



Valencia

Operating Techniques

Shelford MRF – Permit Variation Application

EPR/XP3434HX

Shelford Landfill
Shelford Farm Estate
Shalloak Road
Canterbury
Kent
CT2 0PU

September 2025

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SHF118 Proposed MRF Location

Version Control

Version	Date	Prepared by	Comment
V2.0	October 2023	Wardell Armstrong	Variation application to add MRF to EP
V3.0	June 2024	Wardell Armstrong	Approved under table S1.2 in EP
V1.0	May 2025	Valencia	Operating Techniques Addendum – permit variation to increase MRF throughput
V2.0	September 2025	Valencia	Operating Techniques Report updated with further detail for proposed increase in MRF throughput

1. Introduction

1.1. Context of Report

Shelford Landfill and MRF operates under environmental permit EPR/XP3434HX.

Permit variation EPR/XP3434HX/V013 was granted on 10th July 2024, which added a Material Recycling Facility (MRF) to the permit, including a 5.4 A(1)(b)(ii) pre-treatment of waste for incineration or co-incineration and a physical treatment of non-hazardous waste operation. The combined limit for these activities was 250,000 tonnes per annum.

The waste treatment process separates non-combustible material through shredding and mechanical and manual separation. The combustible fractions will be sent off site for energy recovery as refuse derived fuel (RDF). Some residual waste, such as grit, glass and bricks will be used on site to maintain roads and for landfill cover.

The ambition of the MRF is to move waste further up the Waste Hierarchy, and recover recyclable wastes which would otherwise be destined for landfilling.

The permit variation seeks to increase the annual throughput of non-hazardous and inert waste to be processed through the MRF from 250,000 to 500,000 tonnes per annum.

The site layout is shown on drawing SHF118.

2. Proposed Changes to MRF Operations

Since the MRF has commenced operation and wastes have been processed, it has become increasingly apparent that the MRF can process more waste than first anticipated. This is largely down to the Site accepting dense, heavy loads of waste which are typically difficult to process. Valencia has invested in state of the art equipment which can appropriately handle dense waste types.

This variation seeks to increase the permitted annual throughput of the Material Recycling Facility (MRF) from 250,000 tonnes per annum to 500,000 tonnes per annum. The increase is required to meet ongoing commercial demand and reflects the operational experience gained since the facility became operational.

Although the original plant specification sheets indicate design throughput limits below the proposed figure, in practice the facility has consistently demonstrated the capability to accept, treat, and process a significantly higher volume of material. The discrepancy arises because the specification sheets are based on assumptions of low-density, mixed municipal waste. However, the facility primarily accepts dense and heavy non-hazardous waste streams that are more homogenous and less mechanically demanding to process. Plant specification sheets also typically provide the minimum average capacity of the plant, in order to meet customer expectations.

Operational performance has been monitored closely, and the plant has reliably maintained treatment efficiency, environmental control, and compliance during periods of high input. The existing equipment—comprising shredders, screens, magnets, and picking lines—has proven to be robust and capable of sustaining the proposed increase without risk to permit compliance or operational safety.

No new infrastructure or modifications to the current processing line are required to accommodate the increased throughput.

The site retains sufficient capacity in the treatment process and associated storage areas to handle the increased tonnage without compromising environmental protection or operational control.

There is no proposed changes to the waste storage capacities and storage times, and the Site will continue to operate on a short turn around, first-in, first-out basis. Additionally, there are no proposed changes to the types of waste to be accepted to the MRF, nor the waste treatment processes and techniques.

The MRF activity remains appropriately classified under the Waste Framework Directive, and the activities listed within the environmental permit.

An Environmental Risk Assessment has been prepared as part of the variation application, which assesses the potential impact on nearby receptors from the proposed tonnage increase. There are no point source emissions associated with the MRF, and none will be added as part of this variation.

3. Permitted Activities

The MRF installation is permitted under Section 5.4 A(1)(b)(ii), i.e. a mx if recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration. Additionally there are waste activities for the physical treatment of non—hazardous waste.

The following table presents the permitted activities associated with the MRF. There are no required changes to the listed activities, however the limits of activity for A3 and A13 need amending from 'No more than a total combined tonnage of 250,000 tonnes of waste per annum to be treated under Activity A3 and A13' to 'No more than a total combined tonnage of 500,000 tonnes of waste per annum to be treated under Activity A3 and A13'.

Activity Reference	WFD Annex I and II Operations	Schedule 1 EPR 2016	Description of activity	Limits of activity
A3 (Installation Activity)	R3 Recycling/reclamation of organic substances that are not used as solvents	Section 5.4 Part A(1)(b)(ii) Pre-treatment of waste for incineration or co-incineration	Treatment of waste in a material recycling facility	Waste types limited to Schedule 2 Table S2.4 Treatment is limited to within the Material Recycling Facility defined on drawing SHF247 No more than a total combined tonnage of 500,000 tonnes of waste per annum to be treated under Activity A3 and A13
A12 (DAA)	D15 Storage Pending any of the operations numbered D1 to D14 R13 Storage pending any of the operations numbered R1 to R12	•	Storage of waste in bays and containers	Waste types are limited to Schedule 2, Tables S2.4 and S2.5. Storage pre-treatment and post-treatment is limited to within the MRF.
A13 (Waste Operations)	R3 Recycling/ reclamation of organic substances that are not used as solvents R4 Recycling/ reclamation of metals and metal compounds	-	Physical treatment of non-hazardous waste	Waste types limited to Schedule 2 Table S2.5 Treatment is limited to within the Material Recycling Facility defined on drawing SHF247 No more than a total combined tonnage of 500,000 tonnes of waste per annum to be treated under Activity A3 and A13

	R5 Recycling/ reclamation of other inorganic material			
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The following table lists the wastes, listed according to their EWC code, that are permitted for pre-treatment for incineration or co-incineration (activity A3) at the MRF. There are no proposed changes to the permitted waste types associated with this permit variation.

Waste Code	Description
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	Packaging (including separately collected municipal packaging waste)
15 01 01	Paper and cardboard packaging
15 01 02	Plastic packaging
15 01 03	Wooden packaging
15 01 05	Composite packaging
15 01 06	Mixed packaging
15 01 09	Textile packaging
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 02	Wood, glass and plastic
17 02 01	Wood
17 02 03	Plastic
17 09	Other construction and demolition wastes
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL USE
19 02	Wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	Premixed wastes composed only of non-hazardous wastes
19 02 10	Combustible wastes other than those mentioned in 19 02 08 and 19 02 09

19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	Paper and cardboard
19 12 04	Plastic and rubber
19 12 08	Textiles
19 12 10	Combustible waste (refuse derived fuel)
19 12 12	Other waste (including mixtures of materials) from mechanical treatment of waste other than those mentioned in 19 12 11.
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	Separately collected fractions (except 15 01)
20 01 01	Paper and cardboard
20 01 38	Wood other than that mentioned in.20 01.37
20 01 39	Plastics
20 03	Other municipal wastes
20 03 01	Mixed municipal waste
20 03 02	Waste from markets
20 03 07	Bulky waste

The following table lists the wastes, listed according to their EWC code, that are permitted for physical treatment of non-hazardous waste (Activity A13) at the MRF. There are no proposed changes to the permitted waste types associated with this permit variation.

Waste Code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	Wastes from mineral excavation
01 01 01	Wastes from mineral metalliferous excavation
01 01 02	Wastes from mineral non-metalliferous excavation
01 04	Wastes from physical and chemical processing of non-metalliferous minerals

01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	Waste sands and clays
10 12	Wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 06	Discarded moulds
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 12	Wastes from glazing other than those mentioned in 10 12 11
10 13	Wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	Waste concrete and concrete sludge
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	Packaging (including separately collected municipal packaging waste)
15 01 01	Paper and cardboard packaging
15 01 02	Plastic packaging
15 01 03	Wooden packaging
15 01 04	Metallic packaging
15 01 05	Composite packaging
15 01 06	Mixed packaging
15 01 07	Glass packaging
15 01 09	Textile packaging
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	Concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Toiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	Wood, glass and plastic
17 02 01	Wood
17 02 02	Glass

17 02 03	Plastic
17 03	Bituminous mixtures, coal tar and tarred products
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01
17 04	Metals (including their alloys)
17 04 01	Copper, bronze, brass
17 04 02	Aluminium
17 04 03	lead
17 04 04	Zinc
17 04 05	Iron and steel
17 04 06	Tin
17 04 07	Mixed metals
17 04 11	Cables other than those mentioned in 17 04 10
17 05	Soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 09	Other construction and demolition wastes
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL USE
19 01	Wastes from incineration or pyrolysis of waste
19 01 02	Ferrous materials removed from bottom ash
19 02	Wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	Premixed wastes composed only of non-hazardous wastes
19 02 10	Combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 04	Vitrified waste and waste from vitrification
19 04 01	Vitrified waste
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	Paper and cardboard
19 12 02	Ferrous metal

19 12 03	Non-ferrous metal
19 12 04	Plastic and rubber
19 12 05	Glass
19 12 07	Wood other than that mentioned in 19 12 06
19 12 08	Textiles
19 12 09	Minerals (for example sand, stones)
19 12 10	Combustible waste (refuse derived fuel)
19 12 12	Other waste (including mixtures of materials) from mechanical treatment of waste other than those mentioned in 19 12 11.
19 13	Wastes from soil and groundwater remediation
19 13 02	Solid wastes from soil remediation other than those mentioned in 19 13 01
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	Separately collected fractions (except 15 01)
20 01 01	Paper and cardboard
20 01 02	Glass
20 01 38	Wood other than that mentioned in.20 01.37
20 01 39	Plastics
20 01 40	Metals
20 02	Garden and park wastes (including cemetery waste)
20 02 02	Soil and stones
20 03	Other municipal wastes
20 03 01	Mixed municipal waste
20 03 02	Waste from markets
20 03 07	Bulky waste

4. Waste Acceptance

It is expected that the increased throughput will not significantly impact on deliveries of waste to site as the majority of waste to be treated is currently accepted into the landfill. The landfill is already permitted to accept 495,000 tonnes of non-hazardous waste and 230,000 tonnes of inert waste per annum.



Up to 500,000 tonnes of waste may be treated through the recycling plant each year. The majority of the waste for treatment will be those waste streams already accepted at the landfill. The waste types are very similar to those already accepted on site, therefore the Waste Pre-Acceptance and Acceptance will continue in line with the existing procedures. At the pre-acceptance stage, each waste stream will be allocated to either the treatment plant or the landfill and this will be clearly recorded in the waste information form so it is apparent to weighbridge staff when the waste arrives on site.

There will be an element of hand sorting of wastes at the front end, depending on the waste load and the most effective method of recovering recyclate. Such waste would be move directly to the appropriate bay or container ready to be taken off site.

Waste arriving at the site will be directed to the weighbridge to be weighed and inspected by a weighbridge operator. The transfer note will be checked against the pre-acceptance information and, wherever possible, a visual inspection of the waste will be made. If all is in order, the weighbridge operator will direct the load to the appropriate unloading point, whether that is the active non-hazardous landfill cell or the MRF building. Non-permitted and other non-conforming waste types will be returned to the site of origin or re-directed to an appropriately permitted facility.

Waste loads received at the MRF building will tipped into the waste reception area. Loads will be inspected during unloading to ensure that they are compliant with the permit and whether they are suitable for waste treatment.

5. Waste Treatment

Non-hazardous waste arriving at the site will continue to be received inside a building to provide containment for litter, dust, noise and odour. Waste will be unloaded inside the building with the doors closed and placed in the dedicated waste reception bay.

Waste is to be sorted into a range of different waste streams for recycling or recovery. Appendix 1 provides the specification of the waste sorting equipment to be used on site, and Appendix 2 provides a process flow diagram. A written description of the process is given below.

A written description of the process is given below.

Wastes to be treated through the MRF should be in fraction sizes less than 300mm in any direction. To facilitate this, a shredder will be provided and, where necessary, waste will be treated through the shredder to ensure the correct particle size entering the plant.

As an additional safeguard, a long part separator will be placed between the shredder and the other MRF equipment to remove any long pieces of material that might damage the plant. Long parts will be stored in an appropriate container and will be sent to the landfill on a daily basis.

The waste will then pass via a combi screen which will separate the waste into three sizes:

- <10mm fines, treated as residual waste with no further sorting;
- 10-60mm, sent to a 2-way density separator via an overband magnet;
- 60-300mm, sent to the 4-way separator.

The 10-60mm fraction will pass on a conveyor under an overband magnet in order to remove ferrous metal. Ferrous metals will be placed in a dedicated bay pending removal to a permitted metal recycling site.

The 10-60mm fraction then passes through a 2-way density separator, which will separate waste by weight, producing a light fraction and a heavy fraction. The 10- 60mm light fraction will be collected as residual waste.

The heavier waste will pass through an eddy current separator with magnet drum to separate any ferrous and non-ferrous metal from the remaining heavy waste. Ferrous and non-ferrous metal will be directed to dedicated storage bays pending removal to a metal recycling site. Following mechanical treatment, the remaining heavy waste will pass through a picking station to allow final quality control on the outputs.



The larger material (50-300mm) will pass to a 4-way separator. This will separate waste by weight, producing a super light fraction, a light fraction, a mid-heavy fraction and a heavy fraction. The super light fraction will be sent off site as high calorific value (CV) RDF.

The light fraction will be sent to an optical sorter, which will separate plastics from the residual waste. The residual fraction will be sent off site as a low CV RDF. The plastics will undergo picking and quality control to separate any remaining non-plastic into a separate storage bay. Plastic will be sent off site for recycling.

The 60-300mm mid-heavy fraction will be sent to an optical sorter to separate wood and rigid plastic from the remaining residual waste. These two waste streams will pass through a picking station for quality control and will then be stored in dedicated bays pending being sent off site for recycling.

The residuals will pass via a magnet to segregate any ferrous metal for recycling, with remaining residual waste sent to the landfill.

The 60-300mm heavy fraction will pass via an inline magnet where ferrous metal will be collected in a dedicated bay pending removal to a metal recycling site. The remaining heavies will join the 10-60mm heavies for picking and quality control.

Plastic, wood, residual waste and heavy waste that passes through the picking station will be sorted by hand by trained site operatives to remove any materials remaining in the wrong stream and ensure it is directed to the correct storage bay or container.

Where it is confirmed to be non-hazardous all residual waste will be placed in the landfill.

The heavy fraction is expected to contain a high content of grit, stone, glass etc it will be used within the landfill for maintaining site roads and for daily cover.

Once it has been evidenced that it is non-hazardous, the <10mm fines and the residual waste will be placed in the landfill or where appropriate used as landfill cover. Any hazardous fines will be sent off site to a permitted hazardous waste facility.

