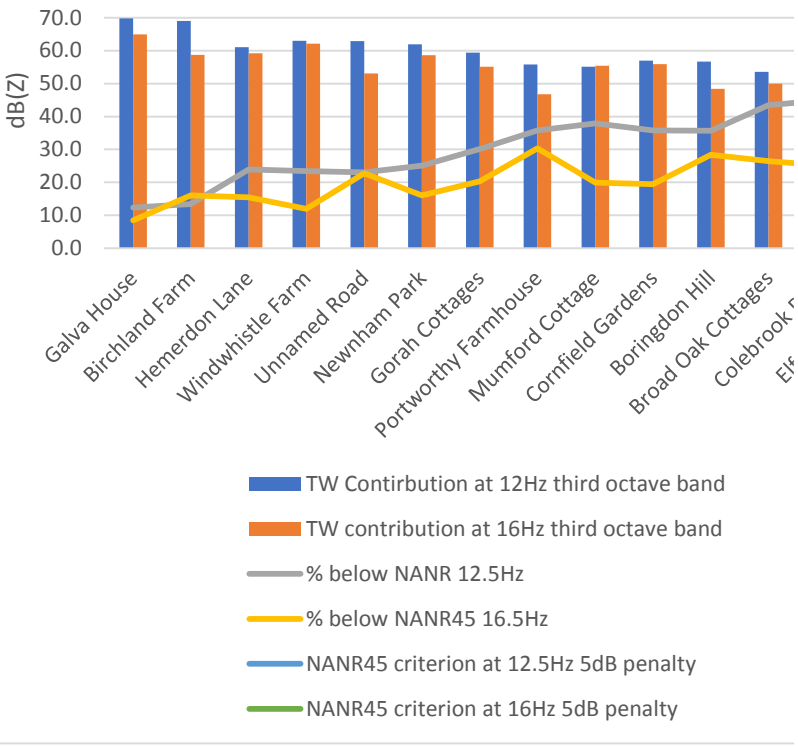


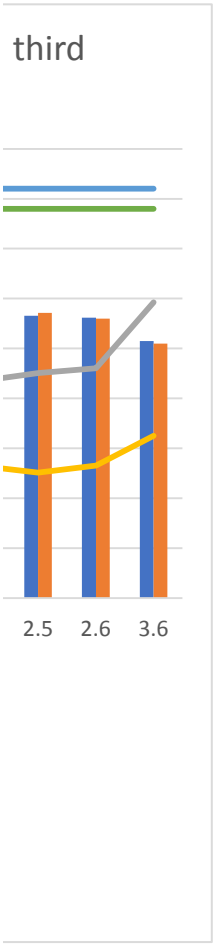



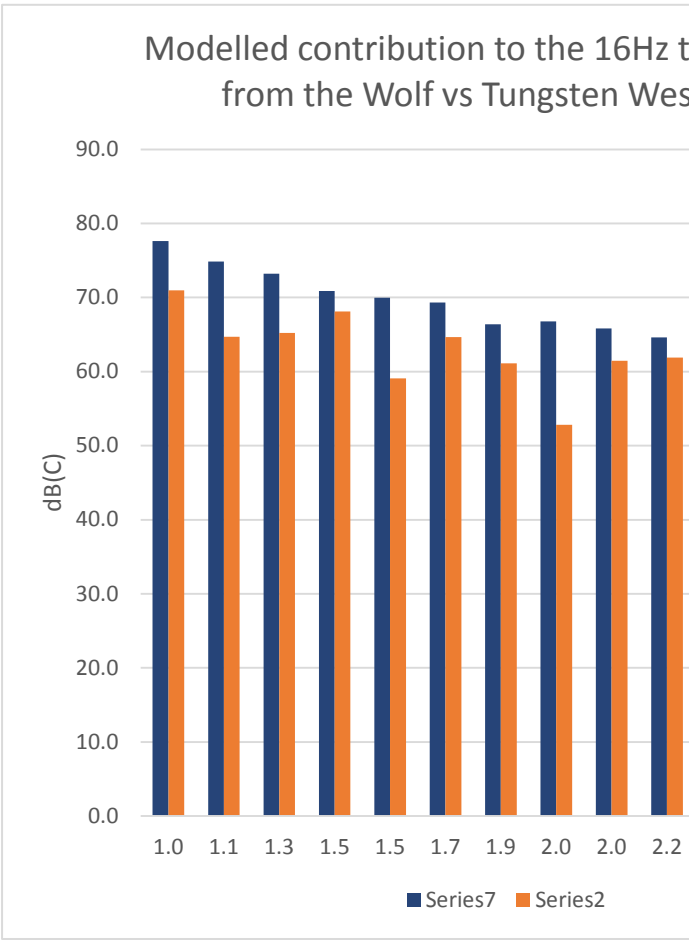



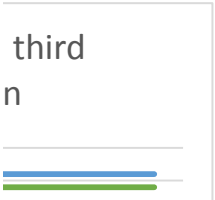

igdon Hill
oad Oak Cottages
Colebrook Road
Elford Crescent
Bond Street
ve band
e band

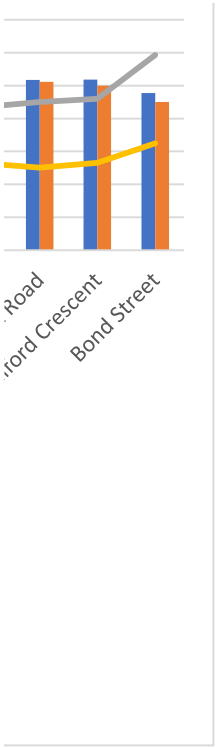

70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
dB(Z)
Galva House
Birchland Farm
Hemerdon Lane
Windwhistle Farm
Unnamed Road
Newnham Park
Gorah Cottages
Portworthy Farmhouse
Mumford Cottage
Cornfield Gardens
Boringdon Hill
Broad Oak Cottages
TW Contirbution at 12Hz third octave band
TW contribution at 16Hz third octave band
% below NANR 12.5Hz
% below NANR45 16.5Hz
NANR45 criterion at 12.5Hz 5dB penalty
NANR45 criterion at 16Hz 5dB penalty

| NANR45 12.5Hz | NANR16Hz | 12.5Hz 5dB penalty for AM | 16Hz 5dB penalty for AM |
|---|---|---|---|
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |
| 87 | 83 | 82 | 78 |

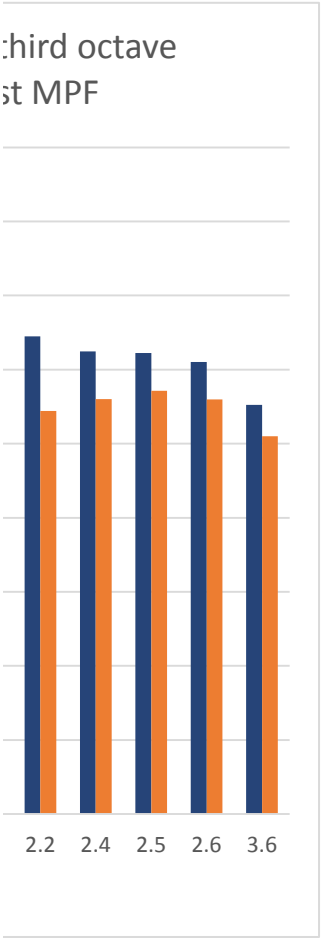


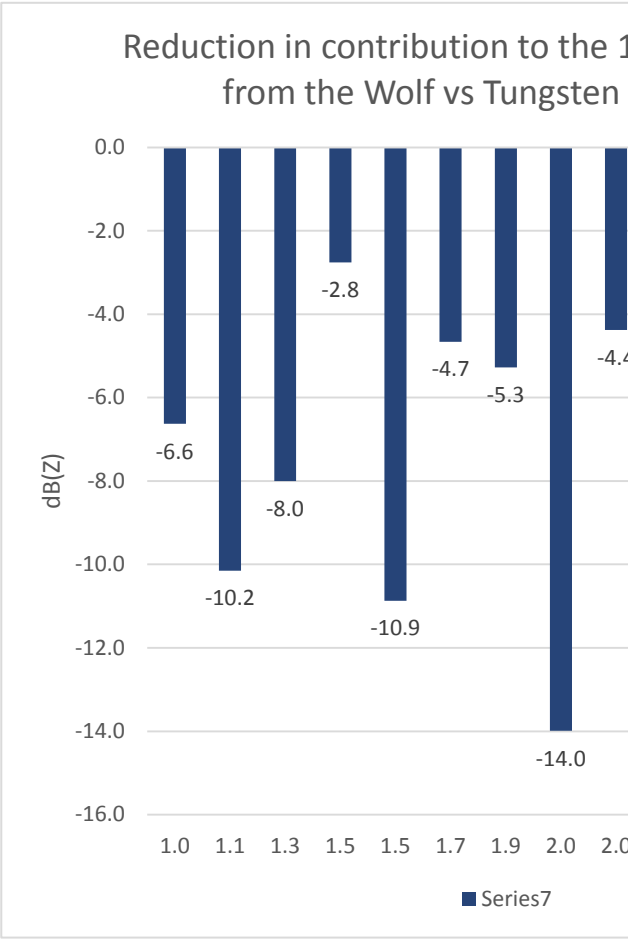



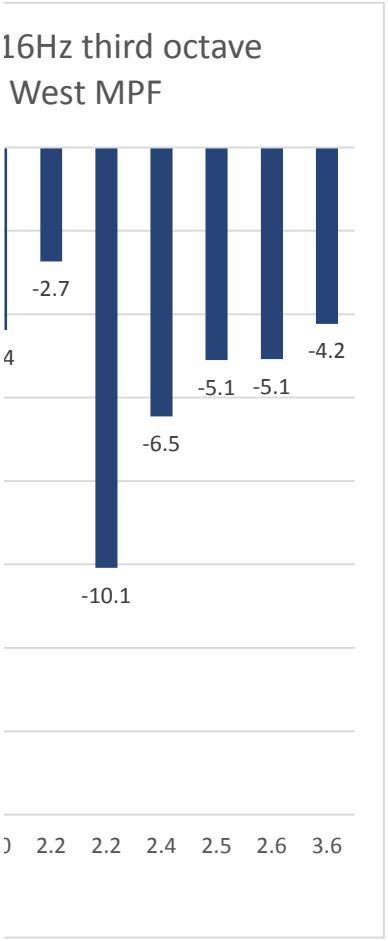

Road
ford Crescent
Bond Street

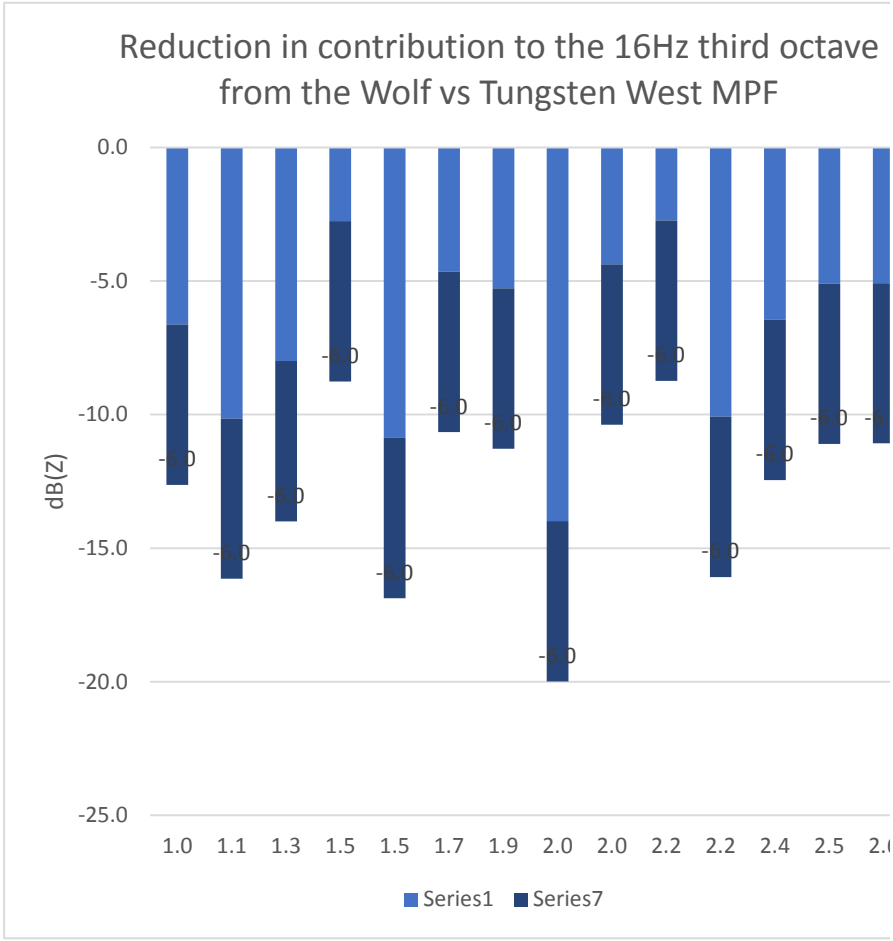
| dB below NANR45 12.5Hz | below 12.5Hz including pena | dB below NANR16Hz |
|---|---|---|
| 14.0 | 9.0 | 12.0 |
| 14.7 | 9.7 | 18.3 |
| 20.8 | 15.8 | 17.8 |
| 20.6 | 15.6 | 14.9 |
| 20.4 | 15.4 | 23.9 |
| 21.4 | 16.4 | 18.3 |
| 24.0 | 19.0 | 21.9 |
| 26.6 | 21.6 | 30.2 |
| 27.6 | 22.6 | 21.6 |
| 26.6 | 21.6 | 21.1 |
| 26.6 | 21.6 | 28.6 |
| 29.9 | 24.9 | 27.0 |
| 30.5 | 25.5 | 25.9 |
| 30.9 | 25.9 | 27.0 |
| 35.5 | 30.5 | 32.0 |



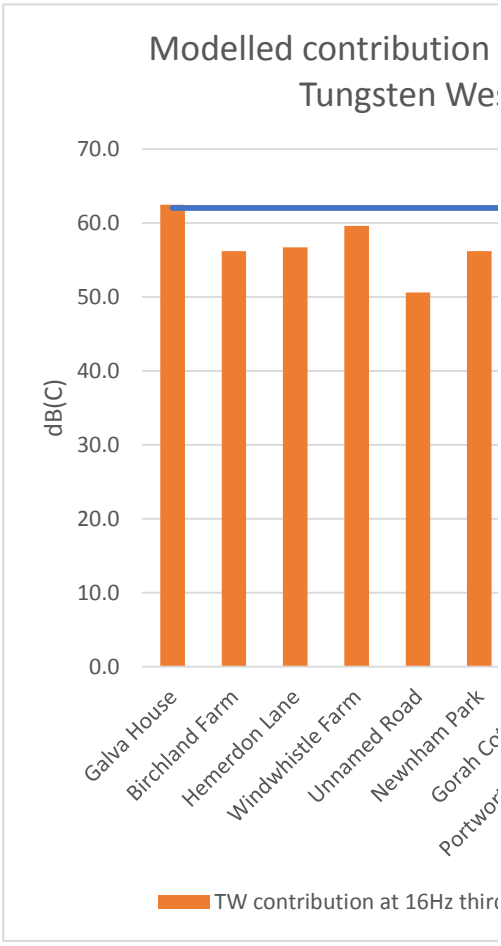



| dB below 16Hz including penalty | % below NANR45 12.5Hz | % below NANR45 12.5Hz including penalty |
|---|---|---|
| 7.0 | 19.21074267 | 12.35955056 |
| 13.3 | 20.31530909 | 13.40063615 |
| 12.8 | 31.49939541 | 23.94195889 |
| 9.9 | 30.98464318 | 23.45679012 |
| 18.9 | 30.53263316 | 23.03075769 |
| 13.3 | 32.7028676 | 25.07626602 |
| 16.9 | 38.0952381 | 30.15873016 |
| 25.2 | 44.11131357 | 35.82905417 |
| 16.6 | 46.34146341 | 37.93103448 |
| 16.1 | 44.08744617 | 35.80655846 |
| 23.6 | 43.99205561 | 35.71665012 |
| 22.0 | 52.23097113 | 43.48206474 |
| 20.9 | 53.90058376 | 45.05572263 |
| 22.0 | 54.94211932 | 46.03739982 |
| 27.0 | 68.997669 | 59.28515929 |