6. Waste Processing Infrastructure

The waste treatment installation incorporates modern Kiverco-supplied mechanical treatment plant (as shown in Appendix 1). The plant includes a high-capacity M&J PreShred 6000S pre-shredder, Combi Screen, Walair air-separation drums, Magnapower magnetic and eddy current separators, and two Mistral+ optical sorters. These technologies are designed for continuous duty in large-scale MRFs and are sized for continuous high volume.

Manufacturer data for the M&J 6000S Shredder (provided as Appendix 3) demonstrates throughput rates of up to ~200 tonnes per hour on MSW and ~70–100 tonnes per hour on bulky/C&D wastes. The downstream system is engineered with sufficient redundancy and buffering (multiple conveyors, dual optical sorters, multiple air-separators, dedicated bays) such that throughput is constrained primarily by the shredder and the process does not bottleneck at any point.

Operating hours are 07:00–18:00 (11 hours/day), six days per week. The number of operational days will be 304 working days per year (excluding bank holidays).

To achieve 500,000 tonnes per annum requires an average of approximately 1,634 tonnes/day, or 149 t/h. Input wastes will vary in density/weight, but the variability is well within the shredder's published operating range. The downstream equipment has been sized accordingly to ensure the process does not 'bottleneck' at any point. For example other equipment used in the process such as the Walair 2-way and 4-way air separation drums can process up to 600m³/hour, which is equivalent to more than 150 tonnes per hour.

There is no intention to increase bay sizes for the temporary storage of waste, rather bays will be emptied at a higher frequency.



7. Outgoing Wastes

7.1. Fate of Sorted Materials

Ferrous and non-ferrous metals will be stored in dedicated bays and then will be loaded into a vehicle and removed to a permitted metal recycling site. Metals will not be stored for more than 1 month.

The heavy material is expected to be largely inert. This material will be stored in a dedicated bay or may be stockpiled on the landfill awaiting use in engineering works. Heavy material will not be stored for more than 6 months.

High CV RDF and Low CV RDF will be stored in dedicated bays and then loaded onto vehicles for direct transfer to the Energy from Waste Plant (EfW). As the material is loose RDF, it will be removed daily and all such waste will be transferred to the EfW within 48 hours of being received on site.

Wood and plastic will be stored in dedicated storage bays before being loaded into vehicle and sent off site for recycling. Wood and plastic will not be stored for more than 1 month.

Fines and residual waste will be removed to the landfill within 72 hours except where they need to be held for a longer period pending results from the laboratory to confirm their classification. Should any fines be classed as hazardous waste they will be loaded onto a vehicle and removed to a permitted hazardous waste site. A consignment note will be completed. Non-hazardous fines may be used as landfill cover providing that they are not dusty or odorous. Any other fines/residual waste will be landfilled.

All fines and residual waste will be stored in a dedicated bay inside the building until they are moved for final disposal.

Outgoing RDF and recyclate will be loaded onto lorries inside the building and will leave the site via the weighbridge so that accurate weights can be recorded for all outgoing waste.

Transfer notes or season tickets will be raised providing the six figure waste code, waste quantities and other pertinent details, to ensure full compliance with the duty of care and the Waste Regulations. Permits will be checked for all receiving sites to ensure that they are authorised to accept the waste.

Materials from the MRF that are to be used for engineering/restoration in the landfill or for disposal in the landfill will also be transferred via the weighbridge so that accurate tonnages are recorded and all incoming and outgoing waste is accounted for.

It is expected that the outgoing materials will generate an increase in vehicle movements, but this is not expected to be significant. As described in section 4, the increased throughput is within the permitted capacity of the landfill, with vehicles already coming to and from the site within this capacity.

7.2. Testing of Trommel Fines

There is an expectation that as only non-hazardous wastes are proposed to be treated on site, the fines will also be non-hazardous. However, 19 12 12 is a mirror entry in the list of waste codes and it is known that some trommel fines classify as hazardous waste. To ensure the quality of the outputs, only a limited number of wastes will be treated through the trommel. The composition of the fines is therefore expected to be relatively consistent.

The previously approved Operating Techniques set out the initial procedure for the testing of trommel fines to ensure fines were properly classified. This procedure is as follows:

To ensure the fines are properly classified, 2 samples per day will be taken during the first month of operation. The waste types accepted over this month of operation are anticipated to be representative of the average feedstock to be processed throughout the operational life of the facility. The samples will be subject to testing in line with the Environment Agency's WM3 guidance to confirm their classification.



If the results show that the wastes are non-hazardous throughout this period, testing will cease after the first month. Thereafter, one sample of trommel fines will be taken each year to assess whether anything has changed. Should any samples within the first month return a result showing that the fines are hazardous an assessment will be made to determine whether the results are statistically significant and, where necessary, a sampling programme will be drawn up to ensure that all wastes are correctly classified and disposed of legally going forward. Likewise, should there be a significant change in the waste source(s) used as a feedstock to the facility identified (e.g. during pre-acceptance checks) as potentially impacting the composition and classification of the trommel fines, additional sampling and testing will be undertaken to assess whether anything has changed and to ensure that all wastes are correctly classified and disposed of legally going forward.

8. Environmental Protection

8.1. General

The purpose of the MRF is to prevent recyclable and recoverable wastes from going to disposal to the landfill, following the principles of the Waste Hierarchy. There is therefore an overall environmental benefit in reduced use of raw materials by recycling metals, and reduced carbon emissions by recycling metals and recovering energy from combustible waste.

It is important that the MRF activities continue to be carried out without causing harm to the local environment. In order to minimise emissions, the activities will continue to be carried out inside the MRF building.

The site will be kept tidy and will be inspected on a daily basis to make sure that no pollution is occurring. Any significant emissions of dust, odour, litter or noise will be investigated and remedied.

All plant and equipment will be properly maintained so that it is fit for purpose and operates without excessive noise.

The site will be managed by a technically competent manager in accordance with Valencia's written Environmental Management System.

As the majority of receptors are more than 200m away, potential emissions of dust, noise or odour are not expected to cause a nuisance or harm to sensitive habitats or human receptors. The facility has been designed to prevent emissions of dust and minimise potential impacts on nearby sensitive receptors, as demonstrated by the Environmental Risk Assessment accompanying the permit application.

8.2. Contaminated Run-Off

Waste will continue to be unloaded, treated and stored inside the building and therefore it is protected from precipitation and any run-off will be minimal.

The building is provided with an impermeable reinforced concrete floor, ensuring that no leachate will enter soils under the site. The seam between the MRF building walls and floor is sealed, and 90mm sleeping policeman ramps are placed at the MRF entrances and exits, preventing the escape of any emissions to land or water. The floor is designed to hold up to 392m³, which will capture any leachate should a load with any free liquid be received. The building is also designed to capture fire water in its footprint in the event of a fire.

8.3. Litter

Measures will be in place to prevent litter. Waste will be unloaded inside the waste MRF building. The building is fitted with fast acting roller shutter doors which will, as far as possible, be kept closed except for allowing vehicle access and egress.

Waste is stored in dedicated storage bays or containers.

Daily inspections will be made and any loose waste noted lying around will be collected and transferred to the appropriate bay or container.

Incoming and outgoing vehicles will be enclosed or have appropriate sheeting to contain any waste.

8.4. Dust

To minimise emissions of dust incoming and outgoing vehicles will be enclosed or have appropriate sheeting to contain any waste.

Waste types accepted at the facility do not include those that are anticipated to be a risk of generating excessive dust.

Waste will be unloaded inside the building and as far as possible the fast acting roller shutter doors will be kept closed to contain emissions.

Localised air extraction is provided for the 3 way separator. This will draw air from the separator via a dust filter before returning air inside the building.

There are no point source emissions to atmosphere external to the building.

Daily inspections will be made to ensure that dust is not being emitted from the building. Where emissions of dust are noted, the cause will be investigated and remedied.

8.5. Odour

Waste will be accepted and dispatched in enclosed or sheeted vehicles.

There is no intention to treat putrescible waste. Household waste and similar materials, with a high proportion of food waste or other putrescible material, will be identified at the pre-acceptance stage and will be directed to the landfill. Only wastes with a low putrescible content, such as construction and demolition wastes and some commercial and industrial wastes, will be directed to the MRF.

Waste will continue to be dealt with on a first in first out basis and will be turned round within 72 hours to minimise the risks of odour and vermin. All bays will be emptied on a regular basis.

Waste will be unloaded inside the MRF building. The building will be fitted with fast acting roller shutter doors which will, as far as possible, be kept closed except for allowing vehicle access and egress.

A daily olfactory inspection will be made and if there is any noticeable odour at the site boundary, the source will be investigated and remedial action will be taken. Odorous loads will be prioritised for removal from site.

8.6. Vermin and Pests

Waste will be stored unloaded and stored inside the building to limit access to pests and vermin.

Wastes containing a high level of putrescible waste will not be treated.

Waste will be turned round within a maximum of 72 hours to prevent conditions that would allow pests to become established.

A pest control contractor will be retained and will make routine inspections, taking appropriate action to control vermin and pests.

The daily inspection will include assessing the presence of rats, flies or other pests. Where there is an indication that there is an infestation the pest contractor will be contacted to attend site as soon as possible to manage the problem.

8.7. Noise

The site is not expected to cause any noise issues as the nearest sensitive receptors as the building is in an industrial setting and the majority of receptors are over 200m away, it is considered unlikely that the cumulative noise from the operation will adversely impact local human or habitat receptors. The new activities will take place inside a building giving a degree of attenuation.

Plant and equipment will be properly maintained so that it operates without excessive noise.

Nevertheless, a Noise Impact Assessment has been prepared to support the application. The Noise Impact Assessment concludes that there are no adverse/significant noise impacts from the proposed activities. A Noise Management Plan has also been provided to support the assessment results has also been provided.

9. Record Keeping

The records described below will be maintained at the site office and will be made available to warranted officers of the Environment Agency on request:

- The pre-acceptance record for each waste stream and copies of related transfer notes.
- Details of all waste taken off site with a copy of the appropriate transfer note.

A site log will be maintained with the results of daily amenity inspections and any actions taken as a consequence and a record of attendance by the technically competent manager.

A copy of the preventative maintenance programme showing plant has been properly inspected and maintained and when.

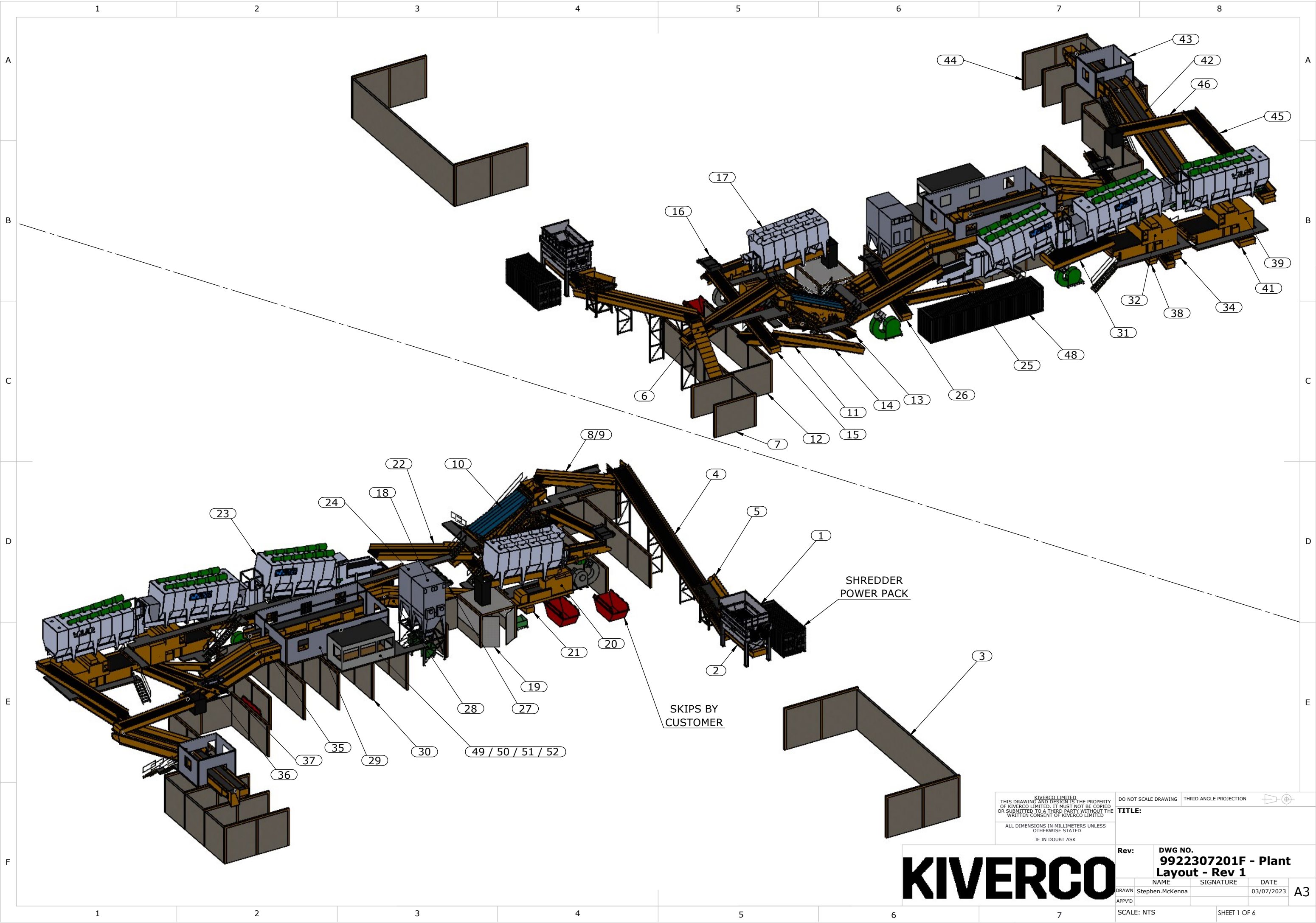
A log will be maintained detailing any complaints received and the actions taken to resolve them.

A log will be maintained of any pollution incidents and the action taken to remediate them.

Records will also be kept regarding staff training.

Records will be kept for a minimum of two years and in line with any statutory requirements. Records of pollution incidents will be maintained indefinitely in order to inform any eventual surrender application.

Appendix 1 – Plant List	
Appendix 2 – Process Flow Diagram	
Appendix 3 - M&J 6000S Shredder	



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THIRD ANGLE PROJECTION

TITLE:

Rev:

DRAWN Stephen.McKenna

APPV'D

SCALE: NTS

DWG NO.
**9922307201F - Plant
Layout - Rev 1**

NAME SIGNATURE DATE

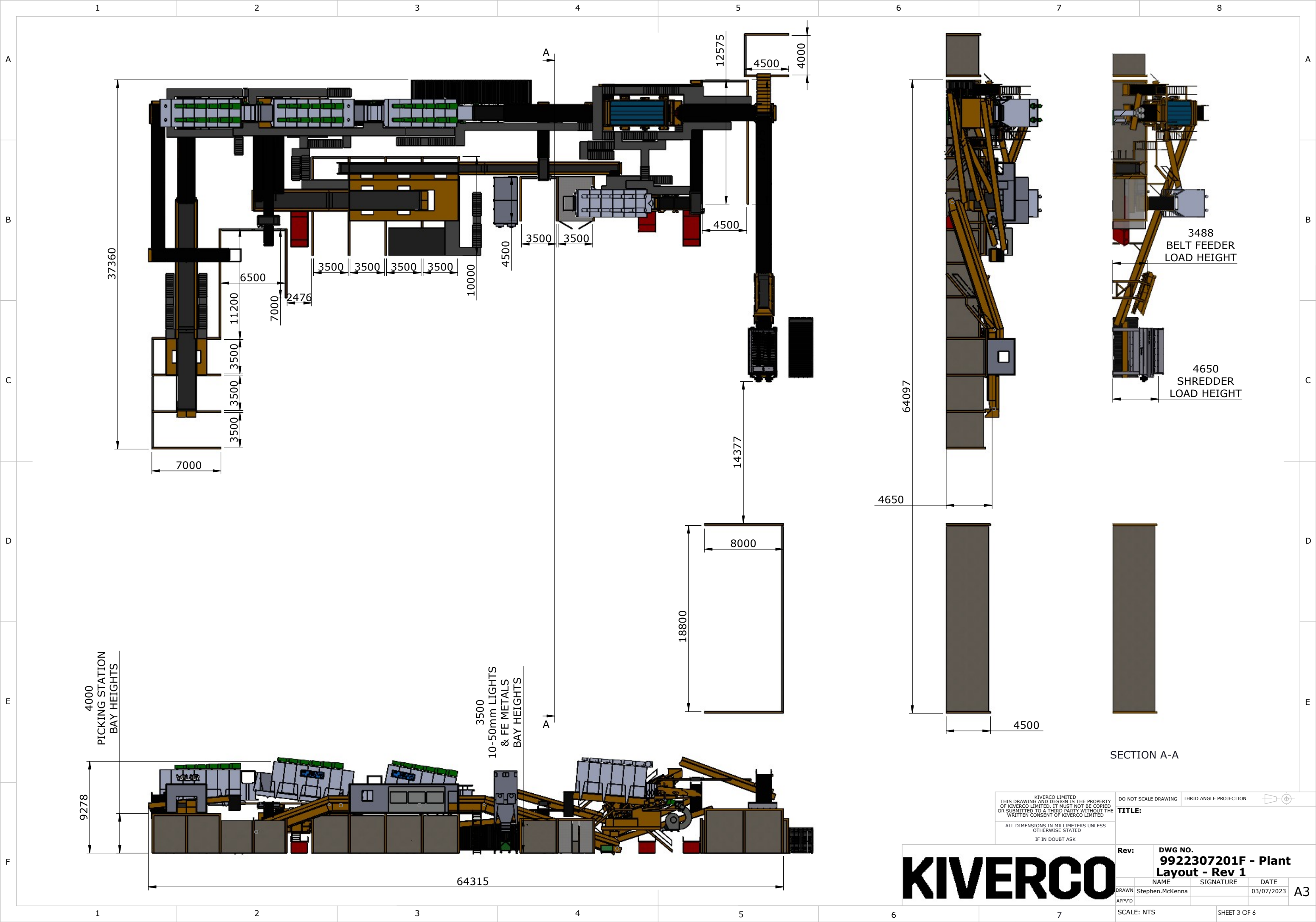
03/07/2023

SHEET 1 OF 6

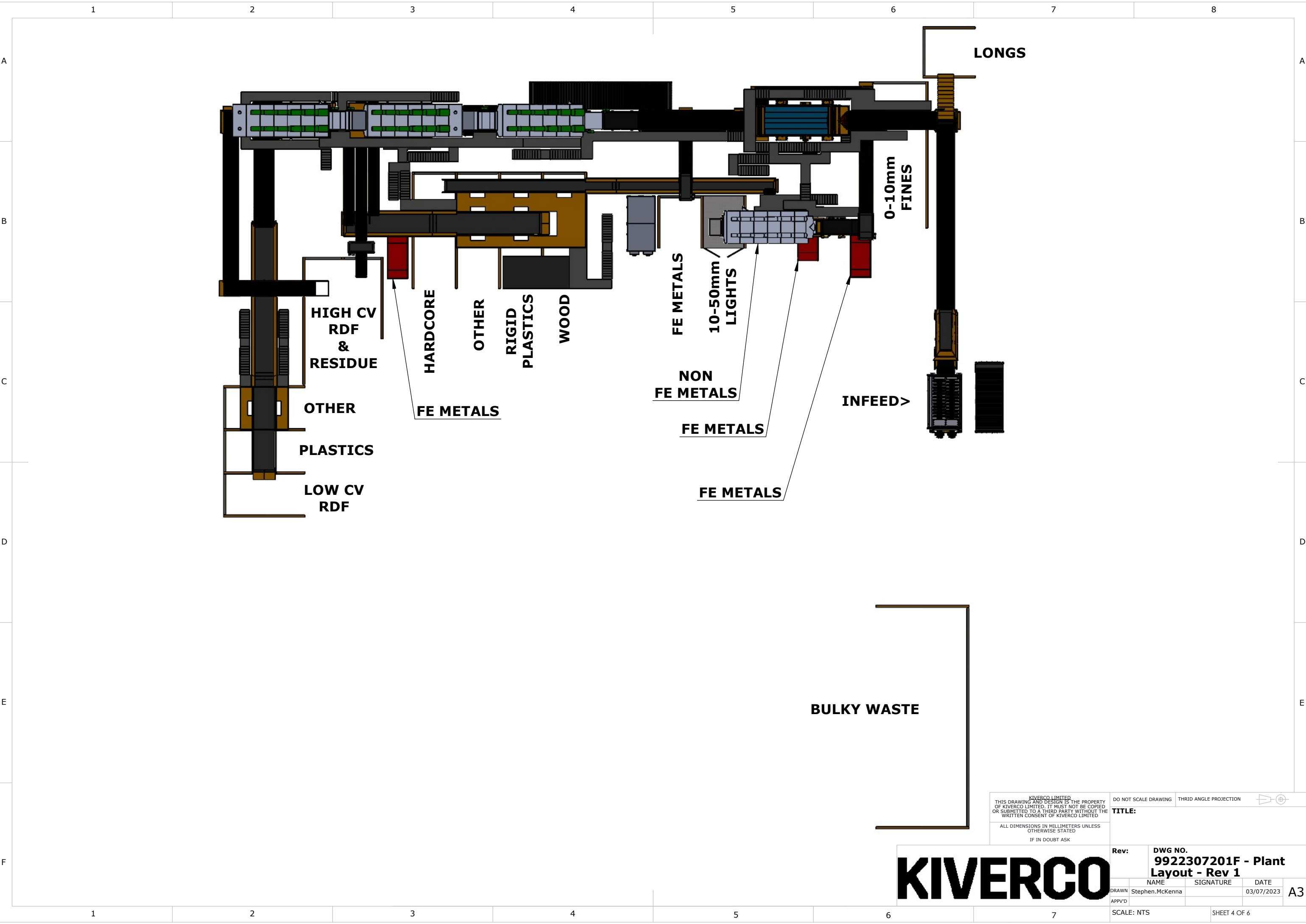
A3

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[illegible]

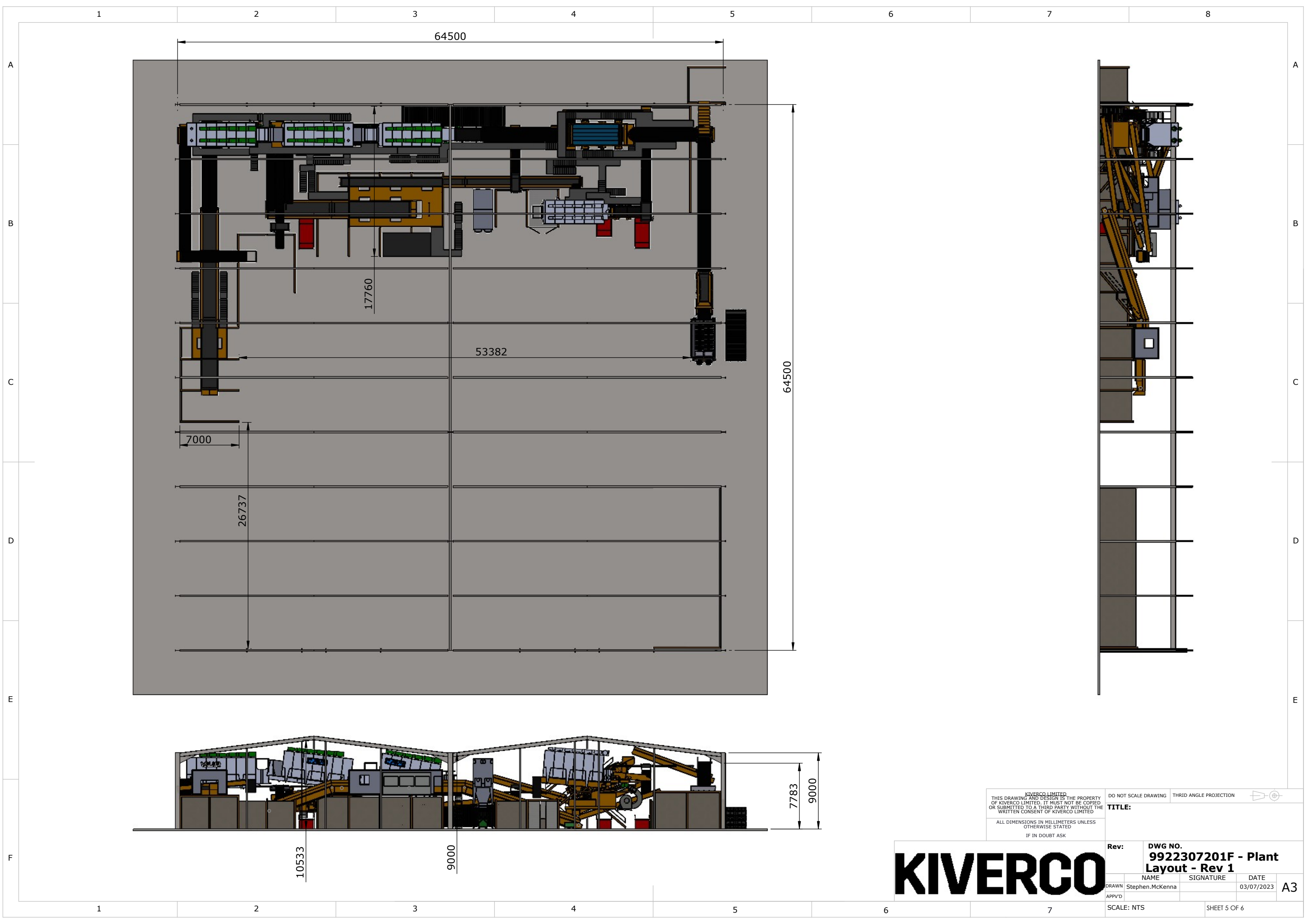


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ERCO			Rev:		DWG NO. 9922307201F - Plant Layout - Rev 1				
			NAME		SIGNATURE		DATE		A3
			DRAWN Stephen.McKenna				03/07/2023		
			APPV'D						
			SCALE: NTS		SHEET 4 OF 6				

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TITLE:

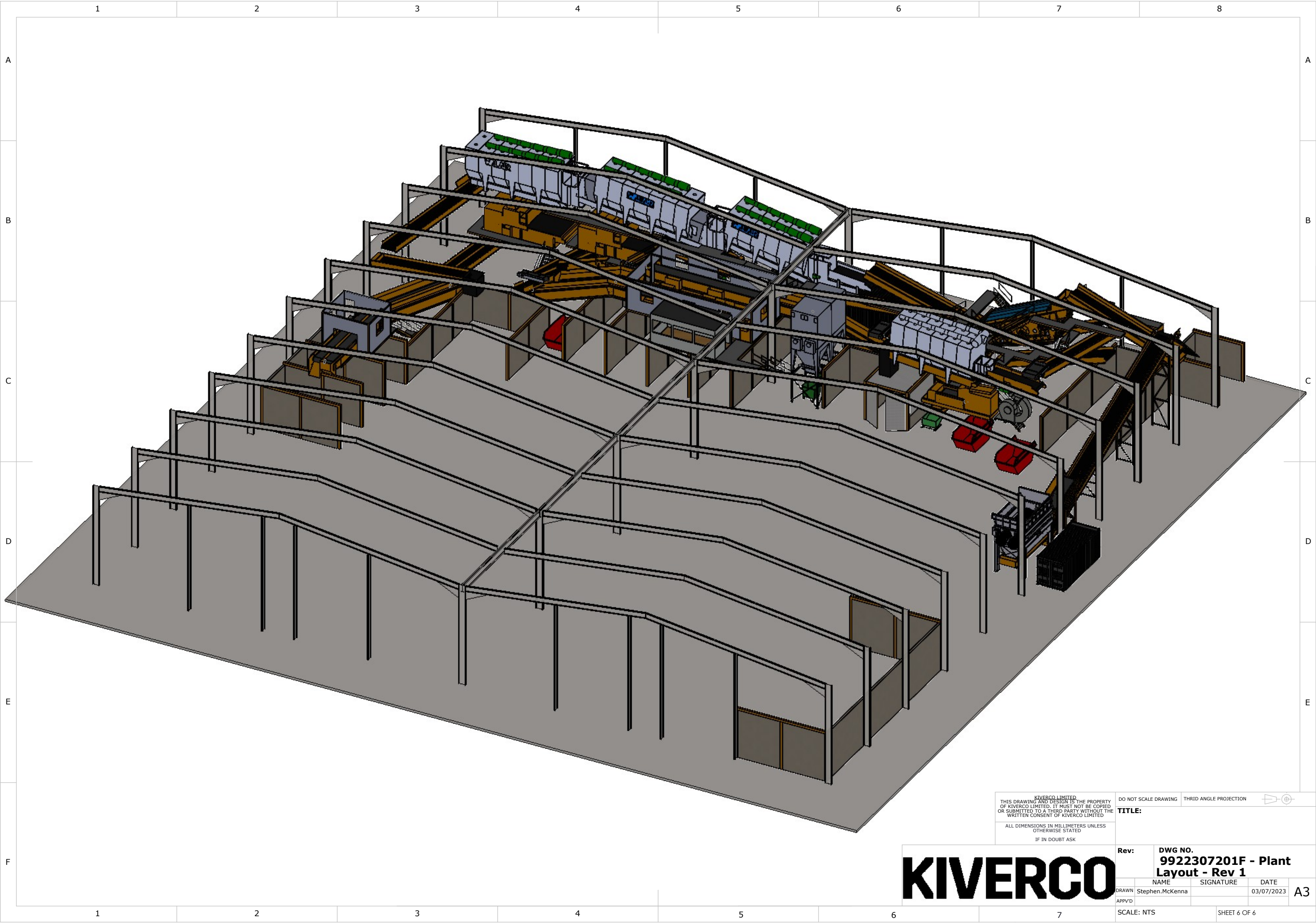
Rev: DWG NO.
9922307201F - Plant
Layout - Rev 1