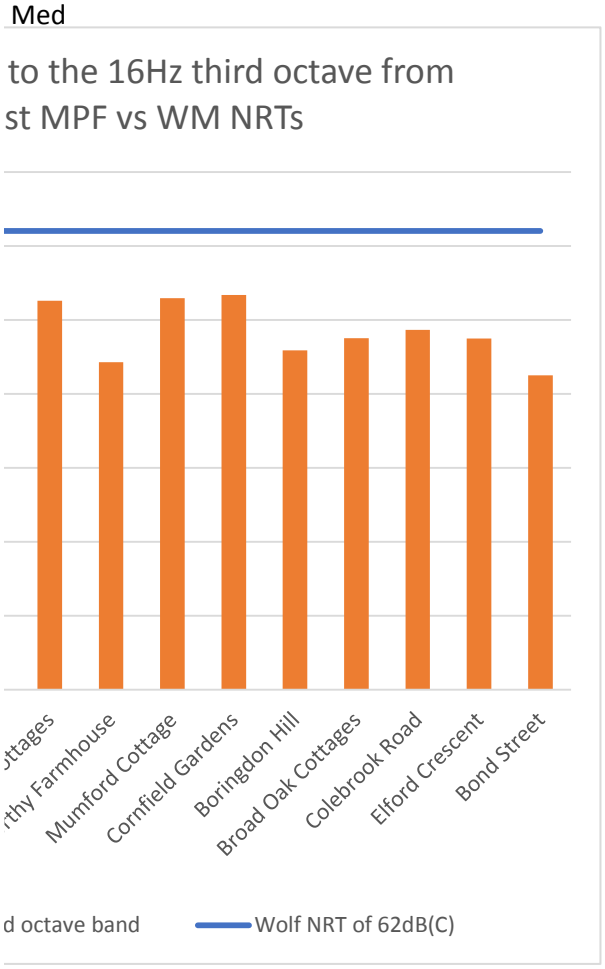



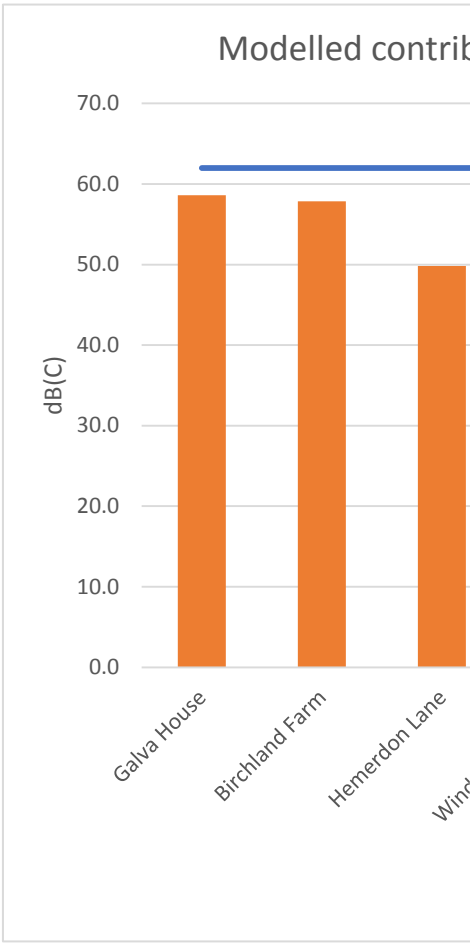
| % below NANR16Hz | % below NANR16Hz including penalty |
|---|---|
| 14.4939759 | 8.469879518 |
| 22.04819277 | 16.02409639 |
| 21.43373494 | 15.40963855 |
| 17.93975904 | 11.91566265 |
| 28.81927711 | 22.79518072 |
| 22.09638554 | 16.07228916 |
| 26.38554217 | 20.36144578 |
| 36.38554217 | 30.36144578 |
| 25.97590361 | 19.95180723 |
| 25.44578313 | 19.42168675 |
| 34.45783133 | 28.43373494 |
| 32.51807229 | 26.4939759 |
| 31.14457831 | 25.12048193 |
| 32.57831325 | 26.55421687 |
| 38.54216867 | 32.51807229 |

| Wolf vs TW 16Hz contribution dB(Z) | Wolf vs TW 16Hz contribution dB© |
|---|---|
| -6.6 | -6.6 |
| -10.2 | -10.2 |
| -8.0 | -8.0 |
| -2.8 | -2.8 |
| -10.9 | -10.9 |
| -4.7 | -4.7 |
| -5.3 | -5.3 |
| -14.0 | -14.0 |
| -4.4 | -4.4 |
| -2.7 | -2.7 |
| -10.1 | -10.1 |
| -6.5 | -6.5 |
| -5.1 | -5.1 |
| -5.1 | -5.1 |
| -4.2 | -4.2 |

| | |
|---|---|
| Min | -2.7 |
| Med | -5.3 |
| | -14.0 |

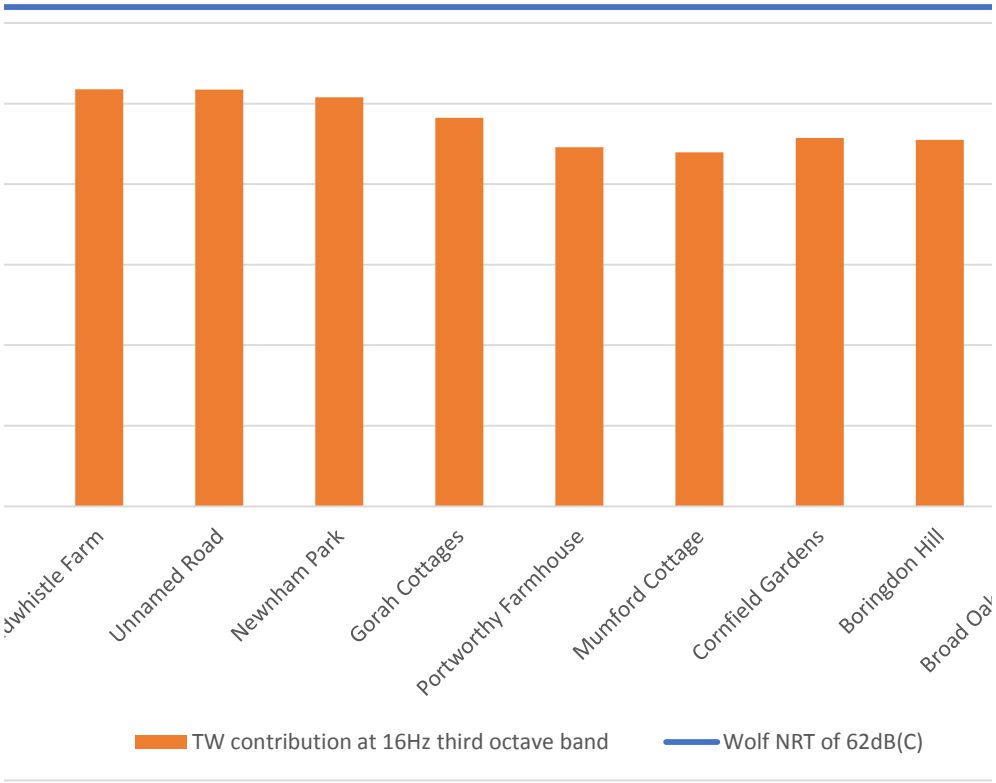


| TW 16Hz contribution vented dB(Z) | |
|---|---|
| -12.6 | -6.0 |
| -16.2 | -6.0 |
| -14.0 | -6.0 |
| -8.8 | -6.0 |
| -16.9 | -6.0 |
| -10.7 | -6.0 |
| -11.3 | -6.0 |
| -20.0 | -6.0 |
| -10.4 | -6.0 |
| -8.7 | -6.0 |
| -16.1 | -6.0 |
| -12.5 | -6.0 |
| -11.1 | -6.0 |
| -11.1 | -6.0 |
| -10.2 | -6.0 |

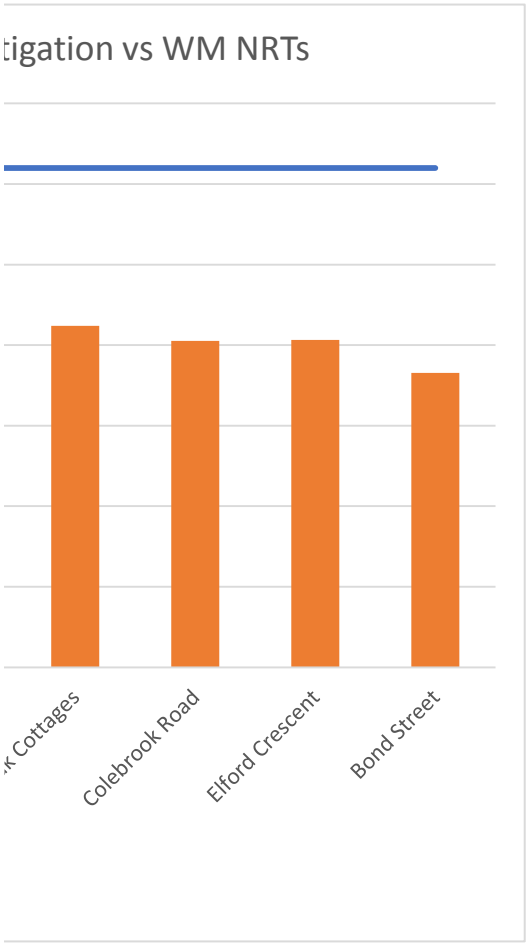
-20.0
-11.3
-20.0

ɔution to the 16Hz third octave from Tungsten West MPF with mit



| TW 16Hz contribution dB© + vented | TW16Hz contribution dB© just vented |
|---|---|
| -12.6 | -6.0 |
| -16.2 | -6.0 |
| -14.0 | -6.0 |
| -8.8 | -6.0 |
| -16.9 | -6.0 |
| -10.7 | -6.0 |
| -11.3 | -6.0 |
| -20.0 | -6.0 |
| -10.4 | -6.0 |
| -8.7 | -6.0 |
| -16.1 | -6.0 |
| -12.5 | -6.0 |
| -11.1 | -6.0 |
| -11.1 | -6.0 |
| -10.2 | -6.0 |

-8.7
-11.3
-20.0



| dB below Wolf NRT 16Hz | % below NRT |
|---|---|
| 9.0 | |
| 2.7 | |
| 3.2 | |
| 6.1 | |
| -2.9 | |
| 2.7 | |
| -0.9 | |
| -9.2 | |
| -0.6 | |
| -0.1 | |
| -7.6 | |
| -6.0 | |
| -4.9 | |
| -6.0 | |
| -11.0 | |

WM NRTs

| dB below Wolf NRT vented | | 62/67dB @ 16Hz |
|---|---|---|
| -3.4 | | 62 |
| -4.2 | | 62 |
| -12.2 | | 62 |
| -10.2 | | 62 |
| -10.3 | | 62 |
| -11.2 | | 62 |
| -13.8 | | 62 |
| -17.4 | | 62 |
| -18.1 | | 62 |
| -16.3 | | 62 |
| -16.5 | | 62 |
| -19.6 | | 62 |
| -21.5 | | 62 |
| -21.4 | | 62 |
| -25.5 | | 62 |

Broner Criteria

| 43dB(Z) @ 50Hz | Desirable 60dB(C) | Maximum 65dB(C) |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| | 8 | 10 | 12.5 |
|---|---|---|---|
| DEFRA 2005 Reference Criterion Curve | | 92 | 87 |
| DIN 45680:1997-3 | 103 | 92 | 87 |
| ISO 7029:2000 Median minus 4 dB (10% of 60 year old males) | | | |
| ISO 389-7 1996 | | | |
| ISO 226-2003 | | | |
| Modelling Output Wolf MPF - Porthworthy Farmhouse - dB(Z) | 0 | 0 | 0 |
| Modelling Output Wolf MPF - Porthworthy Farmhouse - Power | 2903.0 | 2155.4 | 2717.3 |
| Power equation - modelling results | 0 | 0 | 0 |
| Background dB(Z) | 34.6 | 33.3 | 34.3 |
| Power equation - modelling results + background | 2903.035 | 2155.359 | 2717.2671 |
| NANR45 Criterion dB(Z) | 34.62852 | 33.3352 | 34.341323 |
| | 0.0 | 0 | 0 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 16.92852 | 19.0352 | 23.141323 |
| C-Weighting - Power | 49.3006 | 80.07918 | 206.12579 |
| Modelling Output Wolf MPF - Birchland Farm (nearest DZ) - dB(Z) | 0 | 0 | 0 |
| Modelling Output Wolf MPF - Birchland Farm (nearest DZ) - Power | 4273.0 | 3360.8 | 3708.9 |
| Power equation - modelling results | 0 | 0 | 0 |
| Background dB(Z) | 36.3 | 35.3 | 35.7 |
| Power equation - modelling results + background | 4273.0 | 3360.8 | 3708.9 |
| NANR45 Criterion dB(Z) | 36.30733 | 35.26443 | 35.692431 |
| | 0.0 | 0.0 | 0.0 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 18.60733 | 20.96443 | 24.492431 |
| C-Weighting - Power | 72.5659 | 124.8655 | 281.34754 |
| Modelling Output Wolf MPF - Windwhistle Farm - dB(Z) | 0 | 0 | 0 |
| Modelling Output Wolf MPF - Windwhistle Farm - Power | 4438.9 | 3453.8 | 3640.8 |
| Power equation - modelling results | 0 | 0 | 0 |
| Background dB(Z) | 36.5 | 35.4 | 35.6 |
| Power equation - modelling results + background | 4438.9 | 3453.8 | 3640.8 |
| NANR45 Criterion dB(Z) | 36.47278 | 35.38302 | 35.612006 |
| | 0.0 | 0.0 | 0.0 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 18.77278 | 21.08302 | 24.412006 |
| C-Weighting - Power | 75.38373 | 128.3222 | 276.18535 |
| Modelling Output TW MPF - Porthworthy Farmhouse dB(Z) | 0 | 0 | 60.4 |
| Modelling Output TW MPF - Porthworthy Farmhouse - Power | 2903.0 | 2155.4 | 2717.3 |
| Power equation - modelling results | 0 | 0 | 1096478.2 |
| Background dB(Z) | 34.6 | 33.3 | 34.3 |
| Power equation - modelling results + background | 2903.0 | 2155.4 | 1099195.5 |
| NANR45 Criterion dB(Z) | 34.62852 | 33.3352 | 60.410749 |
| | 0 | 0 | 26.069426 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 16.92852 | 19.0352 | 49.210749 |
| C-Weighting - Power | 49.3006 | 80.07918 | 83382.503 |
| Modelling Output TW MPF - Birchland Farm (nearest DZ) dB(Z) | 0 | 0 | 72.3 |
| Modelling Output TW MPF - Birchland Farm (nearest DZ) Power | 2903.0 | 2155.4 | 2717.3 |