NAME	SIGNATURE	DATE
Stephen.McKenna		03/07/2023

SCALE: NTS SHEET 5 OF 6

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A3



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9922307201F- Process Flow – Rev 1

Material Type: C&D Residue
Bulk Density: 250 kg/m3
Throughput: up to 50 tonnes per hour
Operating Hours: 8 hours/1 shifts/5 days/50 wks = 2,000 hrs/year

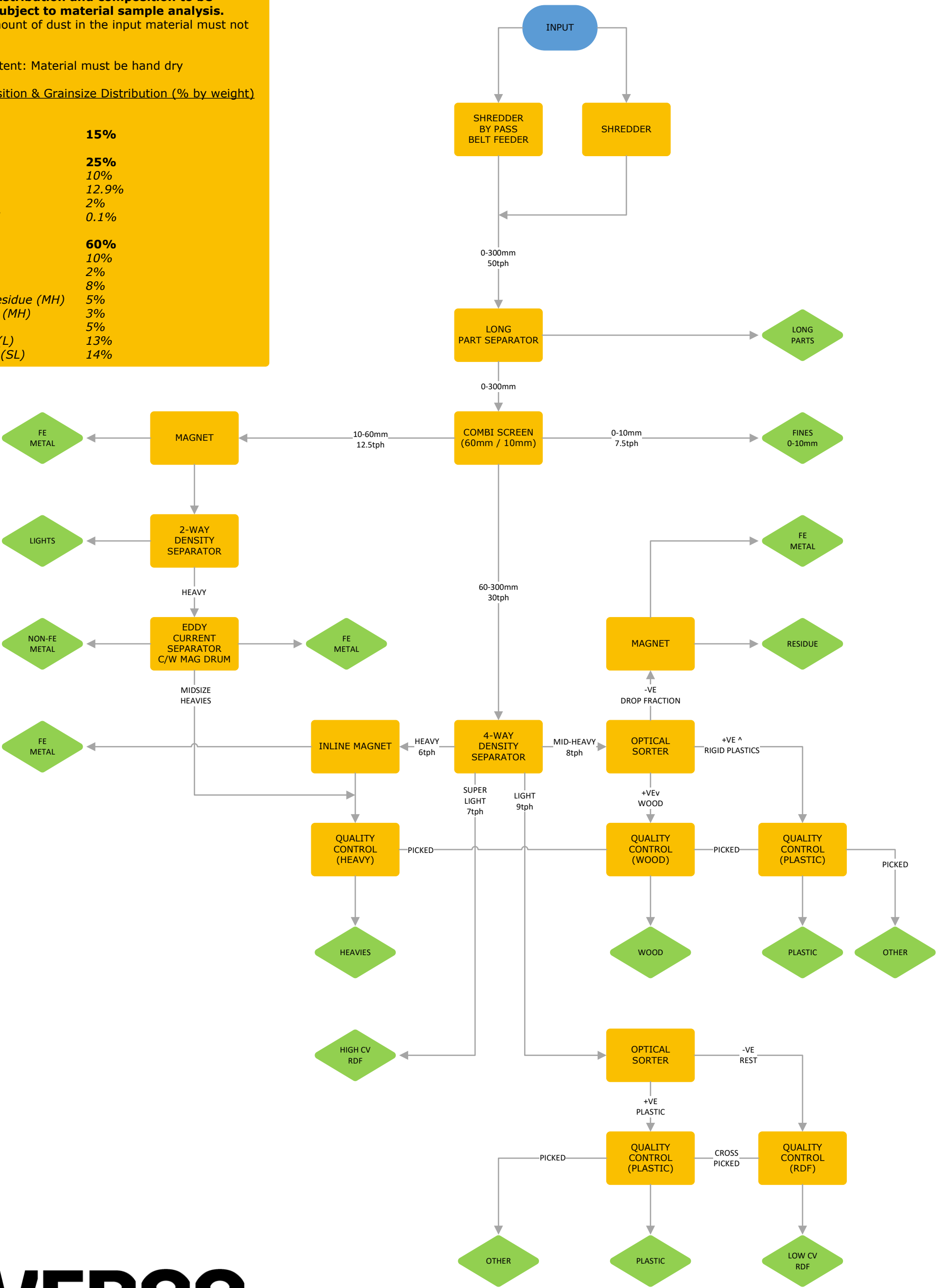
Grain size distribution and composition to be confirmed subject to material sample analysis.
Maximum amount of dust in the input material must not be >3%

Moisture Content: Material must be hand dry

Input composition & Grainsize Distribution (% by weight)
Assumed:

0-10mm	15%
10-60mm	25%
Heavy	10%
Light	12.9%
FE Metal	2%
Non-FE Metal	0.1%

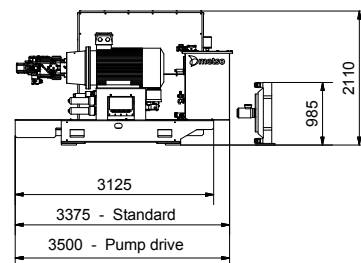
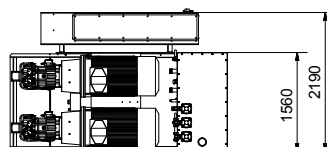
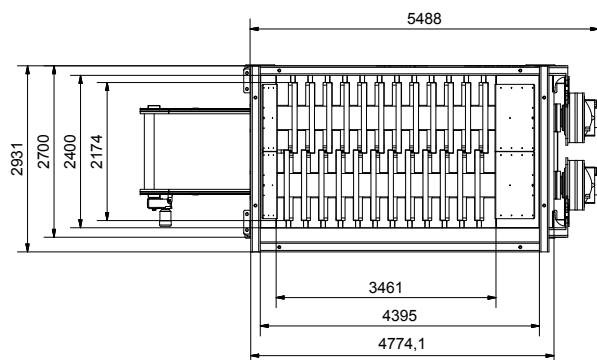
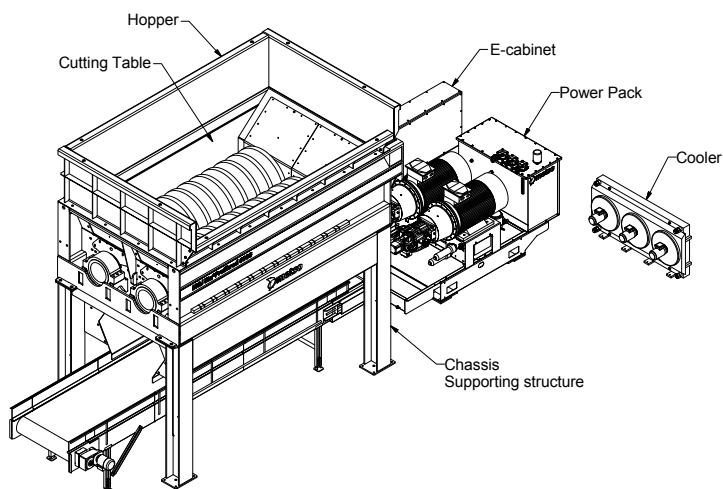
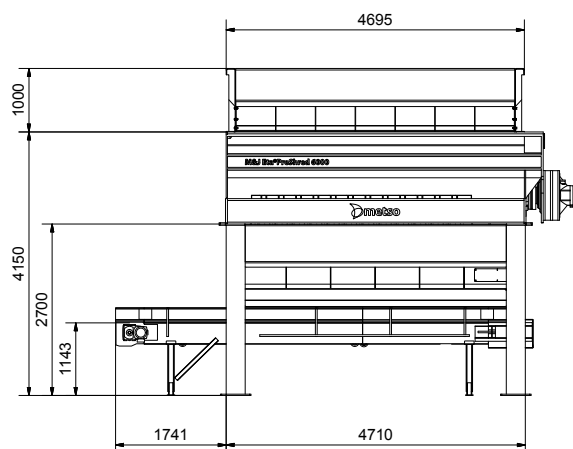
60-300mm	60%
Hardcore (H)	10%
FE Metal (H)	2%
Wood (MH)	8%
Mid Heavy Residue (MH)	5%
Rigid Plastics (MH)	3%
Plastics (L)	5%
Low CV RDF (L)	13%
High CV RDF (SL)	14%



Waste Pre-Shredders from Metso Recycling
M&J Eta®PreShred 6000 Stationary



M&J Eta®PreShred 6000 Stationary



Specification			
Overall dimesion std without hopper (LxWxH)	mm		7740 x 2700 x 4150
Weight (total included standard conveyer)	ton		34.3 – 39.2
Standard colour	RAL		7011, 9002
Loading height (without hopper)	mm		4150
Cutting area	mm		3461 x 2400
Power pack			
Electric motor	kW		2x200 / 2x250
Electric control unit			PLC
Drive principle			Double hydrostatic transmission
Chassis			
Standard belt conveyer (LxW)	mm		6500 x 1200
Discharge height	mm		1145
Discharge width	mm		1200
Weight (included / exclusive conveyer)	ton		4.5 / 3.3

Cutting table



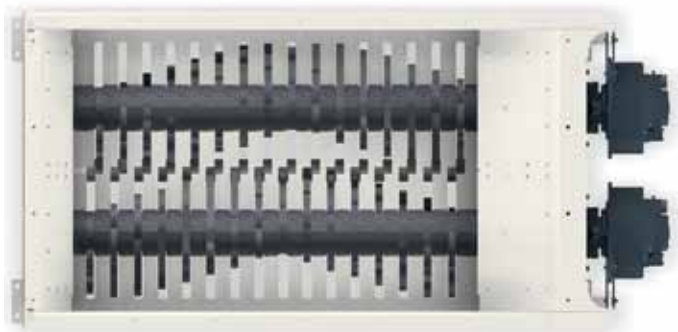
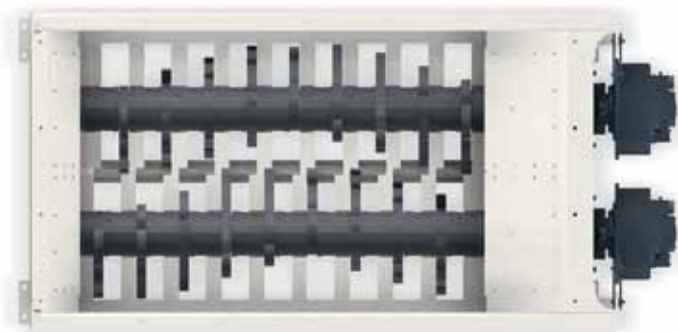
Samurai



Standard

Cutting table 9 knives

Cutting table 16 knives



M&J Eta®PreShred 6000

Cutting Table		
Number of shafts		2
Rotating speed*	rpm	11-32
Number of knives		9 / 12 / 14 / 16
Number of counter knives		18 / 24 / 28 / 32
Cutting area (LxW)	mm	3461 x 2400
Weight	ton	24.5 – 27.7
Grain size **		
9 knives	mm	<450
12 knives	mm	<300
14 knives	mm	<200
16 knives	mm	<100
Capacity per hour ***		
Household waste	ton	Up to 200
Demolition wood	ton	Up to 100
Industrial waste	ton	Up to 50
Bulky waste	ton	Up to 70
* Standard ** 90% less than		
*** Depending on loading, grain size and density of the input material		