| | | | |
|---|---|---|---|
| Power equation - modelling results | 0 | 0 | 16982437 |
| Background dB(Z) | 34.6 | 33.3 | 34.3 |
| Power equation - modelling results + background | 2903.0 | 2155.4 | ######### |
| NANR45 Criterion dB(Z) | 34.62852 | 33.3352 | 72.300695 |
| | 0.0 | 0.0 | 38.0 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 16.92852 | 19.0352 | 61.100695 |
| C-Weighting - Power | 49.3006 | 80.07918 | 1288455.7 |
| Modelling Output TW MPF - Windwhistle Farm | 0 | 0 | 66.4 |
| Modelling Output TW MPF - Windwhistle Farm Power | 4438.9 | 3453.8 | 3640.8 |
| Power equation - modelling results | 0 | 0 | 4365158.3 |
| | 36.5 | 35.4 | 35.6 |
| Power equation - modelling results + background | 4438.9 | 3453.8 | 4368799.2 |
| NANR45 Criterion dB(Z) | 36.47278 | 35.38302 | 66.403621 |
| | 0.0 | 0.0 | 30.8 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 18.77278 | 21.08302 | 55.203621 |
| C-Weighting - Power | 75.38373 | 128.3222 | 331407.31 |
| Modelling Output TW MPF + mitigation - Porthworthy Famrhouse | 0 | 0 | 55.8 |
| | 2903.0 | 2155.4 | 2717.3 |
| Power equation - modelling results | 0 | 0 | 380189.4 |
| | 34.6 | 33.3 | 34.3 |
| Power equation - modelling results + background | 2903.0 | 2155.4 | 382906.7 |
| NANR45 Criterion dB(Z) | 34.62852 | 33.3352 | 55.830929 |
| | 0.0 | 0 | 21.489606 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 16.92852 | 19.0352 | 44.630929 |
| C-Weighting - Power | 49.3006 | 80.07918 | 29046.441 |
| Modelling Output TW MPF + mitigation - Birchland Farm (nearest DZ) | 0 | 0 | 69 |
| | 2903.0 | 2155.4 | 2717.3 |
| Power equation - modelling results | 0 | 0 | 7943282.3 |
| | 34.6 | 33.3 | 34.3 |
| Power equation - modelling results + background | 2903.0 | 2155.4 | 7945999.6 |
| NANR45 Criterion dB(Z) | 34.62852 | 33.3352 | 69.001485 |
| | 0.0 | 0.0 | 34.7 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 16.92852 | 19.0352 | 57.801485 |
| C-Weighting - Power | 49.3006 | 80.07918 | 602765.71 |
| Modelling Output TW MPF + mitigation - Windwhistle | 0 | 0 | 63 |
| | 4438.9 | 3453.8 | 3640.8 |
| Power equation - modelling results | 0 | 0 | 1995262.3 |
| | 36.5 | 35.4 | 35.6 |
| Power equation - modelling results + background | 4438.9 | 3453.8 | 1998903.1 |
| NANR45 Criterion dB(Z) | 36.47278 | 35.38302 | 63.007918 |
| | 0.0 | 0.0 | 27.4 |
| C-Weighting | -17.7 | -14.3 | -11.2 |
| Broner Criterion dB(C) | 18.77278 | 21.08302 | 51.807918 |
| C-Weighting - Power | 75.38373 | 128.3222 | 151632.31 |

Port

| Third octave centre fre | dBZ | Power |
|---|---|---|
| 7.8 | 34.6 | 2903.0 |
| 9.8 | 33.3 | 2155.4 |
| 12.4 | 34.3 | 2717.3 |
| 15.6 | 37.5 | 5683.5 |
| 19.7 | 35.0 | 3145.8 |
| 24.8 | 37.3 | 5421.3 |
| 31.3 | 35.0 | 3158.4 |
| 39.4 | 35.2 | 3282.4 |
| 49.6 | 42.1 | 16153.6 |
| 62.5 | 35.5 | 3523.0 |
| 78.8 | 32.8 | 1888.7 |
| 99.2 | 30.2 | 1041.7 |
| 125 | 31.1 | 1287.7 |
| 157.5 | 27.2 | 529.3 |
| 198.4 | 30.1 | 1027.7 |
| 250 | 25.9 | 393.3 |
| 315 | 25.6 | 362.9 |
| 396.9 | 26.1 | 409.6 |
| 500 | 24.1 | 254.9 |
| 630 | 23.4 | 218.6 |
| 793.7 | 23.4 | 219.5 |
| 1000 | 24.1 | 255.8 |
| 1259.9 | 23.6 | 230.8 |
| 1587.4 | 22.5 | 178.1 |
| 2000 | 21.6 | 146.1 |
| 2519.8 | 20.7 | 118.6 |
| 3174.8 | 19.2 | 83.0 |
| 4000 | 18.9 | 78.1 |
| 5039.7 | 19.7 | 92.7 |
| 6349.6 | 20.6 | 114.7 |
| 8000 | 21.6 | 145.0 |
| 10079.4 | 22.7 | 185.7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 20 | 25 | 31.5 | 40 | 50 | 63 | 80 | 100 |
| 83 | 74 | 64 | 56 | 48 | 48 | 42 | 40 | 38 |
| 79 | 71 | 63 | 56.5 | 48 | 40.5 | 38.5 | 28 | 23.5 |
| | 74 | 62 | 55 | 46 | 39 | 33 | 27 | 22 |
| | 78 | 68 | 59 | 50.5 | 43.5 | 37.5 | 31.5 | 26.5 |
| | 78.5 | 68.7 | 59.5 | 51.1 | 44 | 37.5 | 31.5 | 26.5 |
| 66.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5683.5 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 4786300.923 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37.5 | 35.0 | 37.3 | 35.0 | 35.2 | 42.1 | 35.5 | 32.8 | 30.2 |
| 4791984.4 | 3145.761 | 5421.344 | 3158.422 | 3282.425 | 16153.55 | 3523.045 | 1888.656 | 1041.668 |
| 66.80515396 | 34.97726 | 37.34107 | 34.9947 | 35.16195 | 42.08268 | 35.46918 | 32.76153 | 30.17729 |
| 29.25900867 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 58.30515396 | 28.77726 | 32.94107 | 31.9947 | 33.16195 | 40.78268 | 34.66918 | 32.26153 | 29.87729 |
| 676885.7886 | 754.6156 | 1968.371 | 1582.961 | 2071.07 | 11974.8 | 2930.341 | 1683.267 | 972.1412 |
| 74.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4835.5 | 2824.2 | 7721.3 | 2527.4 | 2823.3 | 24689.6 | 4075.3 | 4135.0 | 3333.8 |
| 30902954.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36.8 | 34.5 | 38.9 | 34.0 | 34.5 | 43.9 | 36.1 | 36.2 | 35.2 |
| 30907789.8 | 2824.2 | 7721.3 | 2527.4 | 2823.3 | 24689.6 | 4075.3 | 4135.0 | 3333.8 |
| 74.9006795 | 34.5089 | 38.87693 | 34.02668 | 34.5076 | 43.92513 | 36.10162 | 36.16479 | 35.22945 |
| 38.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 66.4006795 | 28.3089 | 34.47693 | 31.02668 | 32.5076 | 42.62513 | 35.30162 | 35.66479 | 34.92945 |
| 4365841.355 | 677.4697 | 2803.452 | 1266.683 | 1781.395 | 18302.63 | 3389.708 | 3685.354 | 3111.324 |
| 70.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8403.2 | 4784.1 | 4094.4 | 2287.9 | 1242.8 | 12885.7 | 1501.6 | 2272.0 | 1387.1 |
| 12302687.71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39.2 | 36.8 | 36.1 | 33.6 | 30.9 | 41.1 | 31.8 | 33.6 | 31.4 |
| 12311090.9 | 4784.1 | 4094.4 | 2287.9 | 1242.8 | 12885.7 | 1501.6 | 2272.0 | 1387.1 |
| 70.90296537 | 36.79797 | 36.12191 | 33.59443 | 30.94406 | 41.10109 | 31.76558 | 33.56409 | 31.42093 |
| 31.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 62.40296537 | 30.59797 | 31.72191 | 30.59443 | 28.94406 | 39.80109 | 30.96558 | 33.06409 | 31.12093 |
| 1738987.809 | 1147.618 | 1486.589 | 1146.683 | 784.1621 | 9552.32 | 1248.988 | 2024.927 | 1294.473 |
| 52.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5683.5 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 190546.0718 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37.5 | 35.0 | 37.3 | 35.0 | 35.2 | 42.1 | 35.5 | 32.8 | 30.2 |
| 196229.6 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 52.92764417 | 34.97726 | 37.34107 | 34.9947 | 35.16195 | 42.08268 | 35.46918 | 32.76153 | 30.17729 |
| 15.38149888 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 44.42764417 | 28.77726 | 32.94107 | 31.9947 | 33.16195 | 40.78268 | 34.66918 | 32.26153 | 29.87729 |
| 27718.16128 | 754.6156 | 1968.371 | 1582.961 | 2071.07 | 11974.8 | 2930.341 | 1683.267 | 972.1412 |
| 64.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5683.5 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2951209.227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37.5 | 35.0 | 37.3 | 35.0 | 35.2 | 42.1 | 35.5 | 32.8 | 30.2 |
| 2956892.7 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 64.70835566 | 34.97726 | 37.34107 | 34.9947 | 35.16195 | 42.08268 | 35.46918 | 32.76153 | 30.17729 |
| 27.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 56.20835566 | 28.77726 | 32.94107 | 31.9947 | 33.16195 | 40.78268 | 34.66918 | 32.26153 | 29.87729 |
| 417672.1967 | 754.6156 | 1968.371 | 1582.961 | 2071.07 | 11974.8 | 2930.341 | 1683.267 | 972.1412 |
| 68.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8403.2 | 4784.1 | 4094.4 | 2287.9 | 1242.8 | 12885.7 | 1501.6 | 2272.0 | 1387.1 |
| 6456542.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39.2 | 36.8 | 36.1 | 33.6 | 30.9 | 41.1 | 31.8 | 33.6 | 31.4 |
| 6464945.5 | 4784.1 | 4094.4 | 2287.9 | 1242.8 | 12885.7 | 1501.6 | 2272.0 | 1387.1 |
| 68.10564866 | 36.79797 | 36.12191 | 33.59443 | 30.94406 | 41.10109 | 31.76558 | 33.56409 | 31.42093 |
| 28.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 59.60564866 | 30.59797 | 31.72191 | 30.59443 | 28.94406 | 39.80109 | 30.96558 | 33.06409 | 31.12093 |
| 913197.8198 | 1147.618 | 1486.589 | 1146.683 | 784.1621 | 9552.32 | 1248.988 | 2024.927 | 1294.473 |
| 46.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5683.5 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 47863.00923 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37.5 | 35.0 | 37.3 | 35.0 | 35.2 | 42.1 | 35.5 | 32.8 | 30.2 |
| 53546.5 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 47.28731022 | 34.97726 | 37.34107 | 34.9947 | 35.16195 | 42.08268 | 35.46918 | 32.76153 | 30.17729 |
| 9.741164929 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 38.78731022 | 28.77726 | 32.94107 | 31.9947 | 33.16195 | 40.78268 | 34.66918 | 32.26153 | 29.87729 |
| 7563.642999 | 754.6156 | 1968.371 | 1582.961 | 2071.07 | 11974.8 | 2930.341 | 1683.267 | 972.1412 |
| 58.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5683.5 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 741310.2413 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37.5 | 35.0 | 37.3 | 35.0 | 35.2 | 42.1 | 35.5 | 32.8 | 30.2 |
| 746993.7 | 3145.8 | 5421.3 | 3158.4 | 3282.4 | 16153.6 | 3523.0 | 1888.7 | 1041.7 |
| 58.73316953 | 34.97726 | 37.34107 | 34.9947 | 35.16195 | 42.08268 | 35.46918 | 32.76153 | 30.17729 |
| 21.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 50.23316953 | 28.77726 | 32.94107 | 31.9947 | 33.16195 | 40.78268 | 34.66918 | 32.26153 | 29.87729 |
| 105515.6681 | 754.6156 | 1968.371 | 1582.961 | 2071.07 | 11974.8 | 2930.341 | 1683.267 | 972.1412 |
| 62.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8403.2 | 4784.1 | 4094.4 | 2287.9 | 1242.8 | 12885.7 | 1501.6 | 2272.0 | 1387.1 |
| 1621810.097 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39.2 | 36.8 | 36.1 | 33.6 | 30.9 | 41.1 | 31.8 | 33.6 | 31.4 |
| 1630213.3 | 4784.1 | 4094.4 | 2287.9 | 1242.8 | 12885.7 | 1501.6 | 2272.0 | 1387.1 |
| 62.12244425 | 36.79797 | 36.12191 | 33.59443 | 30.94406 | 41.10109 | 31.76558 | 33.56409 | 31.42093 |
| 22.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8.5 | -6.2 | -4.4 | -3 | -2 | -1.3 | -0.8 | -0.5 | -0.3 |
| 53.62244425 | 30.59797 | 31.72191 | 30.59443 | 28.94406 | 39.80109 | 30.96558 | 33.06409 | 31.12093 |
| 230273.7457 | 1147.618 | 1486.589 | 1146.683 | 784.1621 | 9552.32 | 1248.988 | 2024.927 | 1294.473 |

Residual level 31/08/2020 11:00 - 12:00

| worthy | | | | Sparkwell | | | | Windwhistle | |
|---|---|---|---|---|---|---|---|---|---|
| | dBC | dBZ | Power | | dBC | dBZ | Power | | |
| 2903.0 | 36.3 | 36.3 | 4273.0 | 4273.0 | 26.5 | 36.5 | 4438.9 | 4438.9 | |
| 2155.4 | 38.5 | 35.3 | 3360.8 | 3360.8 | 30.2 | 35.4 | 3453.8 | 3453.8 | |
| 2717.3 | 38.0 | 35.7 | 3708.9 | 3708.9 | 30.4 | 35.6 | 3640.8 | 3640.8 | |
| 5683.5 | 39.0 | 36.8 | 4835.5 | 4835.5 | 32.6 | 39.2 | 8403.2 | 8403.2 | |
| 3145.8 | 39.9 | 34.5 | 2824.2 | 2824.2 | 34.5 | 36.8 | 4784.1 | 4784.1 | |
| 5421.3 | 40.5 | 38.9 | 7721.3 | 7721.3 | 38.5 | 36.1 | 4094.4 | 4094.4 | |
| 3158.4 | 42.3 | 34.0 | 2527.4 | 2527.4 | 34.3 | 33.6 | 2287.9 | 2287.9 | |
| 3282.4 | 45.1 | 34.5 | 2823.3 | 2823.3 | 35.9 | 30.9 | 1242.8 | 1242.8 | |
| 16153.6 | 43.9 | 43.9 | 24689.6 | 24689.6 | 46.3 | 41.1 | 12885.7 | 12885.7 | |
| 3523.0 | 43.5 | 36.1 | 4075.3 | 4075.3 | 42.6 | 31.8 | 1501.6 | 1501.6 | |
| 1888.7 | 44.3 | 36.2 | 4135.0 | 4135.0 | 43.4 | 33.6 | 2272.0 | 2272.0 | |
| 1041.7 | 40.3 | 35.2 | 3333.8 | 3333.8 | 42.1 | 31.4 | 1387.1 | 1387.1 | |
| 1287.7 | 42.2 | 29.3 | 858.3 | 858.3 | 45.3 | 40.8 | 12132.0 | 12132.0 | |
| 529.3 | 41.9 | 30.4 | 1098.3 | 1098.3 | 44.2 | 28.7 | 740.3 | 740.3 | |
| 1027.7 | 39.1 | 30.0 | 1003.0 | 1003.0 | 42.7 | 28.2 | 659.7 | 659.7 | |
| 393.3 | 37.7 | 30.7 | 1164.3 | 1164.3 | 42.8 | 25.5 | 353.7 | 353.7 | |
| 362.9 | 37.1 | 31.4 | 1377.6 | 1377.6 | 43.4 | 27.0 | 499.4 | 499.4 | |
| 409.6 | 36.3 | 28.7 | 737.8 | 737.8 | 42.7 | 24.5 | 281.1 | 281.1 | |
| 254.9 | 37.4 | 34.3 | 2704.7 | 2704.7 | 44.8 | 22.6 | 182.1 | 182.1 | |
| 218.6 | 36.3 | 29.7 | 923.0 | 923.0 | 45.1 | 22.2 | 166.3 | 166.3 | |
| 219.5 | 35.5 | 27.9 | 611.0 | 611.0 | 44.4 | 22.0 | 157.6 | 157.6 | |
| 255.8 | 34.3 | 27.0 | 505.0 | 505.0 | 43.9 | 20.2 | 105.7 | 105.7 | |
| 230.8 | 33.4 | 27.7 | 582.2 | 582.2 | 43.3 | 18.6 | 73.1 | 73.1 | |
| 178.1 | 31.4 | 26.0 | 398.1 | 398.1 | 42.5 | 17.9 | 61.0 | 61.0 | |
| 146.1 | 29.4 | 26.6 | 461.9 | 461.9 | 41.6 | 17.8 | 59.7 | 59.7 | |
| 118.6 | 26.3 | 25.5 | 352.0 | 352.0 | 39.9 | 17.9 | 61.6 | 61.6 | |
| 83.0 | 24.4 | 25.4 | 347.8 | 347.8 | 40.0 | 18.5 | 70.5 | 70.5 | |
| 78.1 | 24.8 | 26.7 | 462.4 | 462.4 | 36.5 | 19.3 | 84.6 | 84.6 | |
| 92.7 | 22.5 | 25.9 | 384.9 | 384.9 | 33.6 | 20.2 | 104.9 | 104.9 | |
| 114.7 | 21.2 | 25.9 | 385.4 | 385.4 | 31.0 | 21.2 | 131.4 | 131.4 | |
| 145.0 | 19.1 | 27.0 | 497.4 | 497.4 | 27.1 | 22.2 | 167.0 | 167.0 | |
| 185.7 | 10.4 | 28.5 | 709.2 | 709.2 | 18.6 | 23.3 | 214.6 | 214.6 | |

| 125 | 160 | 200 | 250 | 315 | 396.9 | 500 | 630 | 793.7 | 1000 |
|---|---|---|---|---|---|---|---|---|---|
| 38 | 34 | | | | | | | | |
| | | | | | | | | | |
| 18 | 14 | 10 | | | | | | | |
| 22 | 18 | 14.5 | | | | | | | |
| 22.1 | 17.8 | 14.4 | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31.1 | 27.2 | 30.1 | 25.9 | 25.6 | 26.1 | 24.1 | 23.4 | 23.4 | 24.1 |
| 1287.746 | 529.3302 | 1027.739 | 393.3213 | 362.9291 | 409.6333 | 254.8813 | 218.5896 | 219.5209 | 255.8025 |
| 31.0983 | 27.23727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30.8983 | 27.13727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 1229.788 | 517.2812 | 1027.739 | 393.3213 | 362.9291 | 409.6333 | 254.8813 | 218.5896 | 219.5209 | 255.8025 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 858.3 | 1098.3 | 1003.0 | 1164.3 | 1377.6 | 737.8 | 2704.7 | 923.0 | 611.0 | 505.0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29.3 | 30.4 | 30.0 | 30.7 | 31.4 | 28.7 | 34.3 | 29.7 | 27.9 | 27.0 |
| 858.3 | 1098.3 | 1003.0 | 1164.3 | 1377.6 | 737.8 | 2704.7 | 923.0 | 611.0 | 505.0 |
| 29.33624 | 30.40709 | 30.01313 | 30.6605 | 31.3912 | 28.67944 | 34.32121 | 29.65216 | 27.86024 | 27.03319 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29.13624 | 30.30709 | 30.01313 | 30.6605 | 31.3912 | 28.67944 | 34.32121 | 29.65216 | 27.86024 | 27.03319 |
| 819.6415 | 1073.27 | 1003.028 | 1164.261 | 1377.589 | 737.8093 | 2704.711 | 923.03 | 610.9755 | 505.0322 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12132.0 | 740.3 | 659.7 | 353.7 | 499.4 | 281.1 | 182.1 | 166.3 | 157.6 | 105.7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40.8 | 28.7 | 28.2 | 25.5 | 27.0 | 24.5 | 22.6 | 22.2 | 22.0 | 20.2 |
| 12132.0 | 740.3 | 659.7 | 353.7 | 499.4 | 281.1 | 182.1 | 166.3 | 157.6 | 105.7 |
| 40.83933 | 28.69436 | 28.19323 | 25.48595 | 26.98486 | 24.48837 | 22.60319 | 22.20886 | 21.97687 | 20.23942 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40.63933 | 28.59436 | 28.19323 | 25.48595 | 26.98486 | 24.48837 | 22.60319 | 22.20886 | 21.97687 | 20.23942 |
| 11586 | 723.496 | 659.665 | 353.6673 | 499.443 | 281.0848 | 182.1036 | 166.2975 | 157.6473 | 105.6677 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31.1 | 27.2 | 30.1 | 25.9 | 25.6 | 26.1 | 24.1 | 23.4 | 23.4 | 24.1 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 31.0983 | 27.23727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30.8983 | 27.13727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 1229.788 | 517.2812 | 1027.739 | 393.3213 | 362.9291 | 409.6333 | 254.8813 | 218.5896 | 219.5209 | 255.8025 |
| 0 | 0 | 0 | | | | | | | |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31.1 | 27.2 | 30.1 | 25.9 | 25.6 | 26.1 | 24.1 | 23.4 | 23.4 | 24.1 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 31.0983 | 27.23727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30.8983 | 27.13727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 1229.788 | 517.2812 | 1027.739 | 393.3213 | 362.9291 | 409.6333 | 254.8813 | 218.5896 | 219.5209 | 255.8025 |
| 0 | 0 | 0 | | | | | | | |
| 12132.0 | 740.3 | 659.7 | 353.7 | 499.4 | 281.1 | 182.1 | 166.3 | 157.6 | 105.7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40.8 | 28.7 | 28.2 | 25.5 | 27.0 | 24.5 | 22.6 | 22.2 | 22.0 | 20.2 |
| 12132.0 | 740.3 | 659.7 | 353.7 | 499.4 | 281.1 | 182.1 | 166.3 | 157.6 | 105.7 |
| 40.83933 | 28.69436 | 28.19323 | 25.48595 | 26.98486 | 24.48837 | 22.60319 | 22.20886 | 21.97687 | 20.23942 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40.63933 | 28.59436 | 28.19323 | 25.48595 | 26.98486 | 24.48837 | 22.60319 | 22.20886 | 21.97687 | 20.23942 |
| 11586 | 723.496 | 659.665 | 353.6673 | 499.443 | 281.0848 | 182.1036 | 166.2975 | 157.6473 | 105.6677 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31.1 | 27.2 | 30.1 | 25.9 | 25.6 | 26.1 | 24.1 | 23.4 | 23.4 | 24.1 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 31.0983 | 27.23727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30.8983 | 27.13727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 1229.788 | 517.2812 | 1027.739 | 393.3213 | 362.9291 | 409.6333 | 254.8813 | 218.5896 | 219.5209 | 255.8025 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31.1 | 27.2 | 30.1 | 25.9 | 25.6 | 26.1 | 24.1 | 23.4 | 23.4 | 24.1 |
| 1287.7 | 529.3 | 1027.7 | 393.3 | 362.9 | 409.6 | 254.9 | 218.6 | 219.5 | 255.8 |
| 31.0983 | 27.23727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30.8983 | 27.13727 | 30.11883 | 25.94747 | 25.59822 | 26.12395 | 24.06338 | 23.3963 | 23.41476 | 24.07905 |
| 1229.788 | 517.2812 | 1027.739 | 393.3213 | 362.9291 | 409.6333 | 254.8813 | 218.5896 | 219.5209 | 255.8025 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12132.0 | 740.3 | 659.7 | 353.7 | 499.4 | 281.1 | 182.1 | 166.3 | 157.6 | 105.7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40.8 | 28.7 | 28.2 | 25.5 | 27.0 | 24.5 | 22.6 | 22.2 | 22.0 | 20.2 |
| 12132.0 | 740.3 | 659.7 | 353.7 | 499.4 | 281.1 | 182.1 | 166.3 | 157.6 | 105.7 |
| 40.83933 | 28.69436 | 28.19323 | 25.48595 | 26.98486 | 24.48837 | 22.60319 | 22.20886 | 21.97687 | 20.23942 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -0.2 | -0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40.63933 | 28.59436 | 28.19323 | 25.48595 | 26.98486 | 24.48837 | 22.60319 | 22.20886 | 21.97687 | 20.23942 |
| 11586 | 723.496 | 659.665 | 353.6673 | 499.443 | 281.0848 | 182.1036 | 166.2975 | 157.6473 | 105.6677 |

| dBC |
| --- |
| 32.5 |
| 34.8 |
| 34.5 |
| 35.2 |
| 36.6 |
| 36.3 |
| 36.1 |
| 34.3 |
| 33.6 |
| 35.7 |
| 41.3 |
| 36.6 |
| 35.9 |
| 41.0 |
| 36.8 |
| 35.4 |
| 33.2 |
| 31.9 |
| 34.2 |
| 29.2 |
| 30.3 |
| 29.5 |
| 27.7 |
| 26.5 |
| 24.6 |
| 25.0 |
| 31.7 |
| 33.0 |
| 29.4 |
| 24.6 |
| 23.3 |
| 10.5 |

| 1259.9 | 1587.4 | 2000 | 2519.8 | 3174.8 | 4000 | 5039.7 | 6349.6 | 8000 | 10079.4 |
|---|---|---|---|---|---|---|---|---|---|

| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23.6 | 22.5 | 21.6 | 20.7 | 19.2 | 18.9 | 19.7 | 20.6 | 21.6 | 22.7 |
| 230.7607 | 178.0992 | 146.0576 | 118.6444 | 83.0203 | 78.14929 | 92.7343 | 114.708 | 145.0171 | 185.719 |
| 23.63162 | 22.50662 | 21.64524 | 20.74247 | 19.19184 | 18.92925 | 19.6724 | 20.59594 | 21.61419 | 22.68856 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 23.63162 | 22.40662 | 21.44524 | 20.44247 | 18.69184 | 18.12925 | 18.3724 | 18.59594 | 18.61419 | 18.28856 |
| 230.7607 | 174.0451 | 139.4839 | 110.7254 | 73.99192 | 65.00175 | 68.74489 | 72.37587 | 72.6807 | 67.43048 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 582.2 | 398.1 | 461.9 | 352.0 | 347.8 | 462.4 | 384.9 | 385.4 | 497.4 | 709.2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 27.7 | 26.0 | 26.6 | 25.5 | 25.4 | 26.7 | 25.9 | 25.9 | 27.0 | 28.5 |
| 582.2 | 398.1 | 461.9 | 352.0 | 347.8 | 462.4 | 384.9 | 385.4 | 497.4 | 709.2 |
| 27.6505 | 26.00009 | 26.64508 | 25.46482 | 25.41379 | 26.65048 | 25.85334 | 25.85958 | 26.96712 | 28.50739 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 27.6505 | 25.90009 | 26.44508 | 25.16482 | 24.91379 | 25.85048 | 24.55334 | 23.85958 | 23.96712 | 24.10739 |
| 582.1707 | 389.053 | 441.0709 | 328.4594 | 310.0123 | 384.6346 | 285.3209 | 243.197 | 249.2942 | 257.4775 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 73.1 | 61.0 | 59.7 | 61.6 | 70.5 | 84.6 | 104.9 | 131.4 | 167.0 | 214.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18.6 | 17.9 | 17.8 | 17.9 | 18.5 | 19.3 | 20.2 | 21.2 | 22.2 | 23.3 |
| 73.1 | 61.0 | 59.7 | 61.6 | 70.5 | 84.6 | 104.9 | 131.4 | 167.0 | 214.6 |
| 18.63671 | 17.85154 | 17.76147 | 17.89641 | 18.48092 | 19.27375 | 20.20896 | 21.18576 | 22.22846 | 23.31697 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 18.63671 | 17.75154 | 17.56147 | 17.59641 | 17.98092 | 18.47375 | 18.90896 | 19.18576 | 19.22846 | 18.91697 |
| 73.05849 | 59.58732 | 57.03577 | 57.49651 | 62.81916 | 70.36803 | 77.78495 | 82.90416 | 83.72319 | 77.92853 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23.6 | 22.5 | 21.6 | 20.7 | 19.2 | 18.9 | 19.7 | 20.6 | 21.6 | 22.7 |
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 23.63162 | 22.50662 | 21.64524 | 20.74247 | 19.19184 | 18.92925 | 19.6724 | 20.59594 | 21.61419 | 22.68856 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 23.63162 | 22.40662 | 21.44524 | 20.44247 | 18.69184 | 18.12925 | 18.3724 | 18.59594 | 18.61419 | 18.28856 |
| 230.7607 | 174.0451 | 139.4839 | 110.7254 | 73.99192 | 65.00175 | 68.74489 | 72.37587 | 72.6807 | 67.43048 |

| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23.6 | 22.5 | 21.6 | 20.7 | 19.2 | 18.9 | 19.7 | 20.6 | 21.6 | 22.7 |
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 23.63162 | 22.50662 | 21.64524 | 20.74247 | 19.19184 | 18.92925 | 19.6724 | 20.59594 | 21.61419 | 22.68856 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 23.63162 | 22.40662 | 21.44524 | 20.44247 | 18.69184 | 18.12925 | 18.3724 | 18.59594 | 18.61419 | 18.28856 |
| 230.7607 | 174.0451 | 139.4839 | 110.7254 | 73.99192 | 65.00175 | 68.74489 | 72.37587 | 72.6807 | 67.43048 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 73.1 | 61.0 | 59.7 | 61.6 | 70.5 | 84.6 | 104.9 | 131.4 | 167.0 | 214.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18.6 | 17.9 | 17.8 | 17.9 | 18.5 | 19.3 | 20.2 | 21.2 | 22.2 | 23.3 |
| 73.1 | 61.0 | 59.7 | 61.6 | 70.5 | 84.6 | 104.9 | 131.4 | 167.0 | 214.6 |
| 18.63671 | 17.85154 | 17.76147 | 17.89641 | 18.48092 | 19.27375 | 20.20896 | 21.18576 | 22.22846 | 23.31697 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 18.63671 | 17.75154 | 17.56147 | 17.59641 | 17.98092 | 18.47375 | 18.90896 | 19.18576 | 19.22846 | 18.91697 |
| 73.05849 | 59.58732 | 57.03577 | 57.49651 | 62.81916 | 70.36803 | 77.78495 | 82.90416 | 83.72319 | 77.92853 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23.6 | 22.5 | 21.6 | 20.7 | 19.2 | 18.9 | 19.7 | 20.6 | 21.6 | 22.7 |
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 23.63162 | 22.50662 | 21.64524 | 20.74247 | 19.19184 | 18.92925 | 19.6724 | 20.59594 | 21.61419 | 22.68856 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 23.63162 | 22.40662 | 21.44524 | 20.44247 | 18.69184 | 18.12925 | 18.3724 | 18.59594 | 18.61419 | 18.28856 |
| 230.7607 | 174.0451 | 139.4839 | 110.7254 | 73.99192 | 65.00175 | 68.74489 | 72.37587 | 72.6807 | 67.43048 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23.6 | 22.5 | 21.6 | 20.7 | 19.2 | 18.9 | 19.7 | 20.6 | 21.6 | 22.7 |
| 230.8 | 178.1 | 146.1 | 118.6 | 83.0 | 78.1 | 92.7 | 114.7 | 145.0 | 185.7 |
| 23.63162 | 22.50662 | 21.64524 | 20.74247 | 19.19184 | 18.92925 | 19.6724 | 20.59594 | 21.61419 | 22.68856 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 23.63162 | 22.40662 | 21.44524 | 20.44247 | 18.69184 | 18.12925 | 18.3724 | 18.59594 | 18.61419 | 18.28856 |
| 230.7607 | 174.0451 | 139.4839 | 110.7254 | 73.99192 | 65.00175 | 68.74489 | 72.37587 | 72.6807 | 67.43048 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 73.1 | 61.0 | 59.7 | 61.6 | 70.5 | 84.6 | 104.9 | 131.4 | 167.0 | 214.6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18.6 | 17.9 | 17.8 | 17.9 | 18.5 | 19.3 | 20.2 | 21.2 | 22.2 | 23.3 |
| 73.1 | 61.0 | 59.7 | 61.6 | 70.5 | 84.6 | 104.9 | 131.4 | 167.0 | 214.6 |
| 18.63671 | 17.85154 | 17.76147 | 17.89641 | 18.48092 | 19.27375 | 20.20896 | 21.18576 | 22.22846 | 23.31697 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.8 | -1.3 | -2 | -3 | -4.4 |
| 18.63671 | 17.75154 | 17.56147 | 17.59641 | 17.98092 | 18.47375 | 18.90896 | 19.18576 | 19.22846 | 18.91697 |
| 73.05849 | 59.58732 | 57.03577 | 57.49651 | 62.81916 | 70.36803 | 77.78495 | 82.90416 | 83.72319 | 77.92853 |