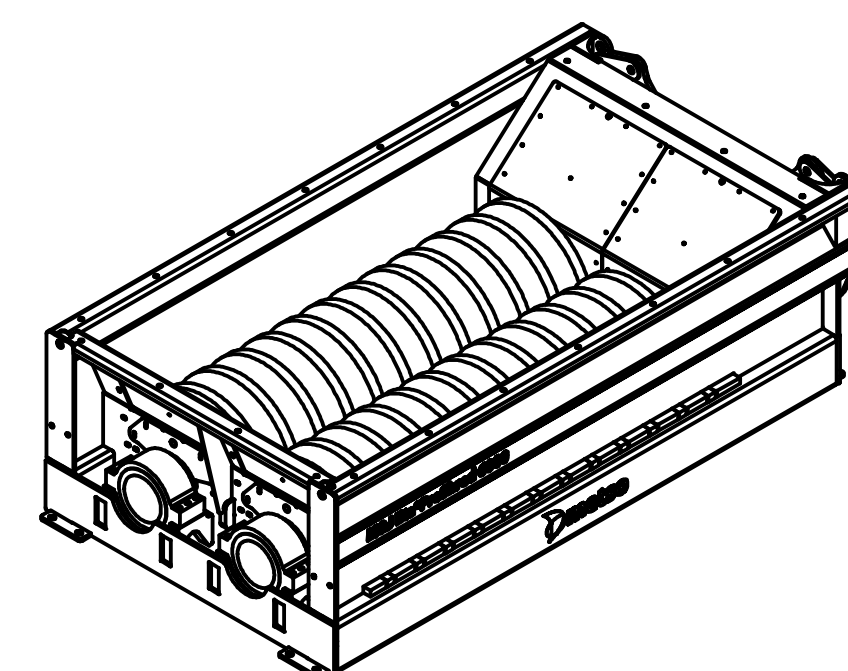
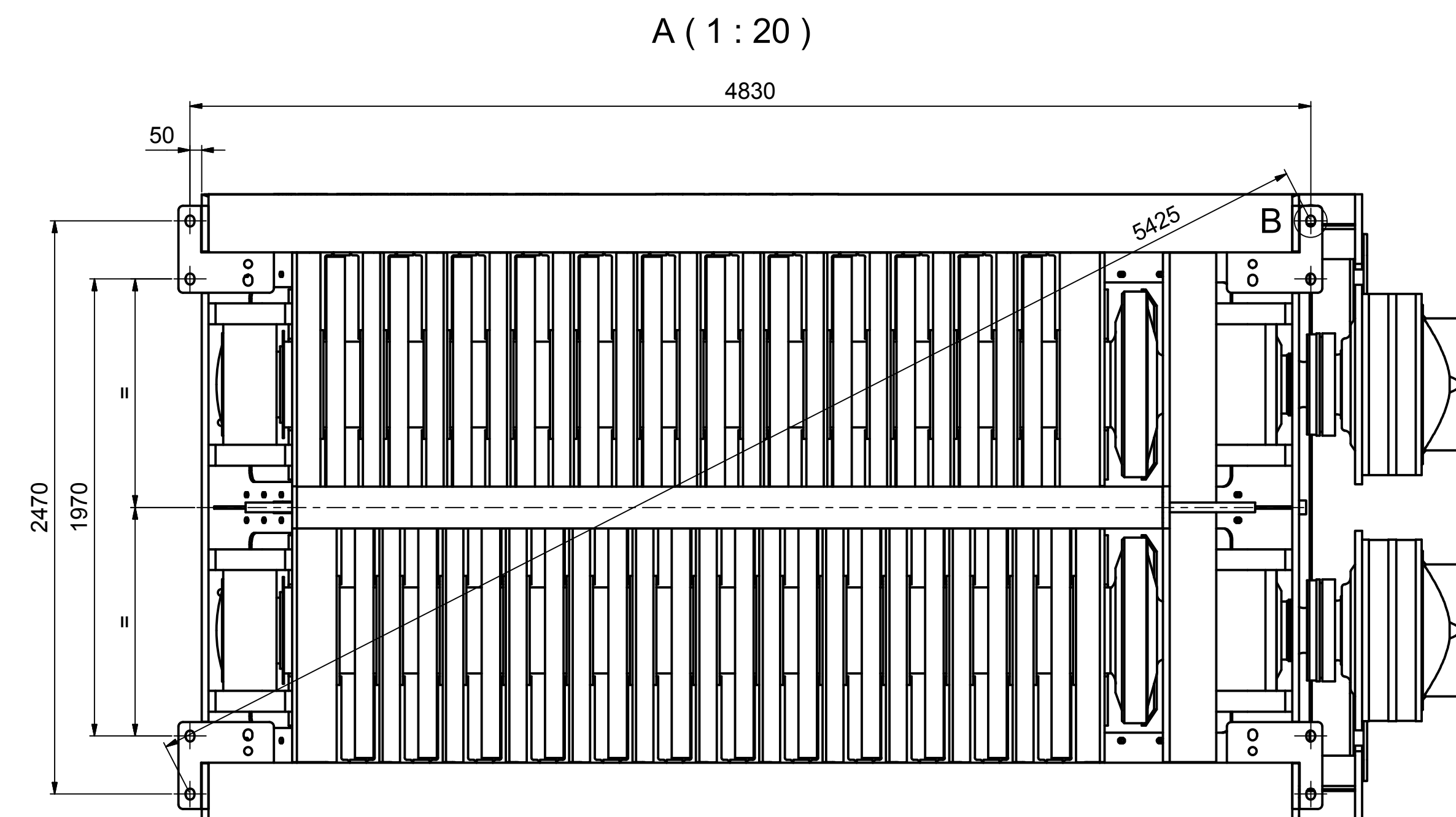
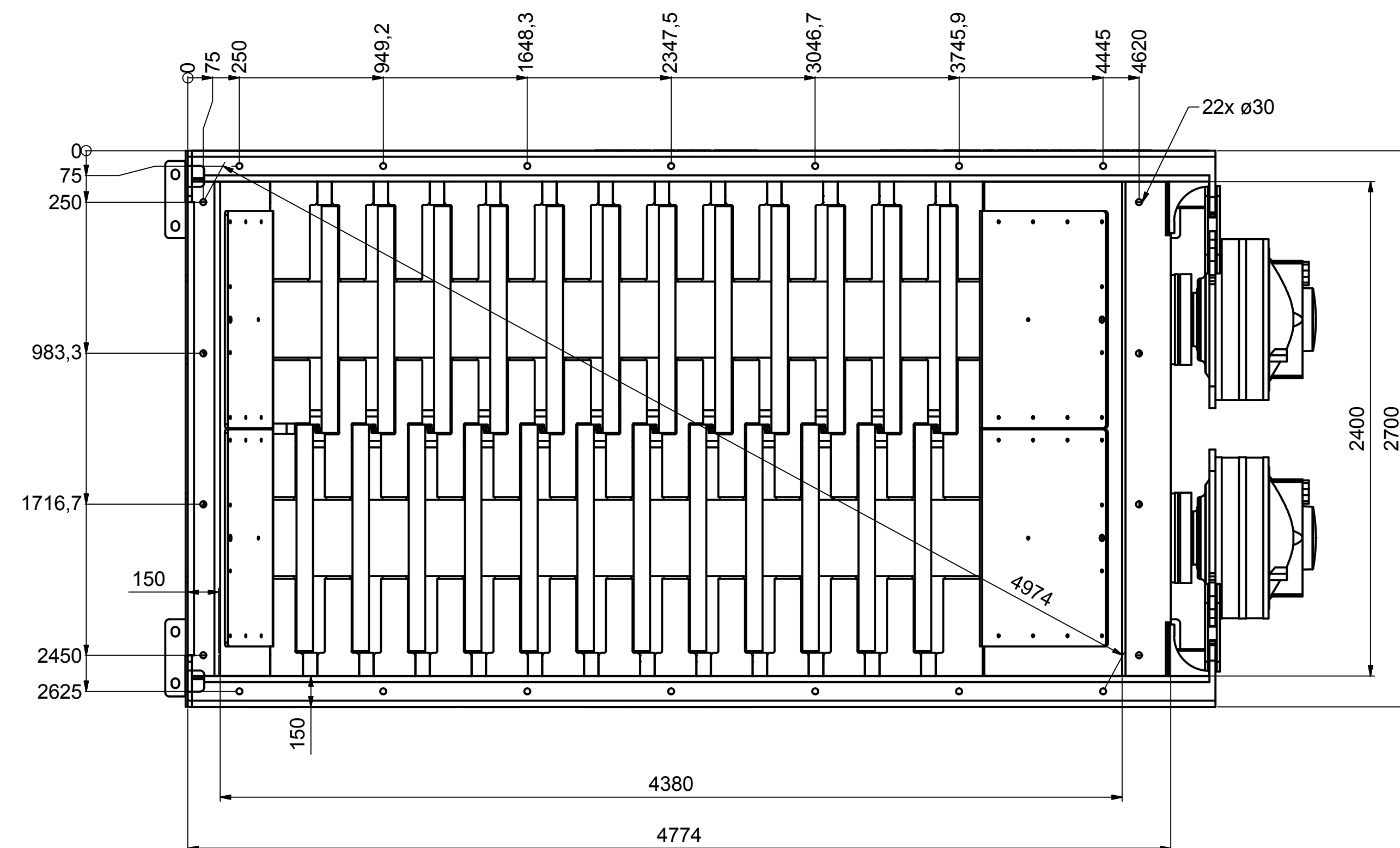
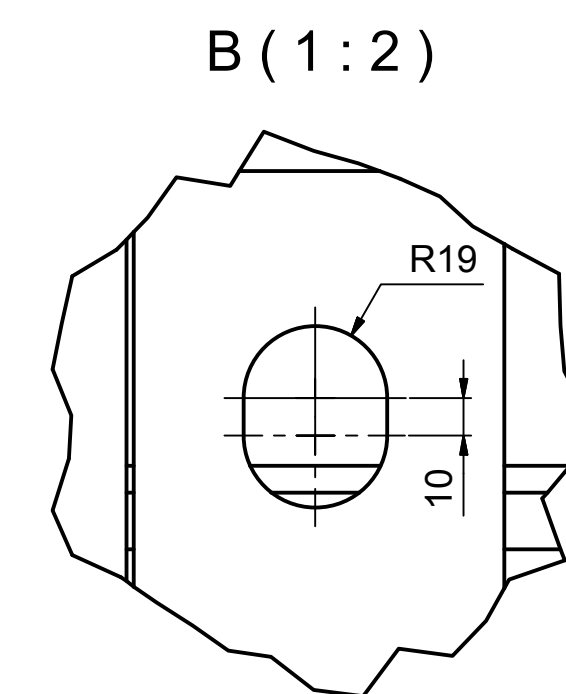
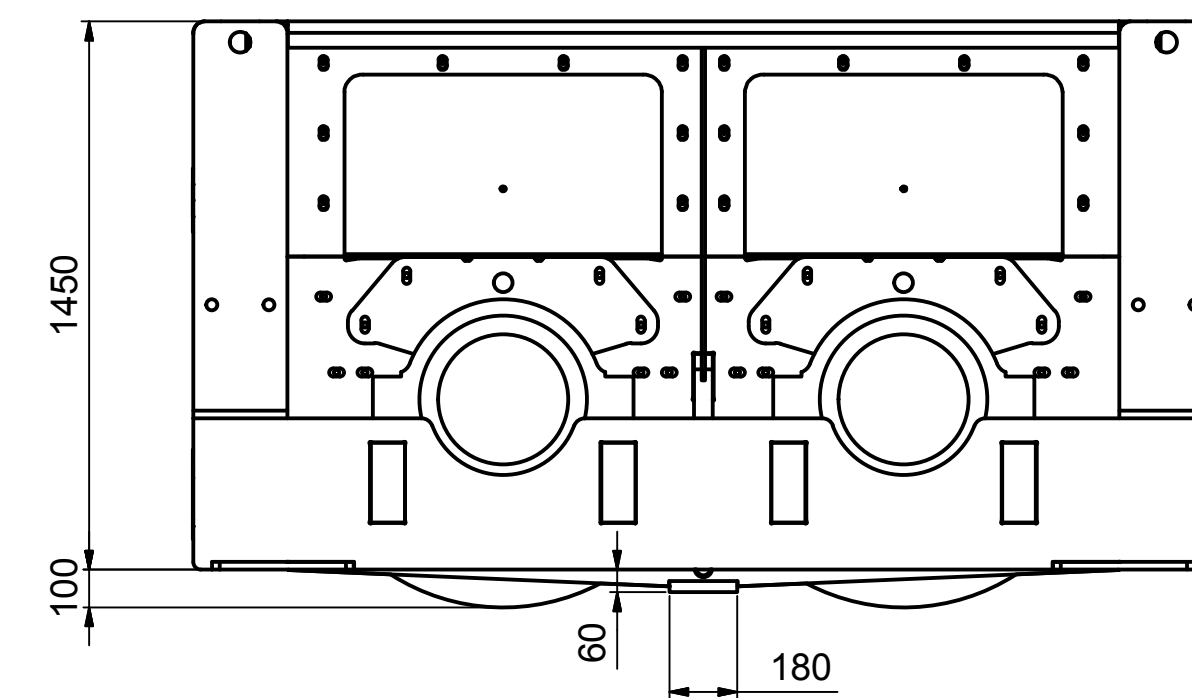
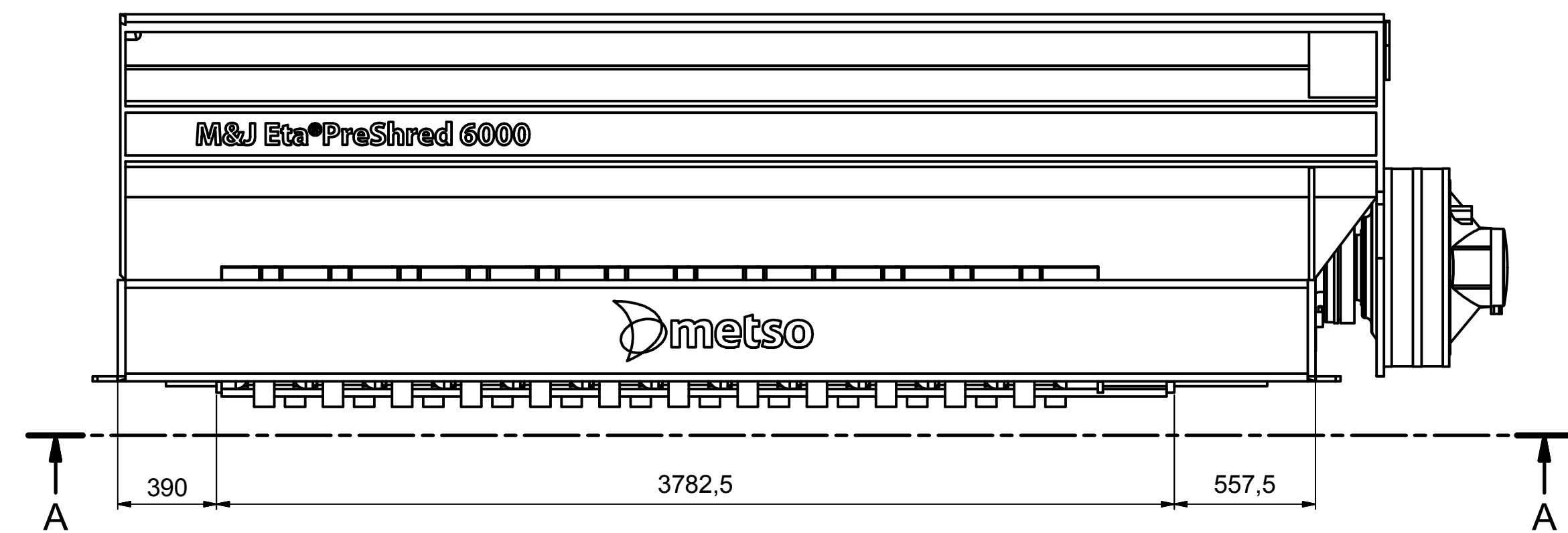


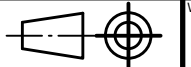
For more information, contact your local Metso Recycling representative,
or contact your dealer directly.