dBC Broner

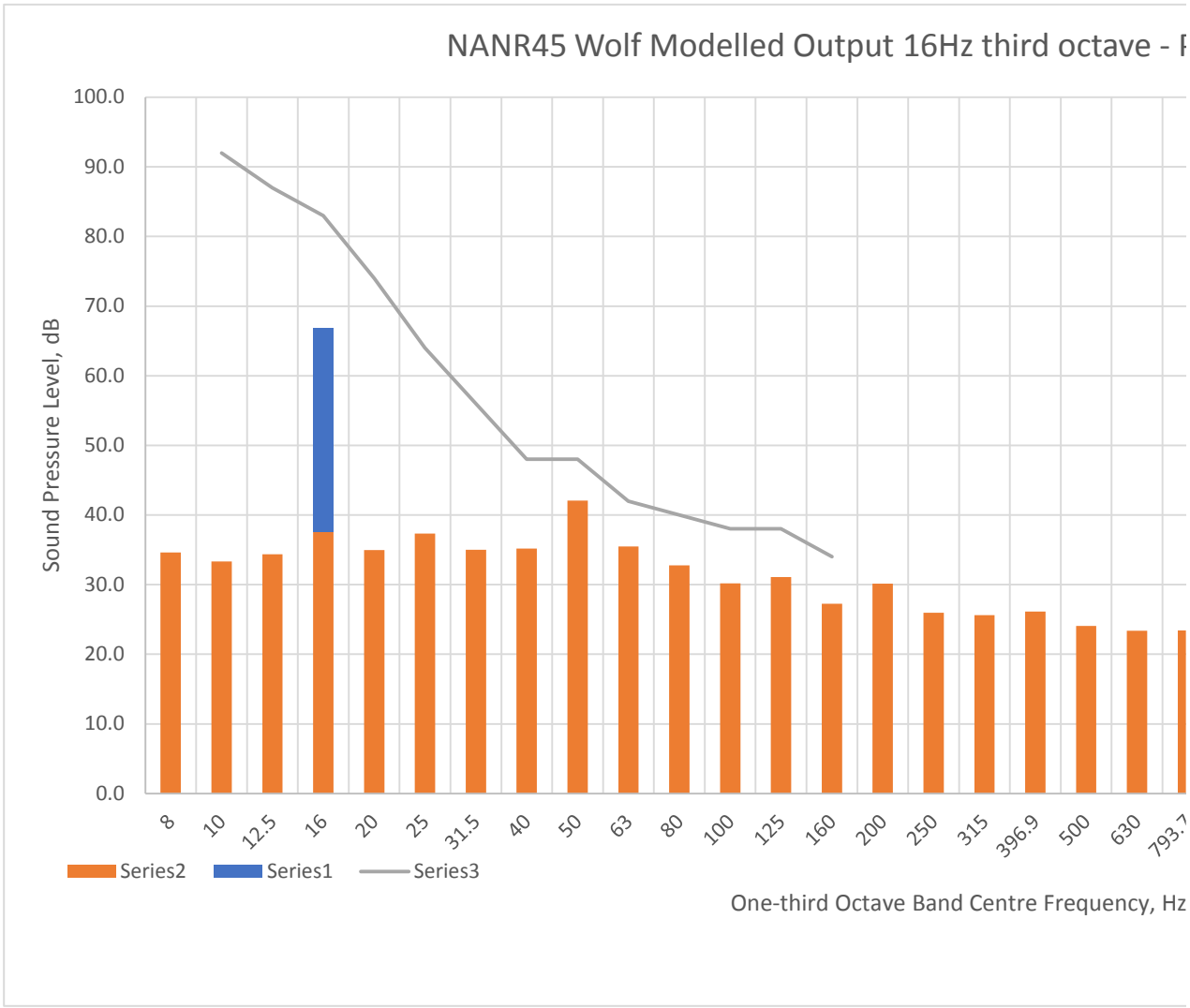
707123.58 58.49495322

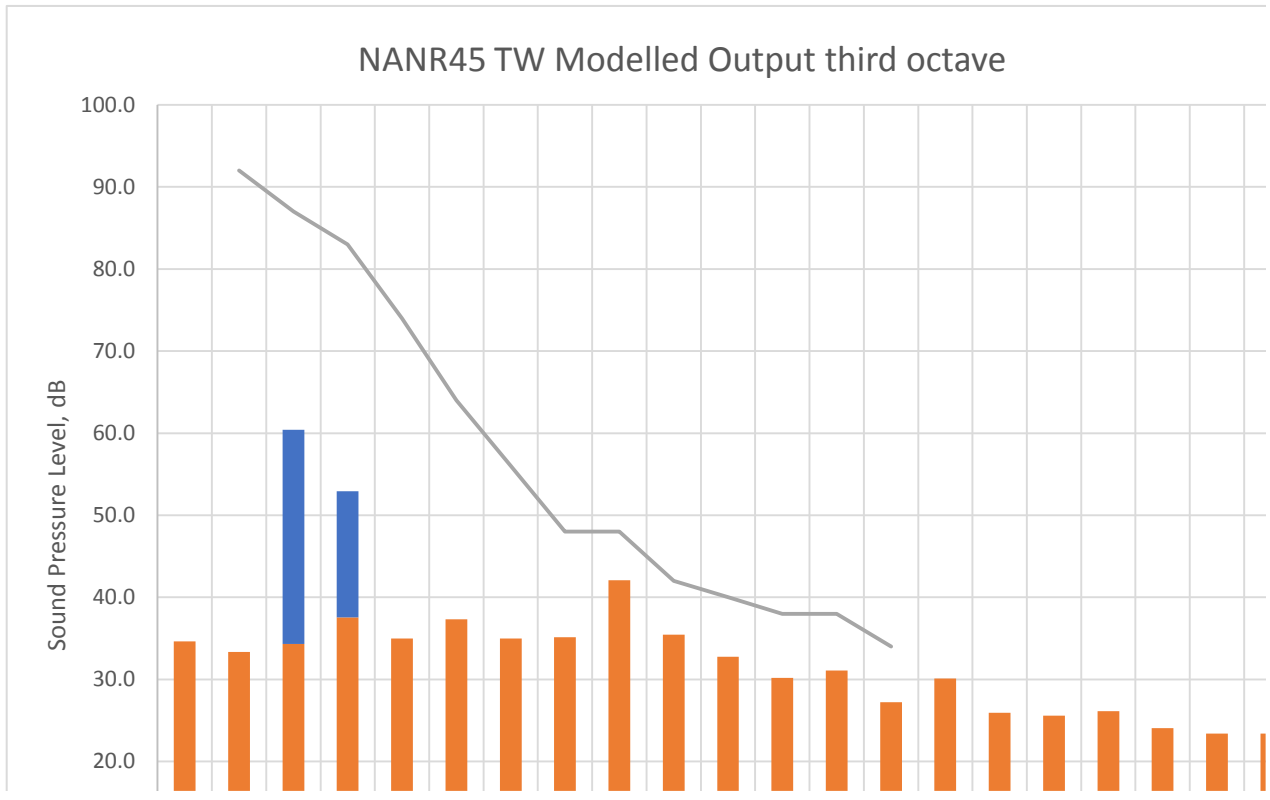
4415728.2 66.45002332

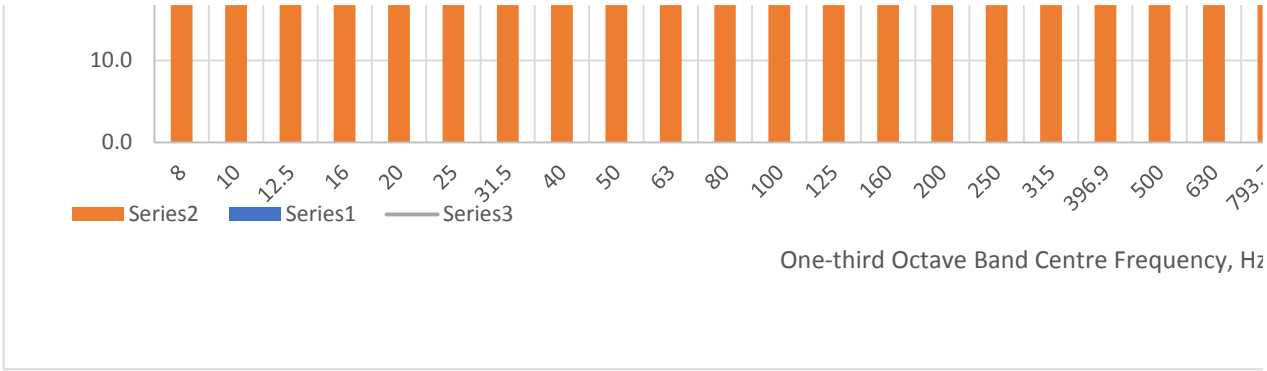
1773571.2 62.48848637

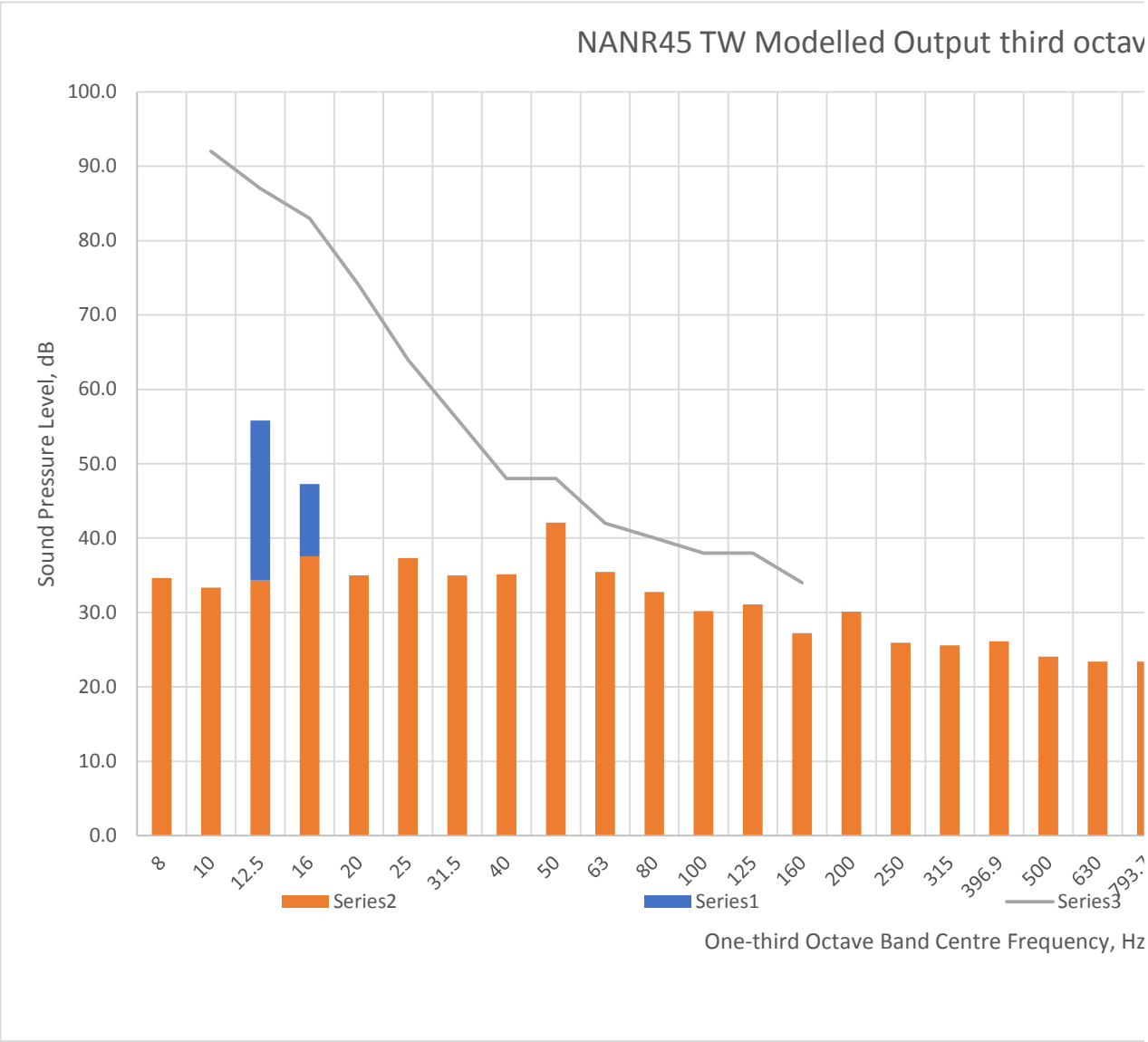
141132.33 51.49626522

| | |
|---|---|
| 1732969.6 | 62.3879095 |
| 1278912.4 | 61.06840787 |
| 66641.753 | 48.23746413 |
| 738313.05 | 58.68240544 |
| 416213.3 | 56.19315951 |


NANR45 Wolf Modelled Output 16Hz third octave - F
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Sound Pressure Level, dB
8
10
12.5
16
20
25
31.5
40
50
63
80
100
125
160
200
250
315
396.9
500
630
793.7
Series2
Series1
Series3
One-third Octave Band Centre Frequency, Hz

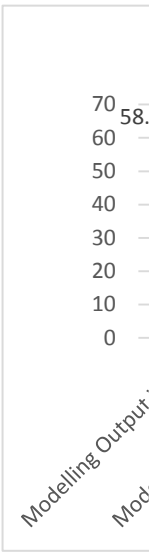

NANR45 TW Modelled Output third octave
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
Sound Pressure Level, dB



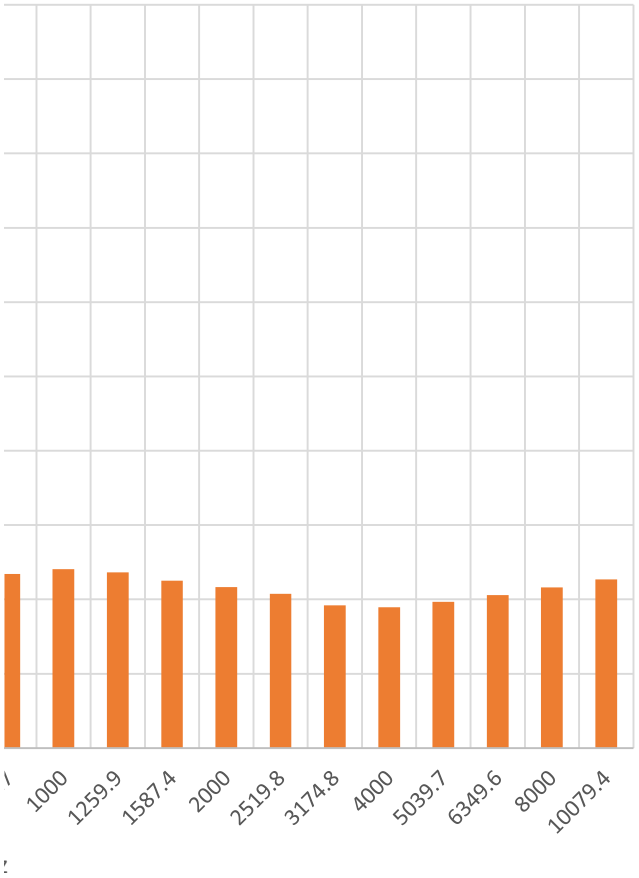




| | | Desirable |
|---|---|---|
| Modelling Output Wolf MPF - Porthworthy Farmhouse - dB(Z) | 58.49495 | 60 |
| Modelling Output Wolf MPF - Birchland Farm (nearest DZ) - dB(Z) | 66.45002 | 60 |
| Modelling Output Wolf MPF - Windwhistle Farm - dB(Z) | 62.48849 | 60 |

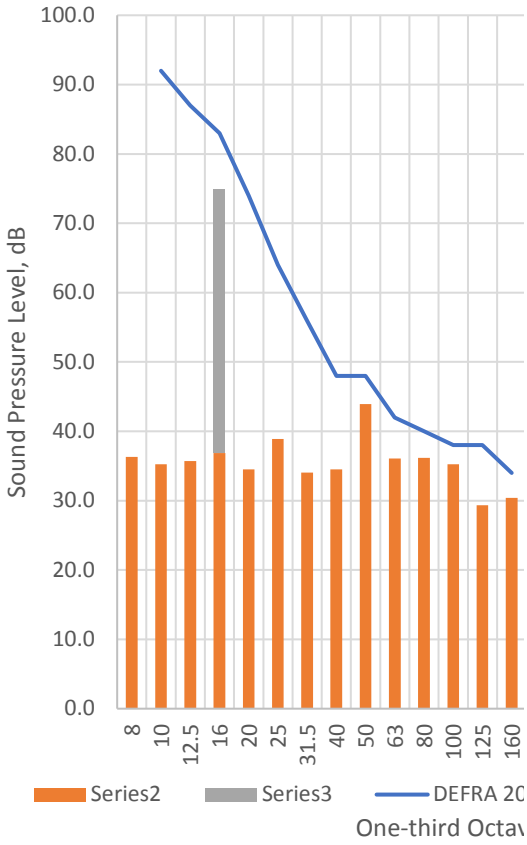
| | | |
|---|---|---|
| Modelling Output TW MPF - Porthworthy Farmhouse dB(Z) | 51.49627 | 60 |
| Modelling Output TW MPF - Birchland Farm (nearest DZ) dB(Z) | 62.38791 | 60 |
| Modelling Output TW MPF - Windwhistle Farm | 61.06841 | 60 |
| Modelling Output TW MPF + mitigation - Porthworthy Famrhouse | 48.23746 | 60 |
| Modelling Output TW MPF - Birchland Farm (nearest DZ) dB(Z) | 58.68241 | 60 |
| Modelling Output TW MPF + mitigation - Windwhistle | 56.56937 | 60 |