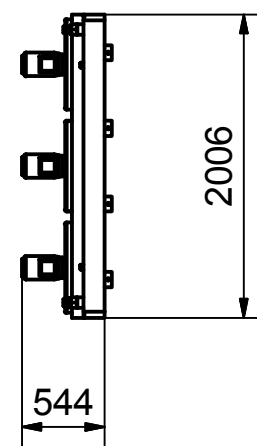
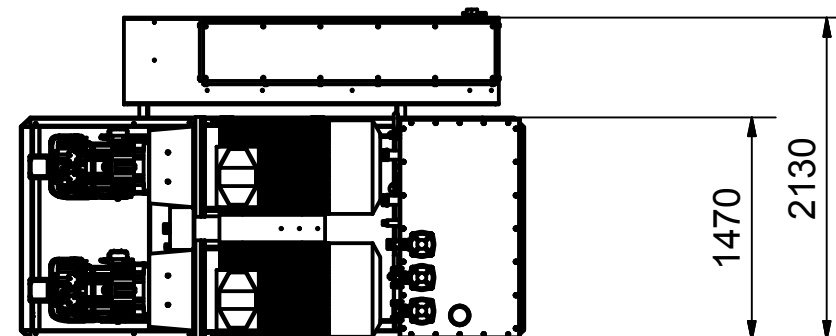
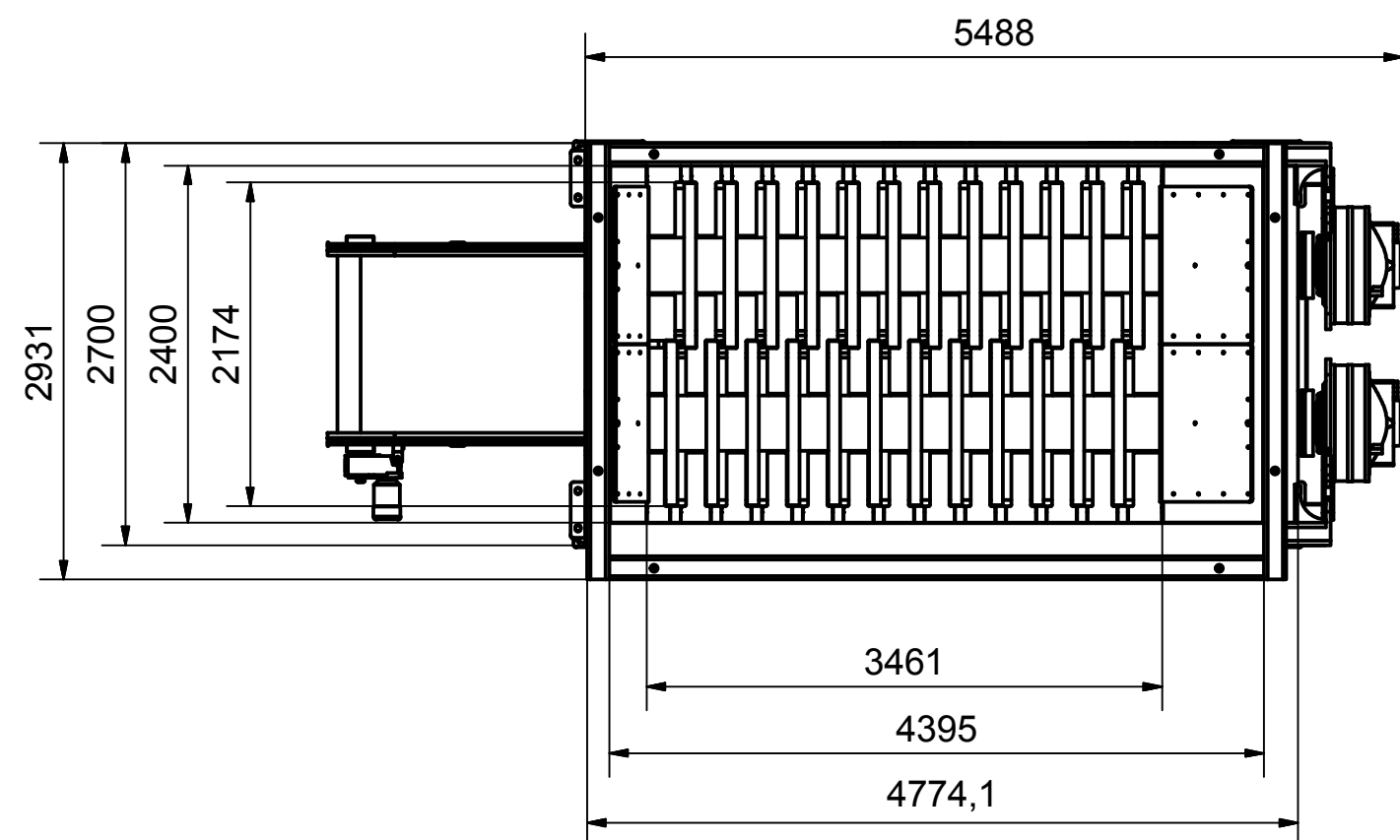
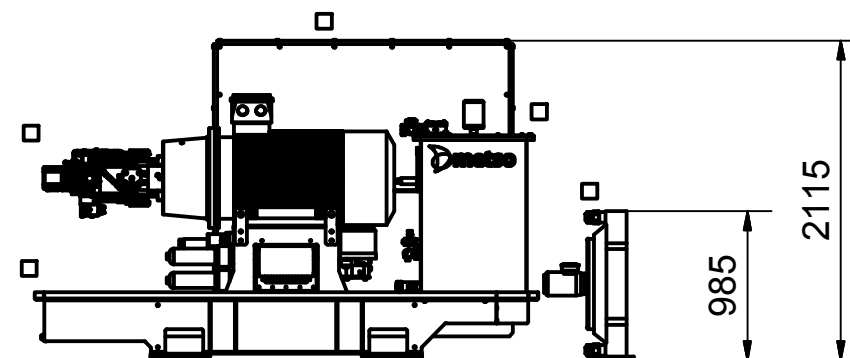
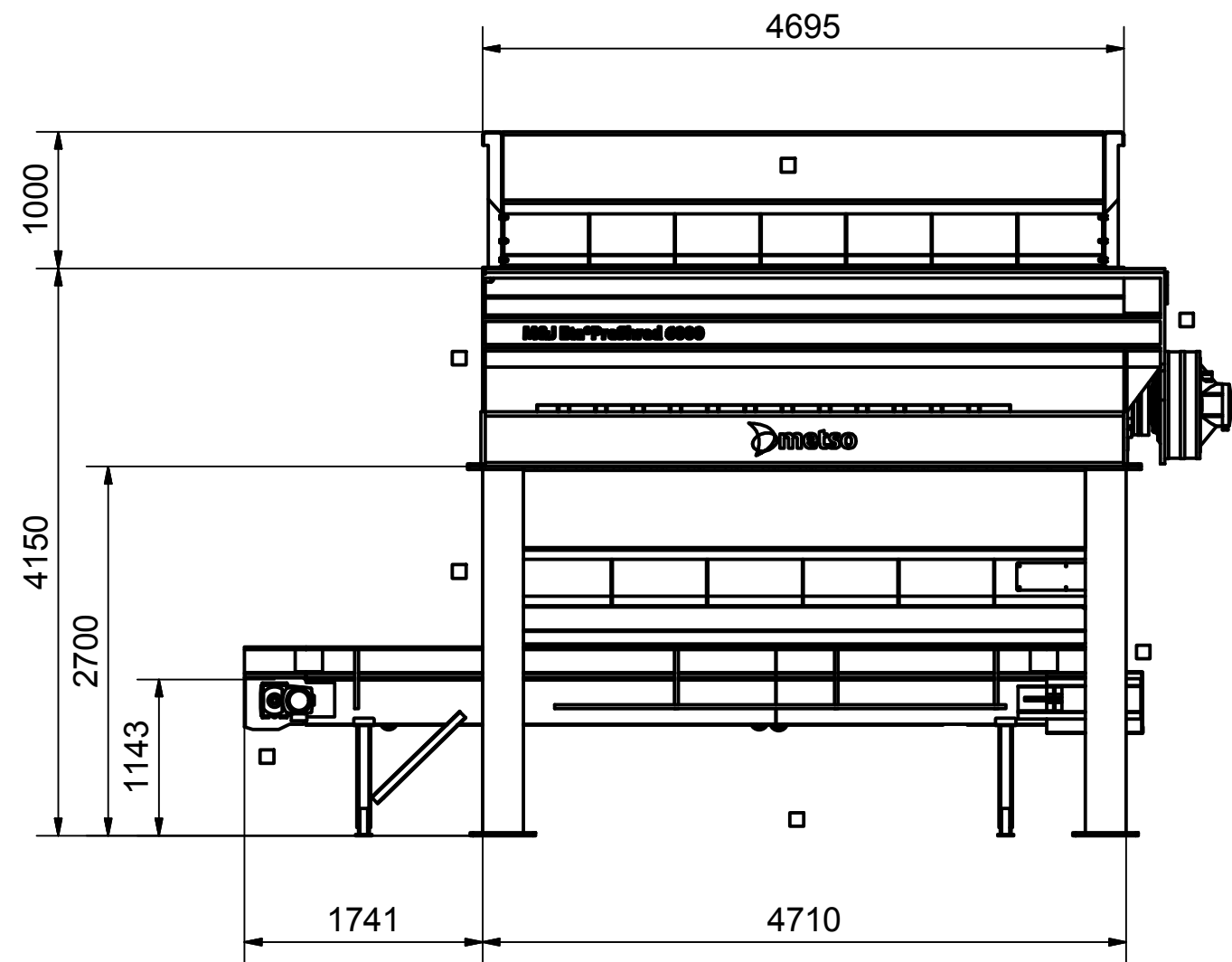
Metso Denmark A/S
Vejlevej 5
DK-8700 Horsens
Denmark
Tel: +45 7626 6400
Fax: +45 7626 6449
recycling.info.dk@metso.com

www.metso.com/recycling

We reserve the right to make changes and improvements without notice, "M&J Eta*PreShred 6000 Stationary". Metso Recycling, February 2013

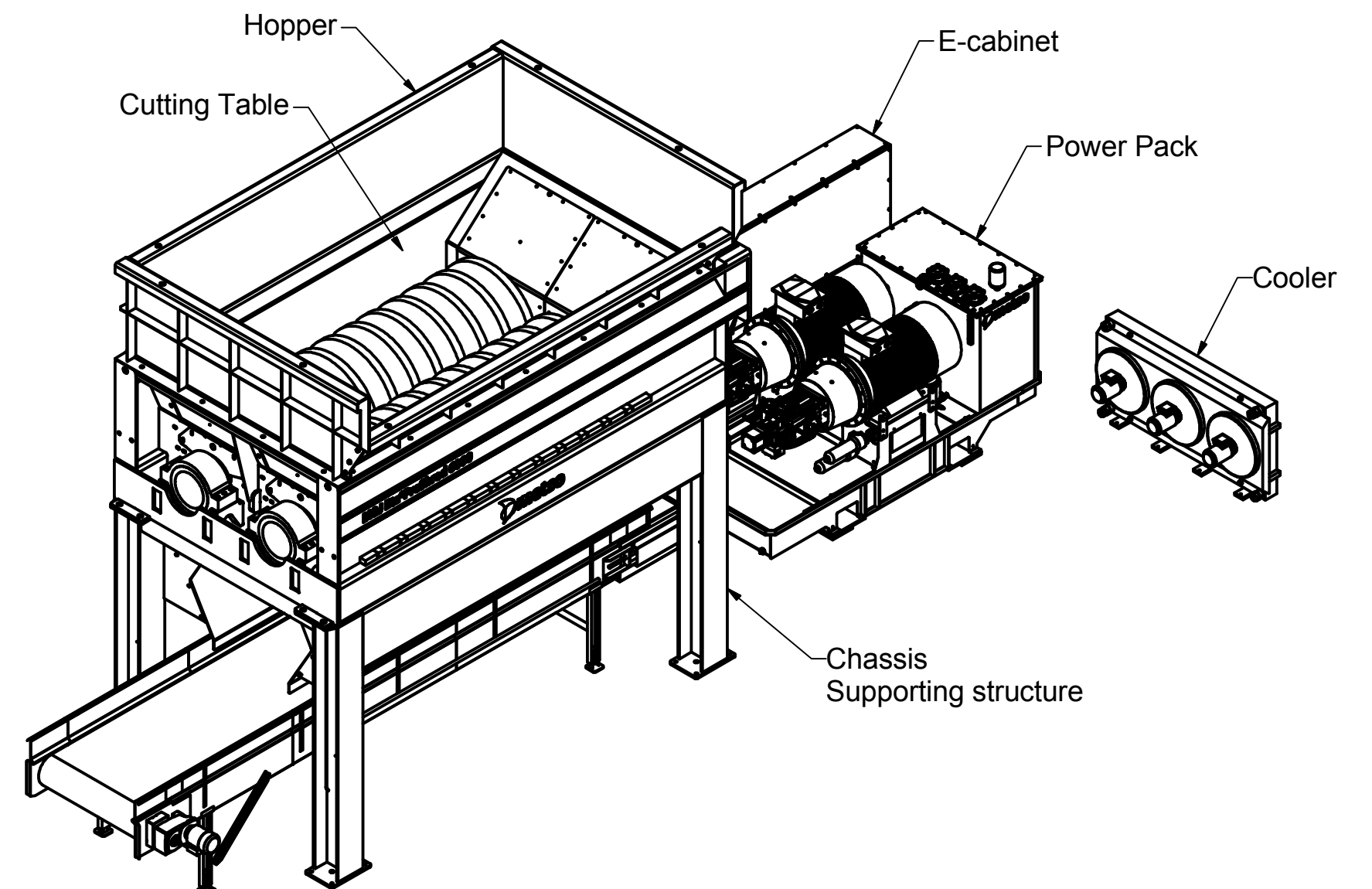


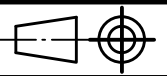
B	Cutting Table updated	2011.06.09	HS
A	Dimension added	2010.04.21	HS
REV.	TEXT OF REVISION	DATE	SIGN.
 Metso Denmark A/S Vejlevej 5 DK-8700 Horsens Tel.: +45 7626 6400 www.metso.com/recycling		Scale 1:20	Drawn 2009.06.11 HS Check 2009.06.23 JK
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Dimensions without specified tolerances according to ISO 2768-m and ISO 13920-BE			
Title Cutting Table			Weight - kg
M&J EtaPreShred 6000		Drawn No. 17 83 70	Rev. C



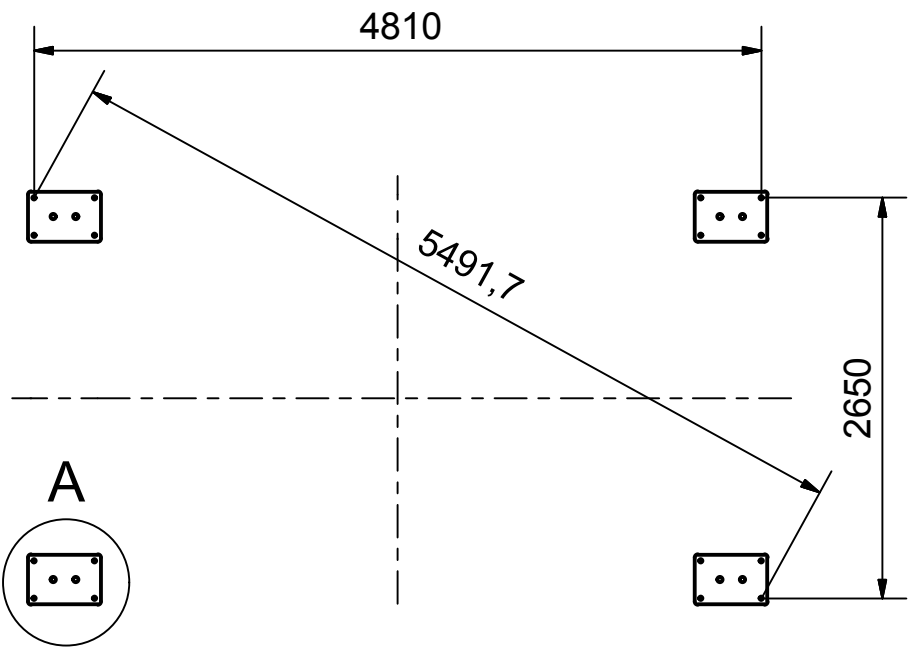
□
The symbol indicates a point/area where an access needs to be available.
It can either be for operation, adjustment or maintenance.

The customer is responsible for providing sufficient access for operation, adjustments and maintenance work needed throughout the lifetime of the shredder.

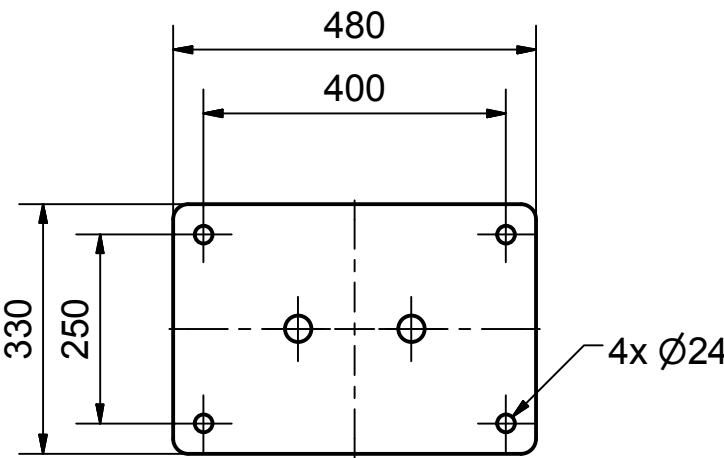


F	Power Pack changed	2013.05.01	HS
E	Cutting Table updated	2012.07.05	HS
D	Added symbols for quotation	2011.11.18	HS
C	Power Pack changed. Cutting Table and Conveyor updated	2011.06.09	HS
B	Dimension addad	2010.06.18	HS
REV.	TEXT OF REVISION	DATE	SIGN.
 Metso Denmark A/S Vejlevej 5 DK-8700 Horsens Tel.: +45 7626 6400 www.metso.com/recycling		Scale 1:50	Drawn 2009.06.11 HS Check 2009.06.23 JK
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Dimensions without specified tolerances according to ISO 2768-mK and ISO 13920-BE .		GPS according to EN ISO 8015	
Title Shredder			Weight: kg
DRWG.No. M&J EtaPreShred 6000 S		17 83 68	REV. F

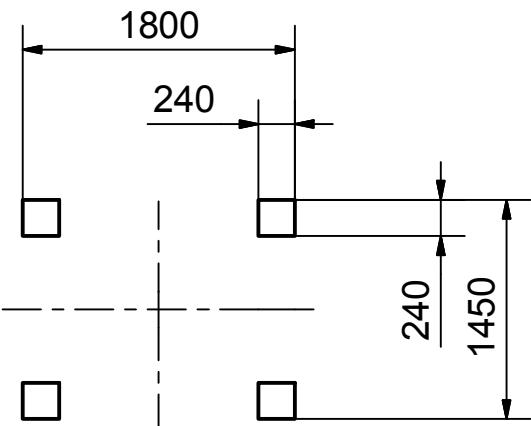
Cutting Table
Weight: 26-30 ton
Chassis
Weight: 7 ton

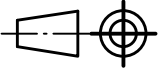


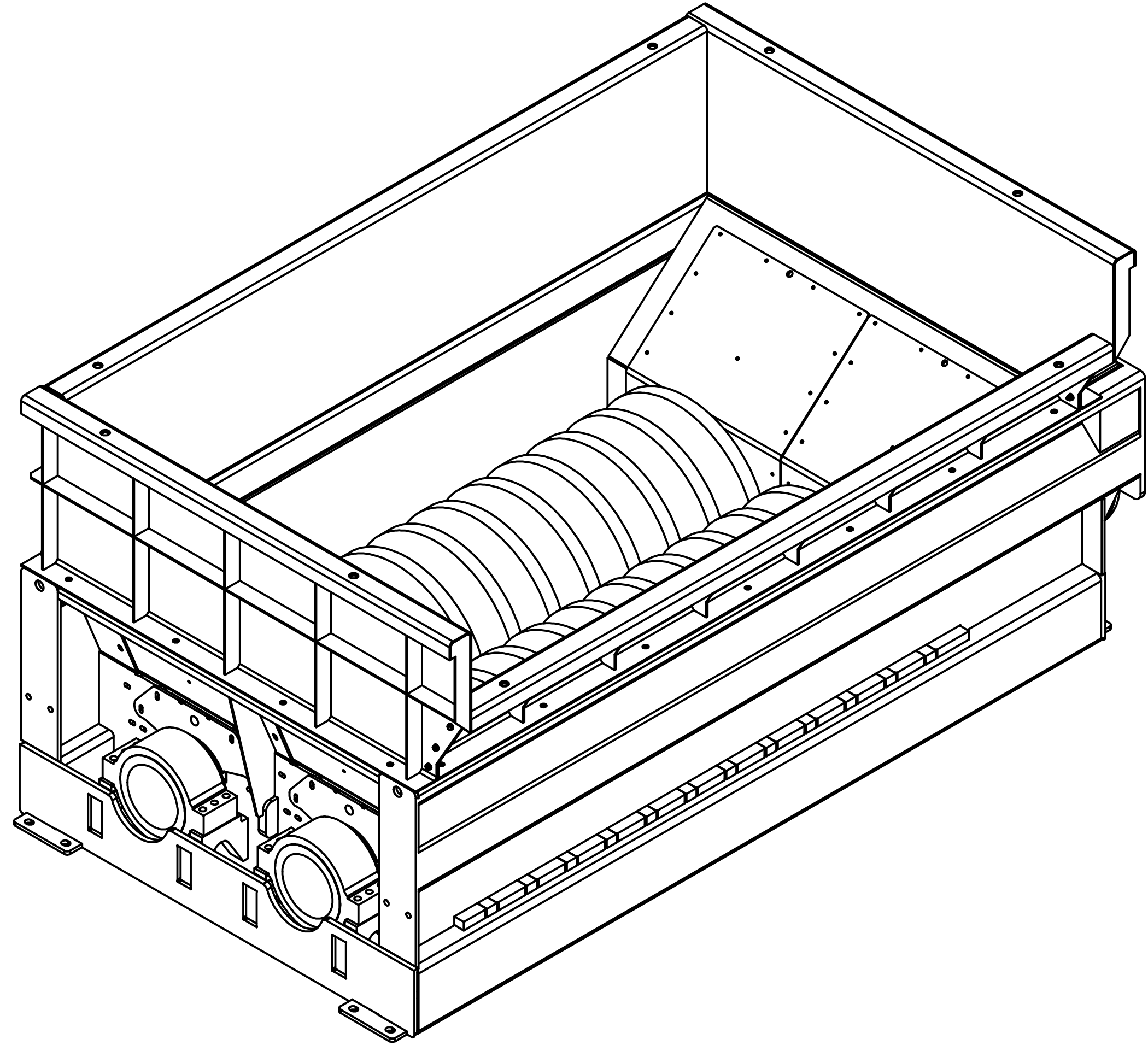
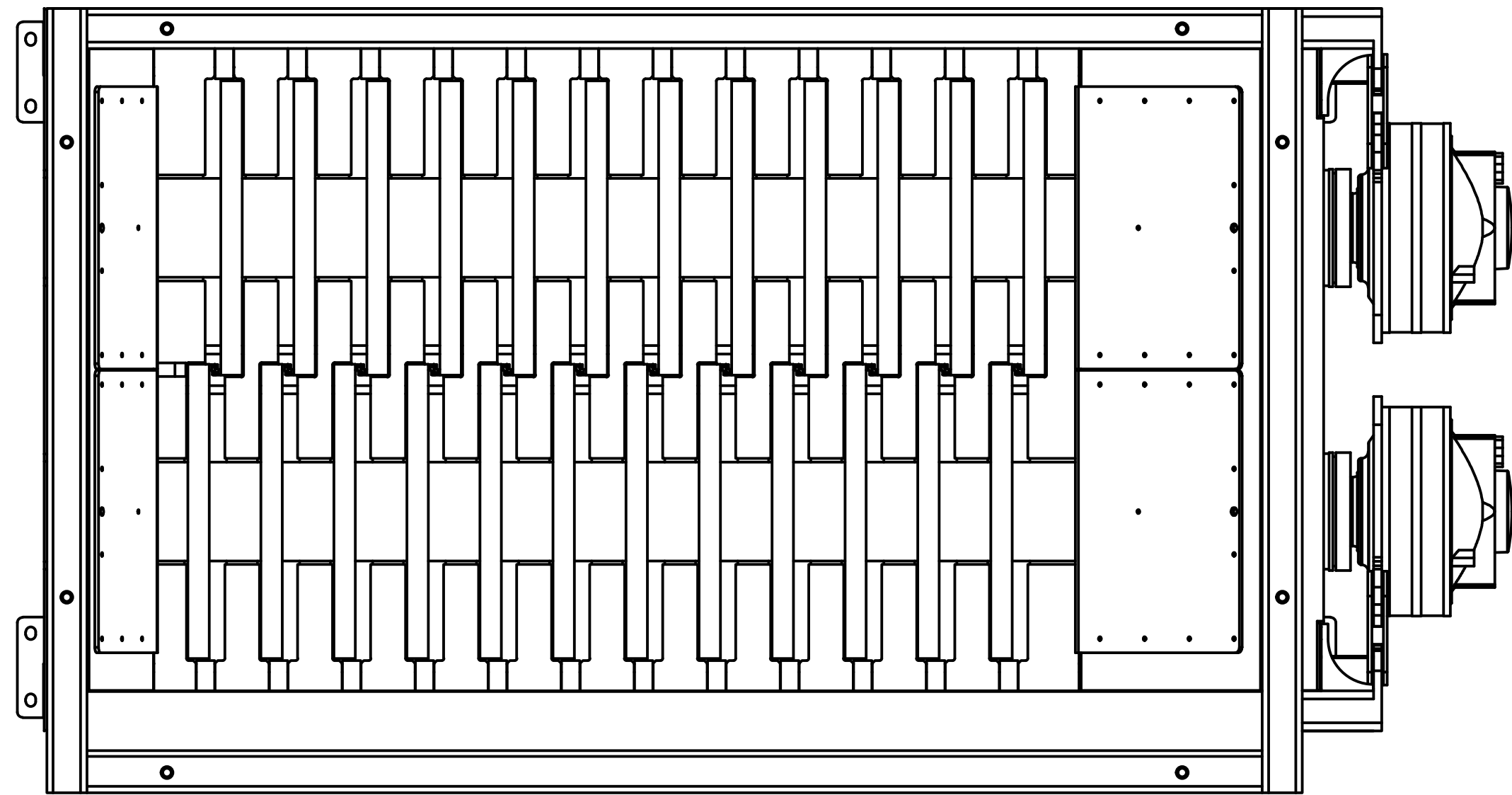
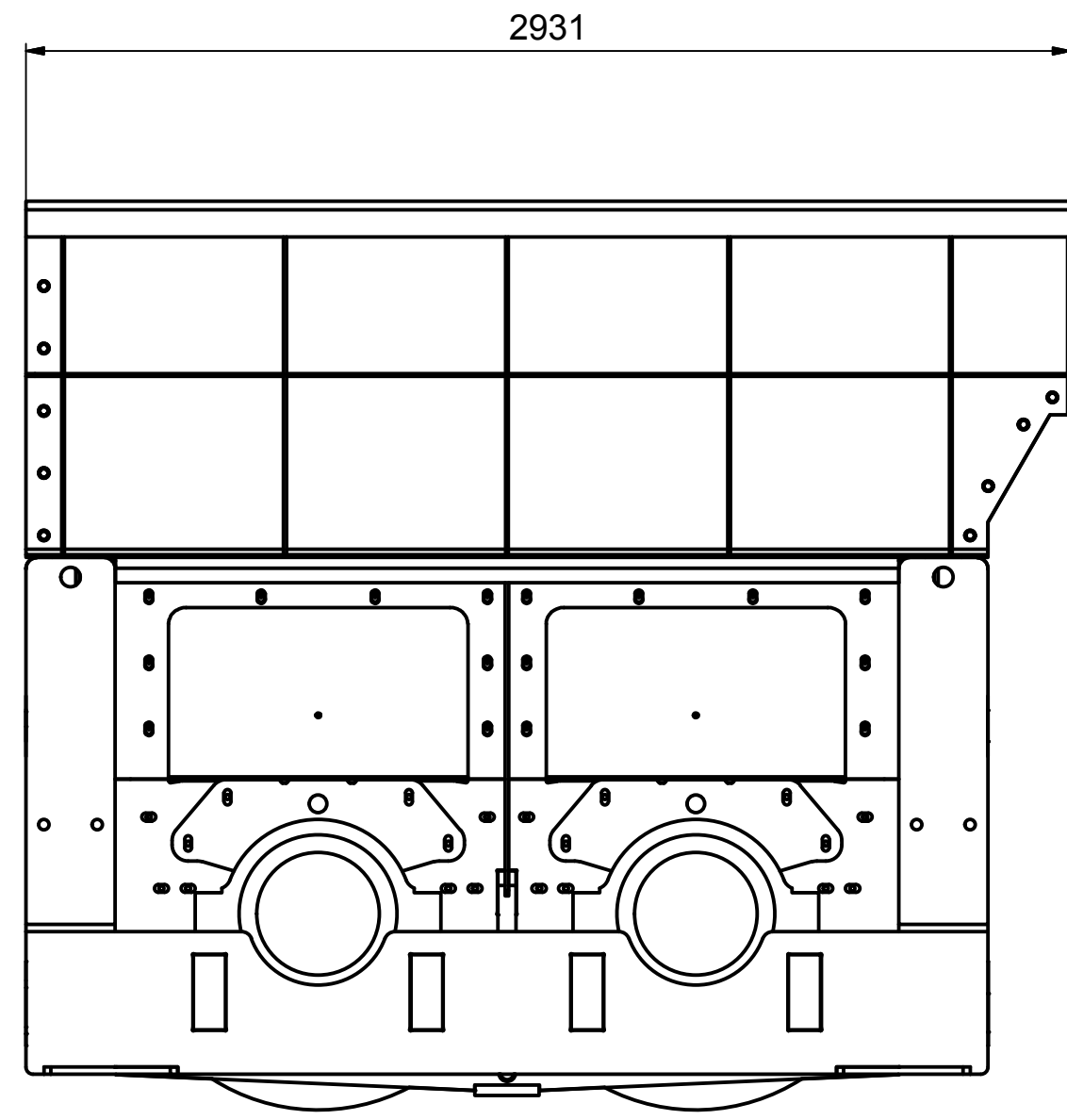
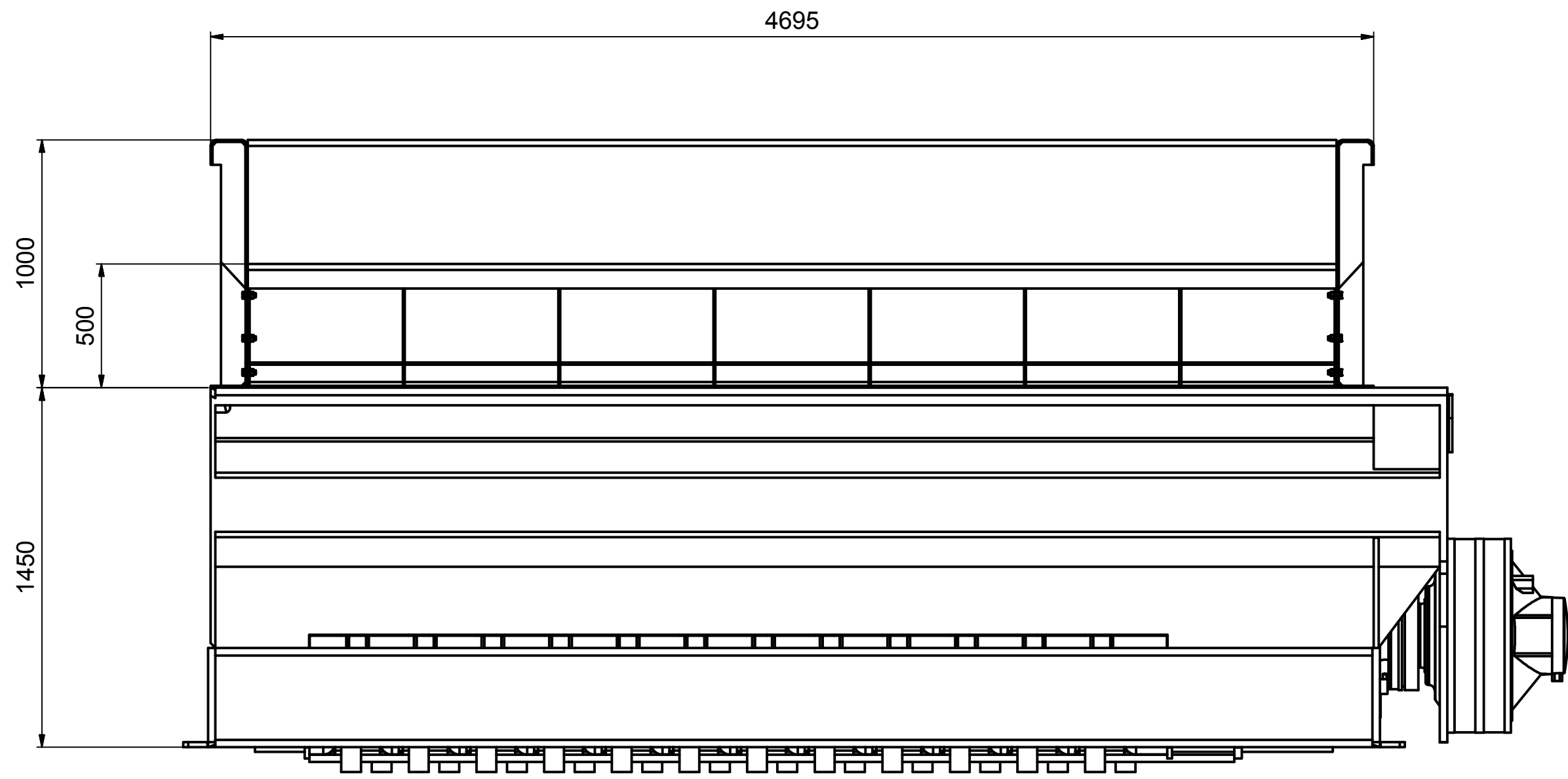
A (1 : 10)