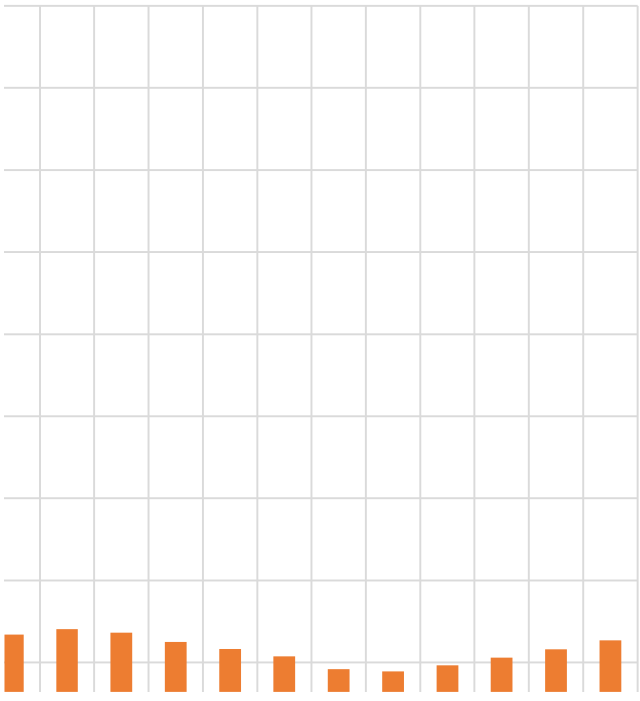


Porthworthy

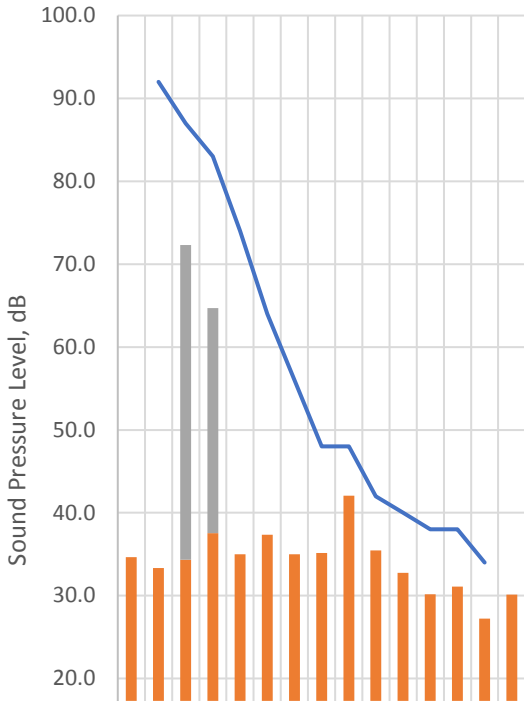


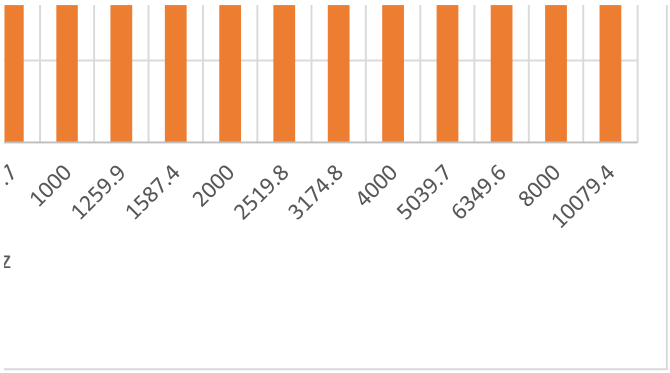

NANR45 Wolf Modelled Birc

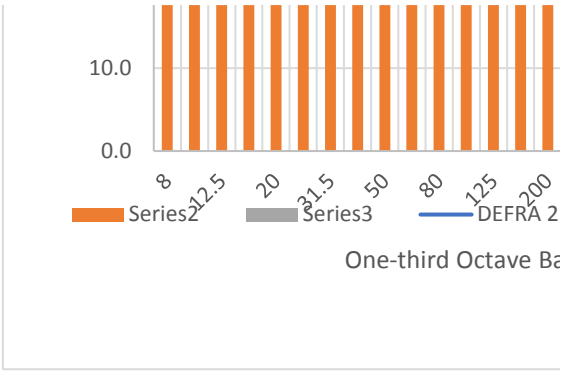


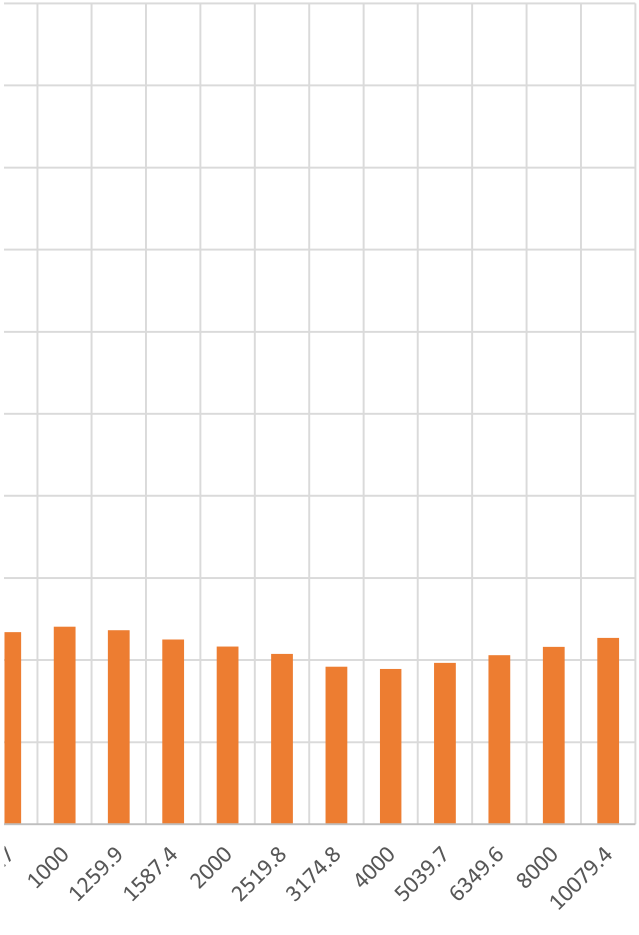



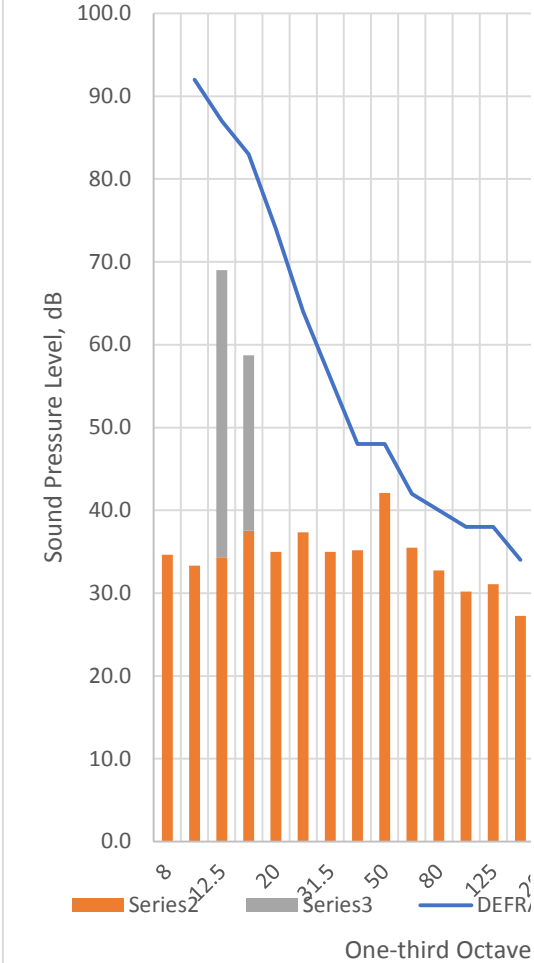
NANR45 TW Modelled (





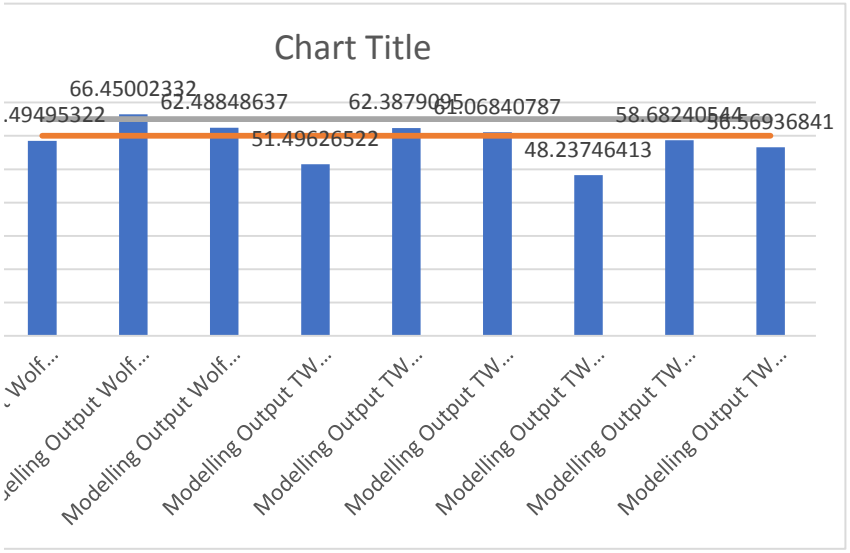



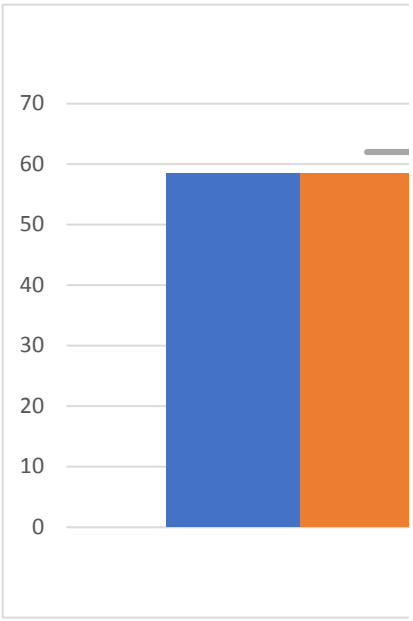



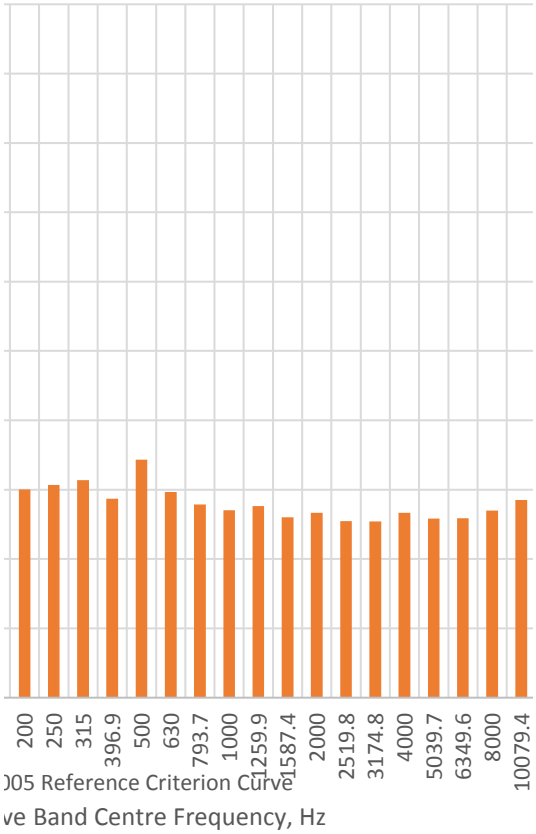

| Maximum |
|---|
| 65 |
| 65 |
| 65 |

65
65
65
65
65
65

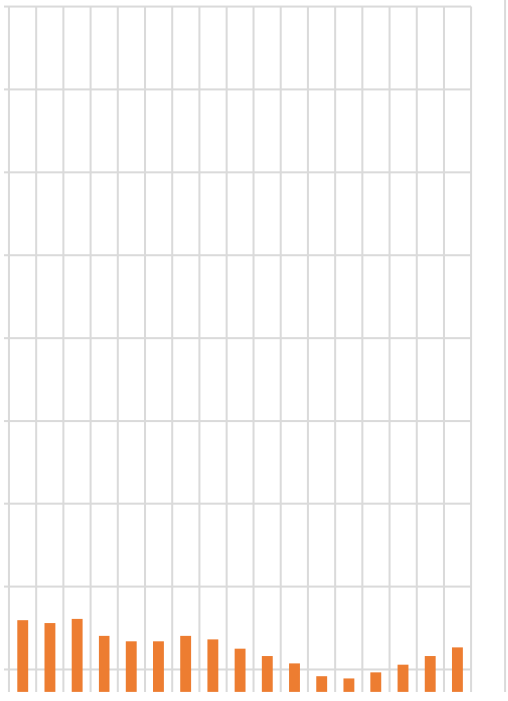


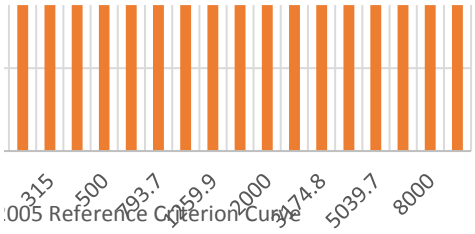



Output 16Hz third octave - :hland

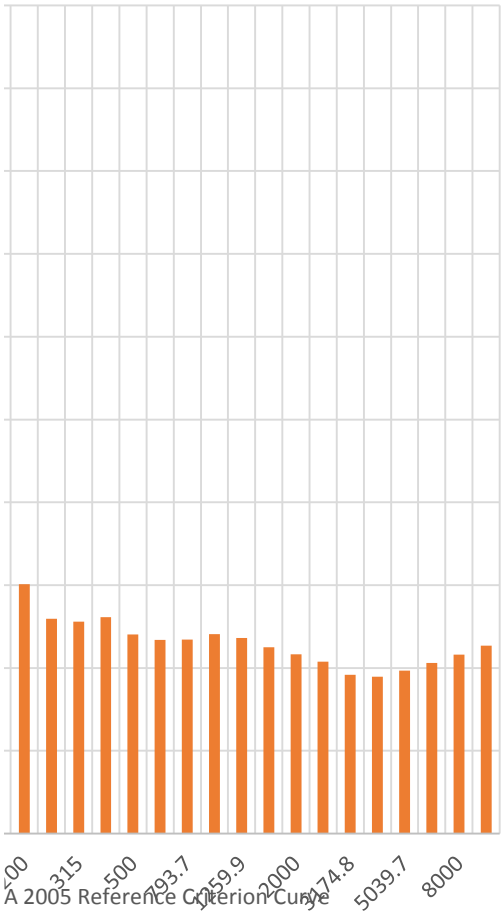


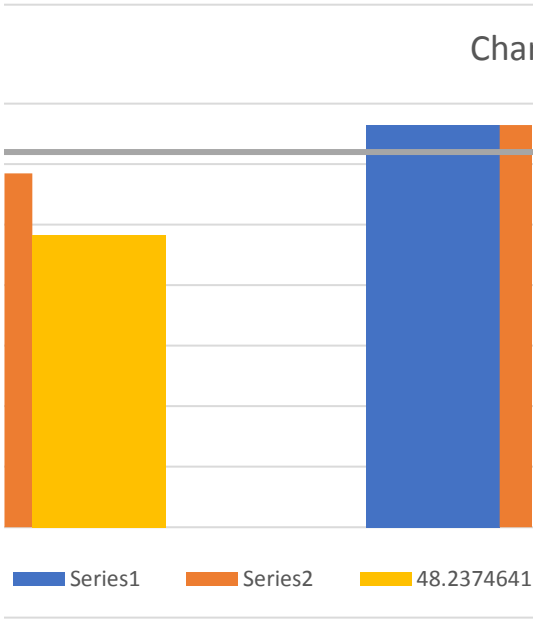

Output third octave

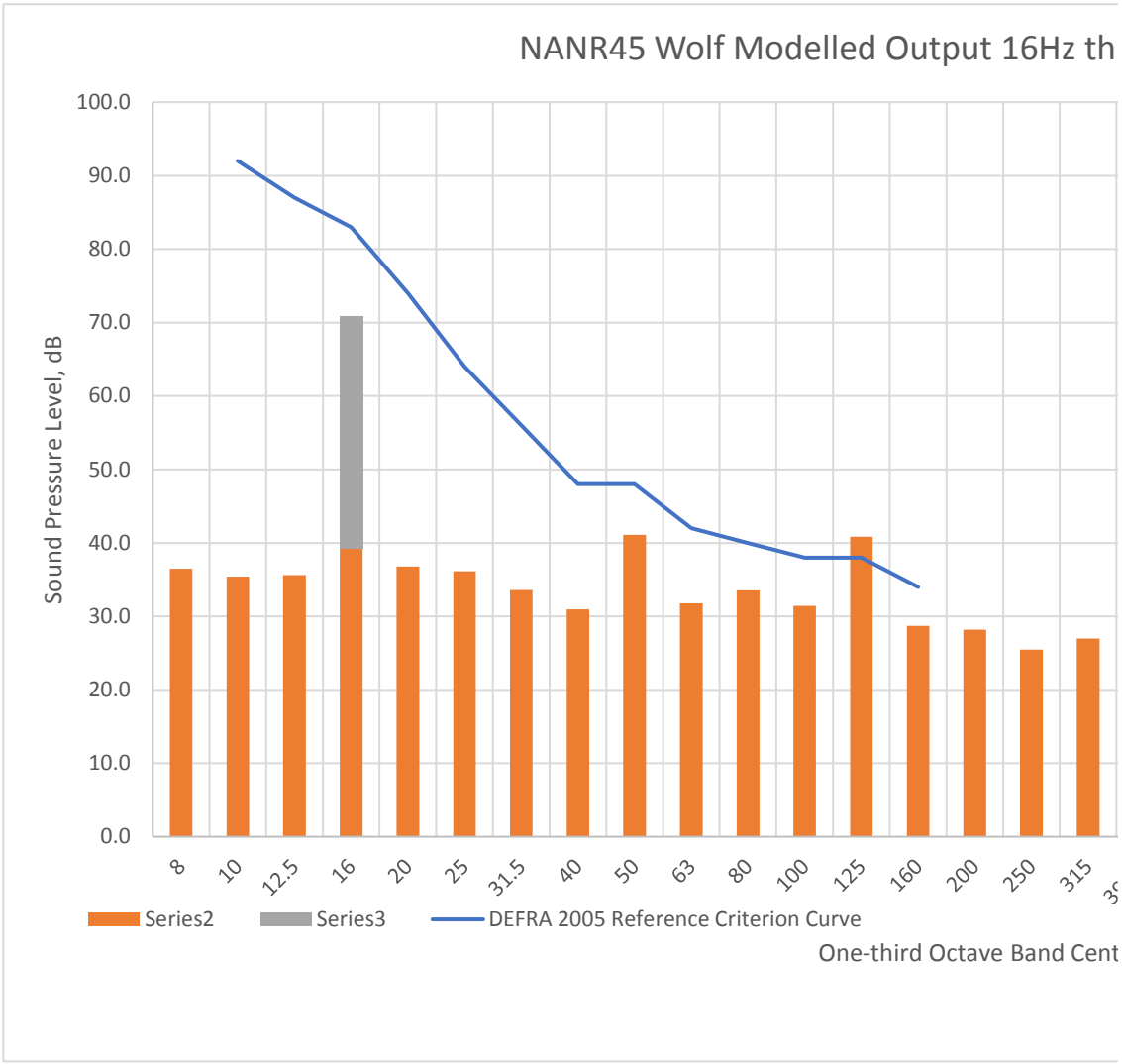


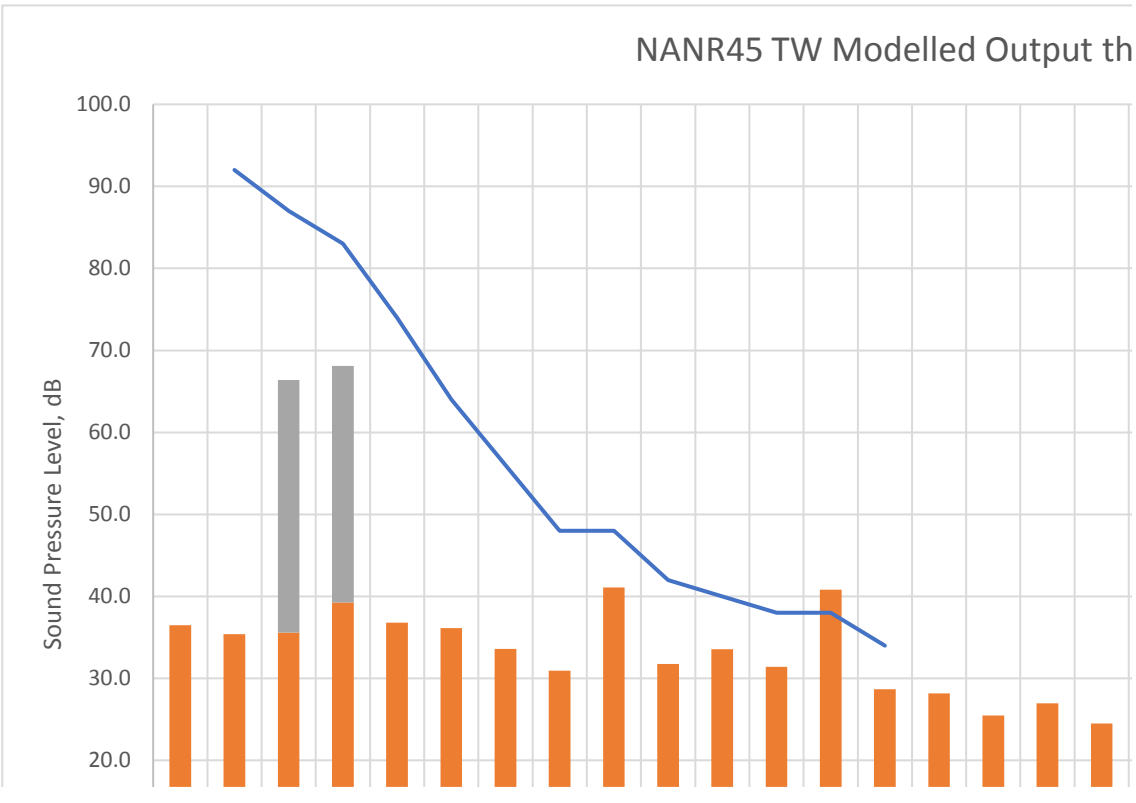


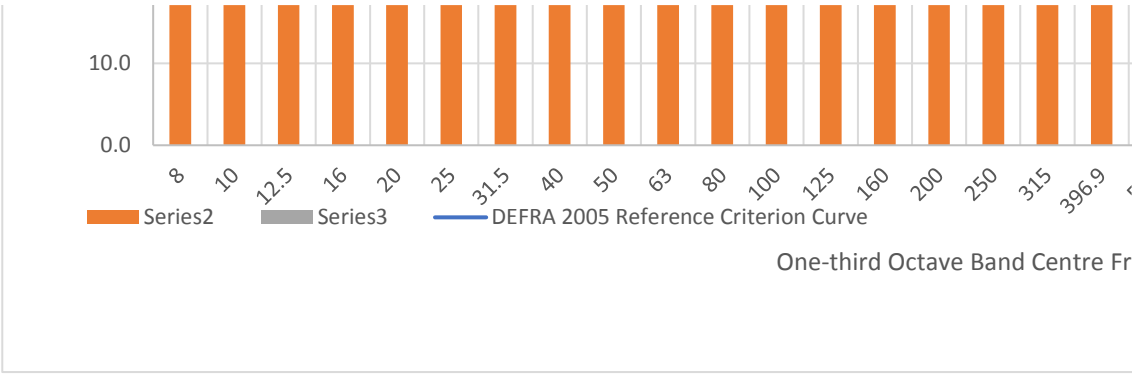

## d Output third octave

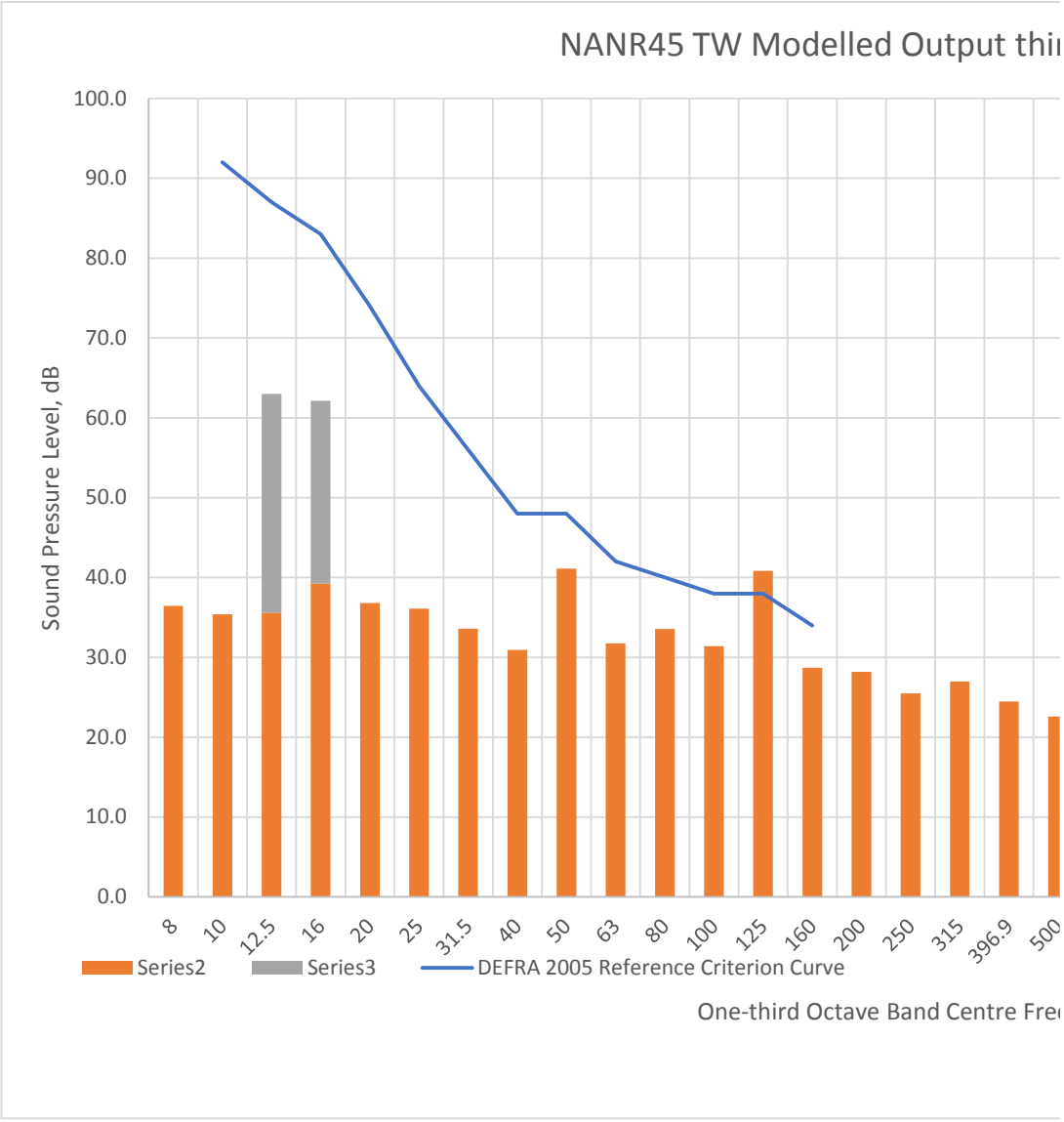



Chai
Series1
Series2
48.2374641

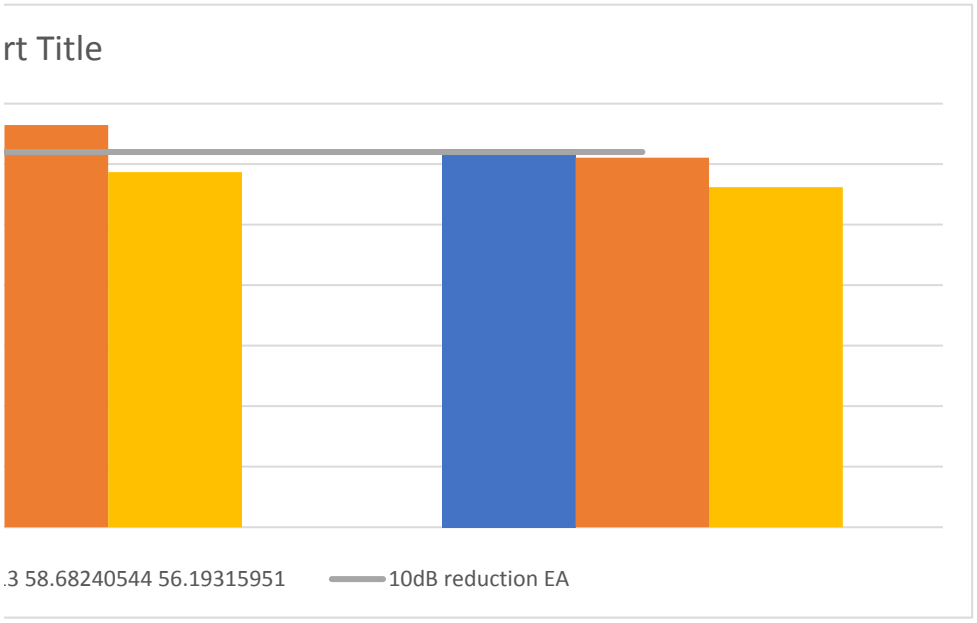

NANR45 Wolf Modelled Output 16Hz th
Sound Pressure Level, dB
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
8
10
12.5
16
20
25
31.5
40
50
63
80
100
125
160
200
250
315
Series2
Series3
DEFRA 2005 Reference Criterion Curve
One-third Octave Band Cent


NANR45 TW Modelled Output th
Sound Pressure Level, dB
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0

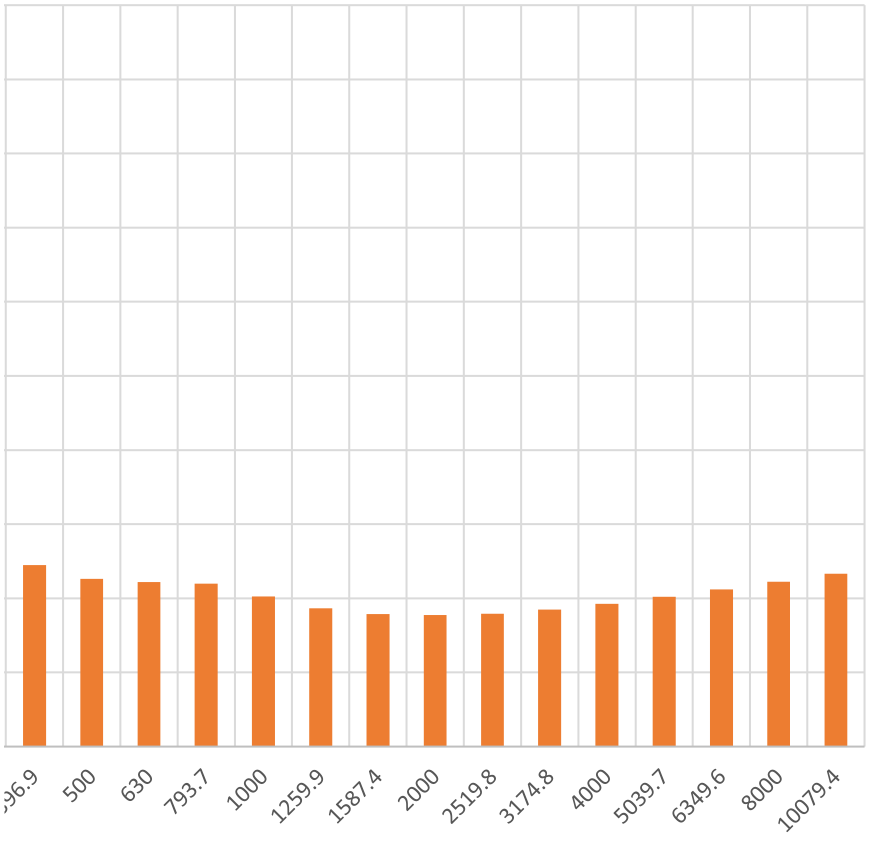

10.0
0.0
8
10
12.5
16
20
25
31.5
40
50
63
80
100
125
160
200
250
315
396.9
Series2
Series3
DEFRA 2005 Reference Criterion Curve
One-third Octave Band Centre Fr


NANR45 TW Modelled Output thi
Sound Pressure Level, dB
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
8
10
12.5
16
20
25
31.5
40
50
63
80
100
125
160
200
250
315
396.9
500
Series2
Series3
DEFRA 2005 Reference Criterion Curve
One-third Octave Band Centre Fre

| | | |
|---|---|---|
| Modelling Output Wolf MPF - Birchland Farm (nearest DZ) - dB(Z) | 66.45002 | 62 |
| Modelling Output Wolf MPF - Windwhistle Farm - dB(Z) | 62.48849 | 62 |
| Modelling Output TW MPF - Porthworthy Farmhouse dB(Z) | 58.49495 | 62 |
| Modelling Output TW MPF - Birchland Farm (nearest DZ) dB(Z) | 66.45002 | 62 |
| Modelling Output Wolf MPF - Windwhistle Farm - dB(Z) | 61.06841 | 62 |
| Modelling Output TW MPF + mitigation - Birchland Farm (nearest DZ) | 48.23746 | 62 |
| Modelling Output TW MPF - Birchland Farm (nearest DZ) dB(Z) | 58.68241 | 62 |
| Modelling Output TW MPF + mitigation - Windwhistle | 56.19316 | 62 |

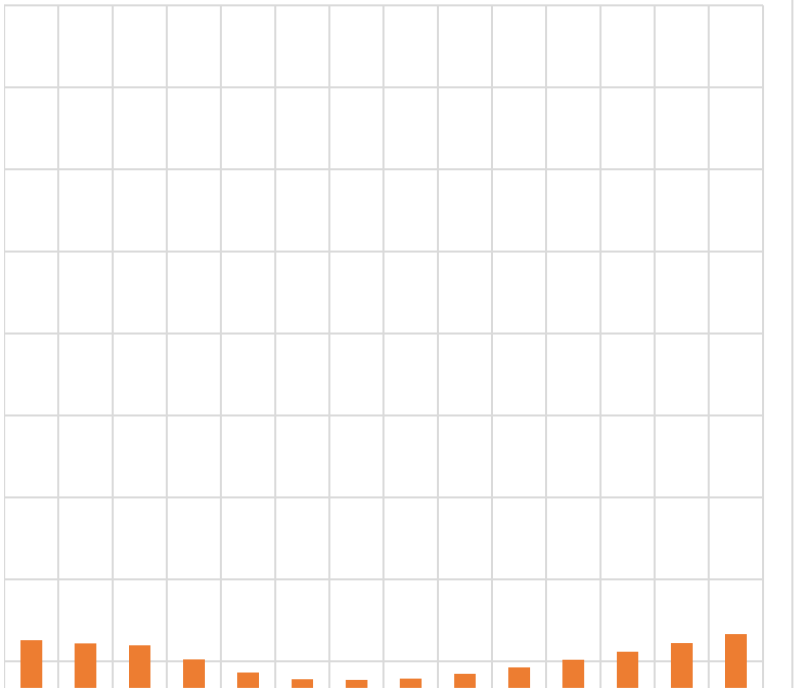


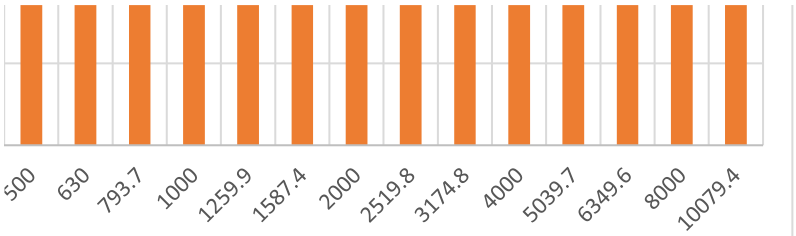
ird octave - Windwhistle




tre Frequency, Hz

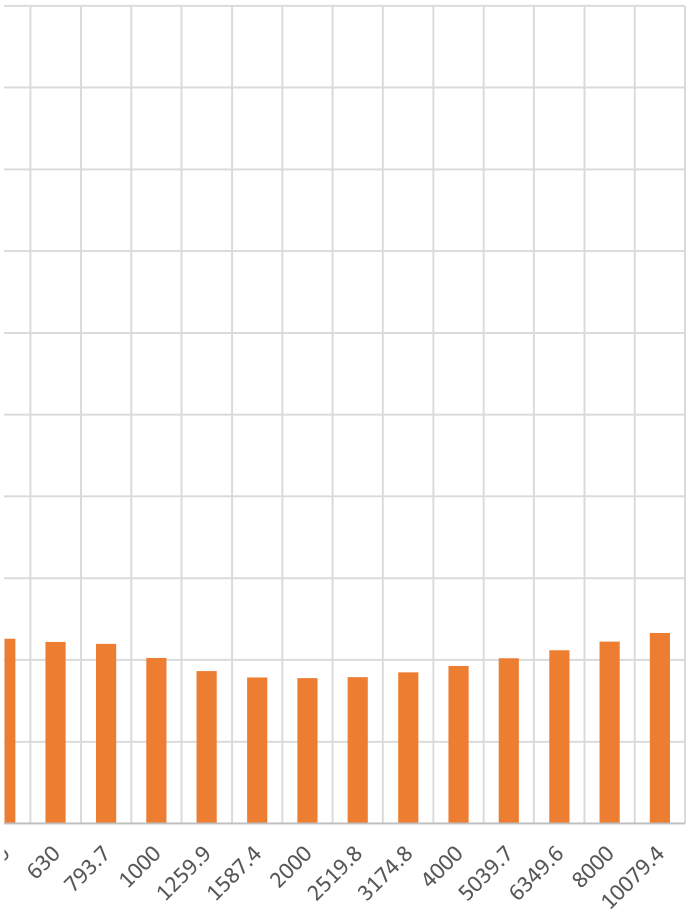
ird octave



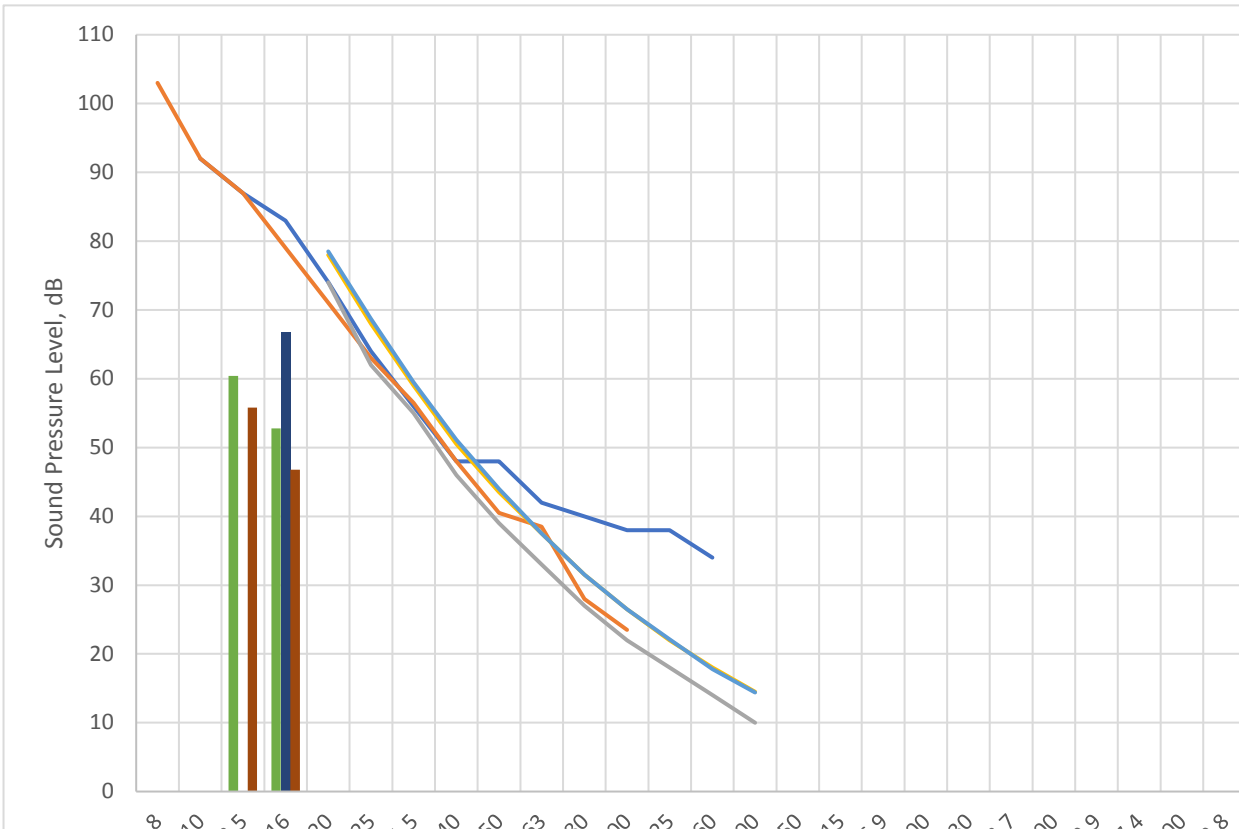


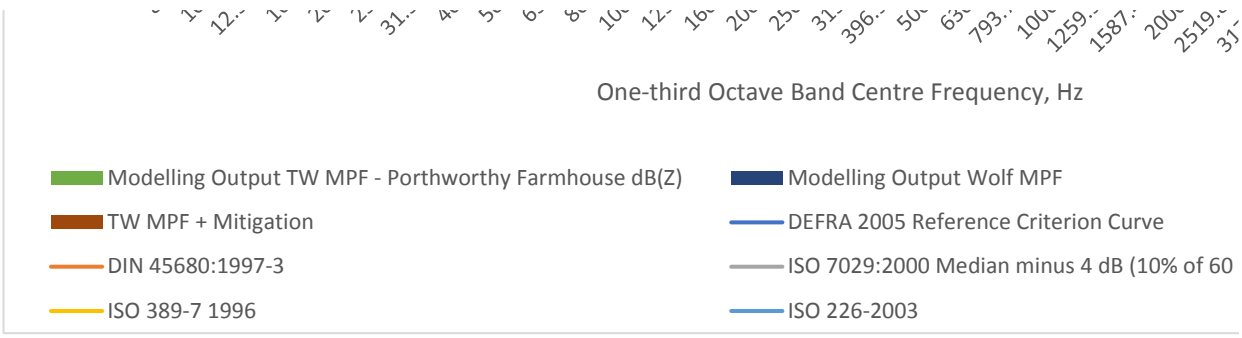

equency, Hz

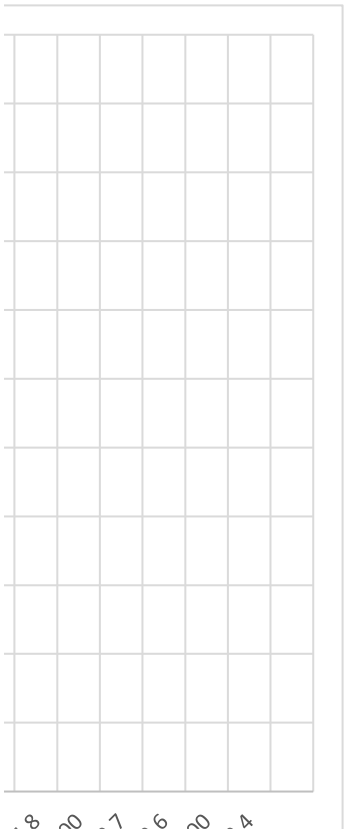
rd octave

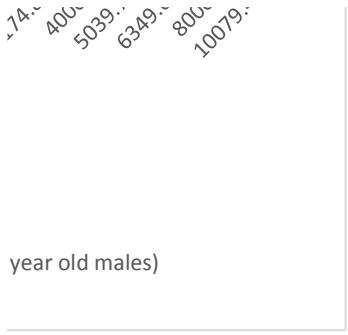



quency, Hz


Sound Pressure Level, dB
110
100
90
80
70
60
50
40
30
20
10
0


One-third Octave Band Centre Frequency, Hz
Modelling Output TW MPF - Porthworthy Farmhouse dB(Z)
Modelling Output Wolf MPF
TW MPF + Mitigation
DEFRA 2005 Reference Criterion Curve
DIN 45680:1997-3
ISO 7029:2000 Median minus 4 dB (10% of 60
ISO 389-7 1996
ISO 226-2003






year old males)