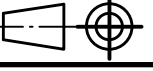


Power Pack
Weight: 6,1 - 7,6 ton

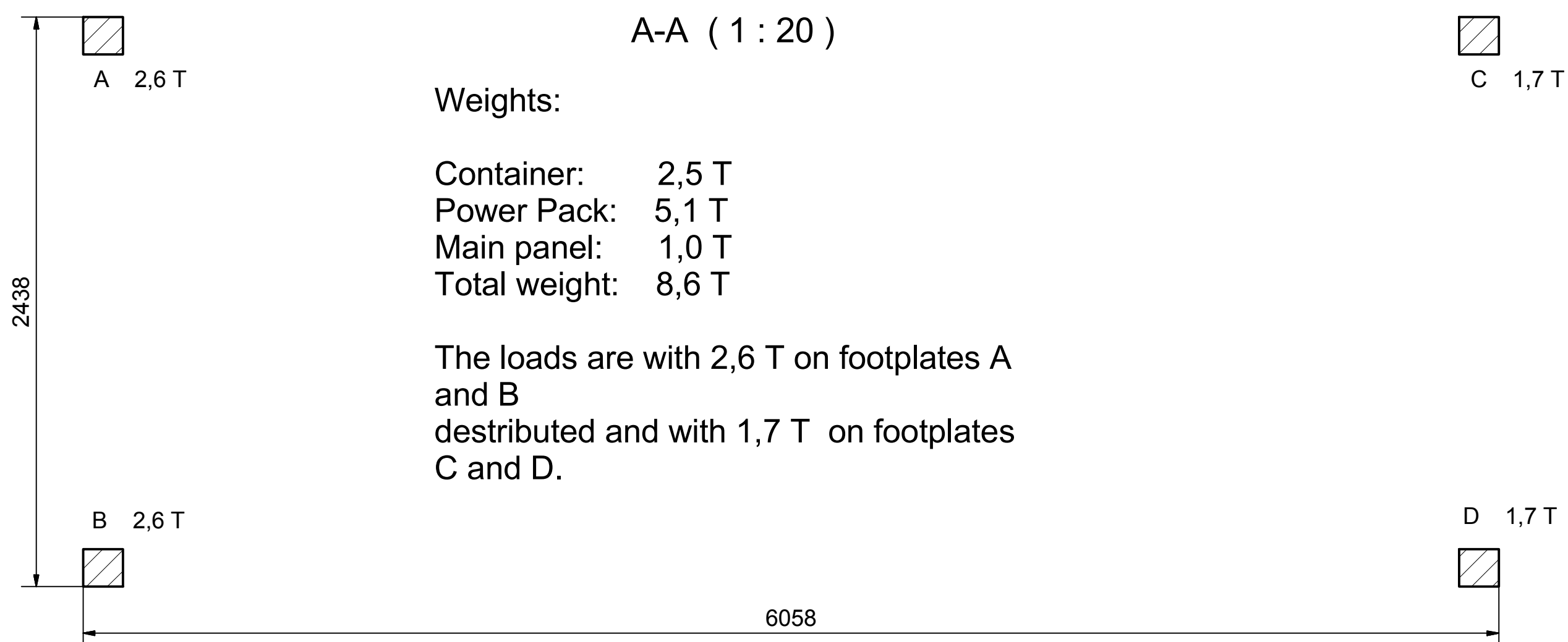
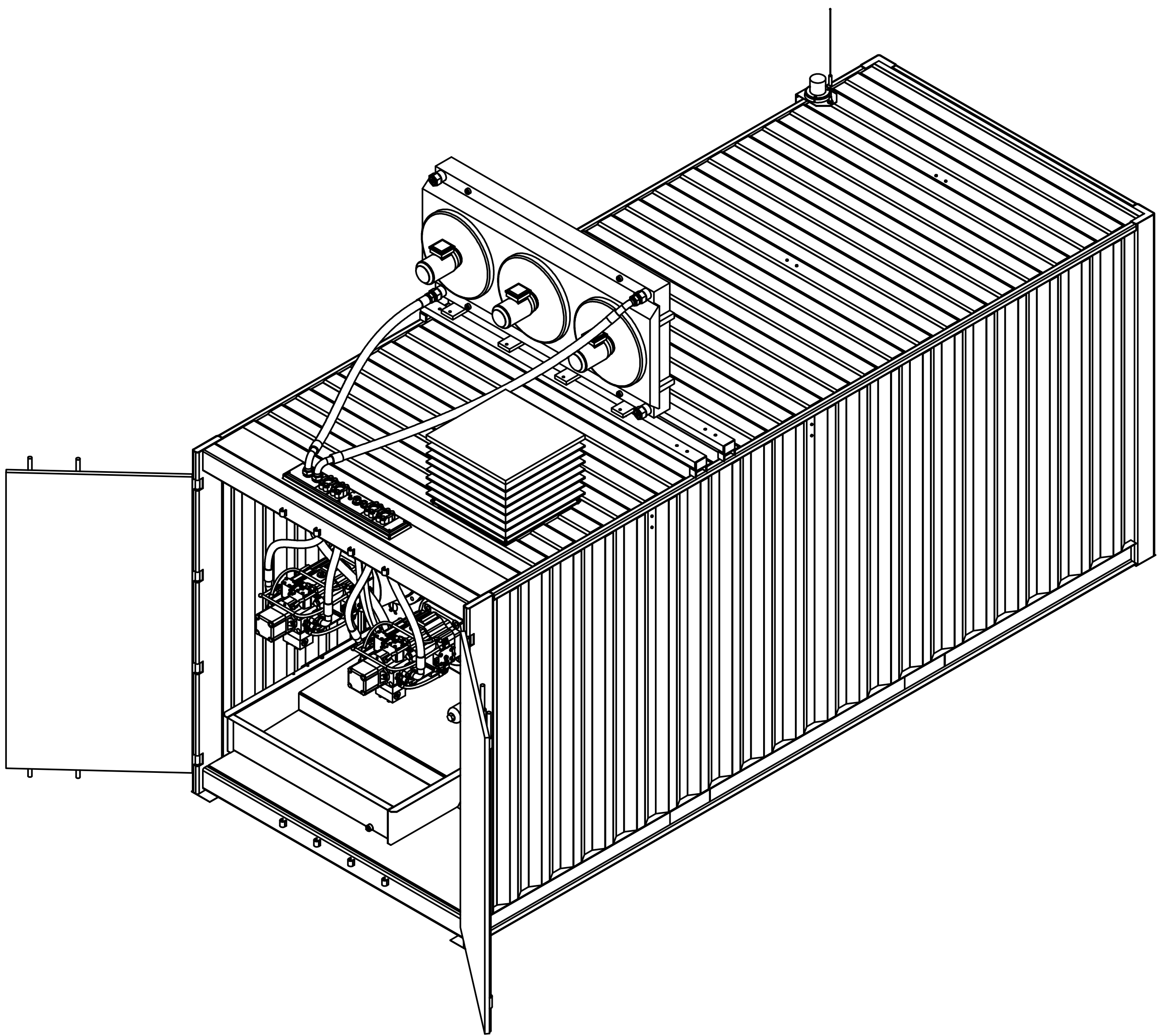
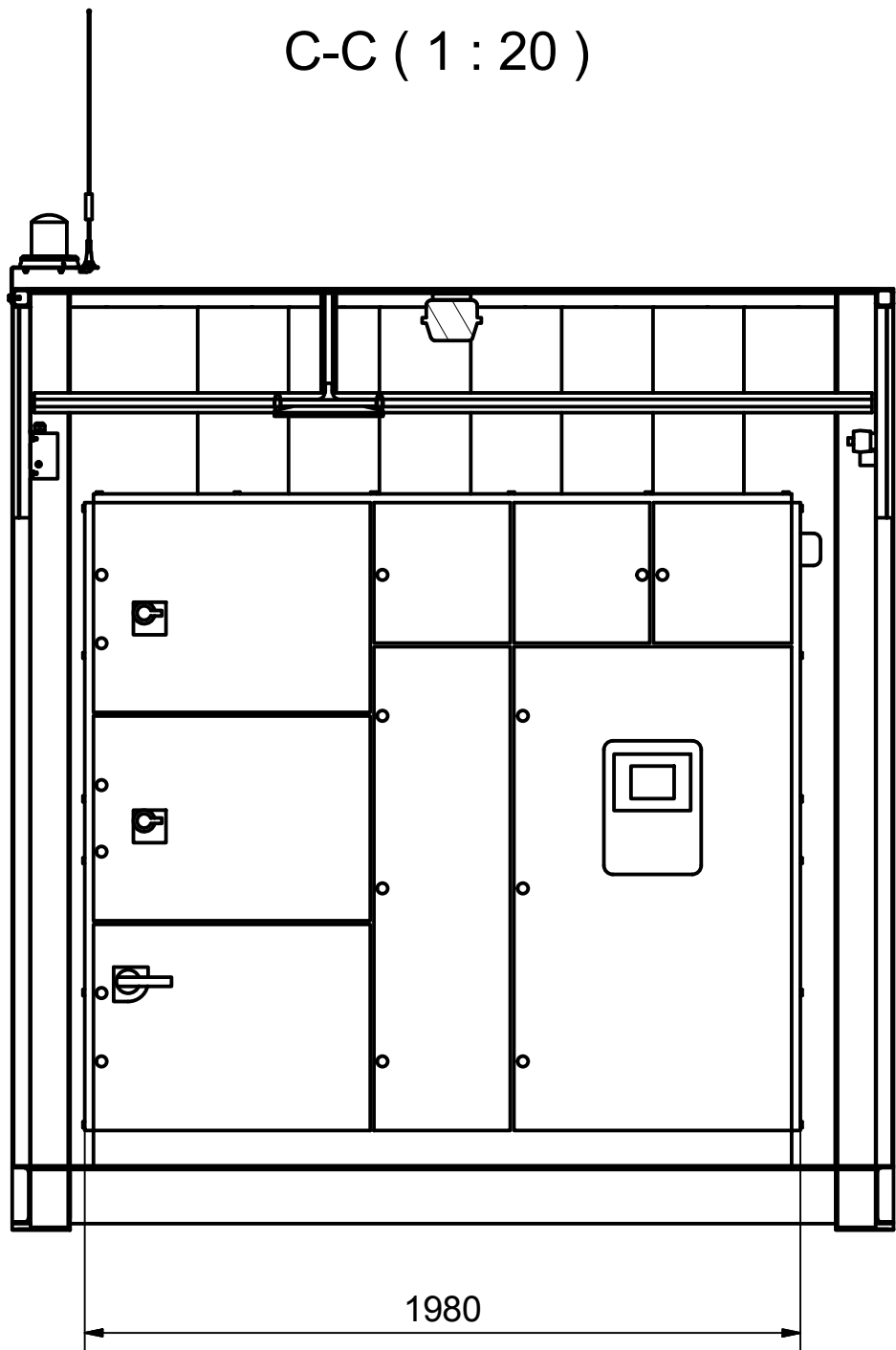
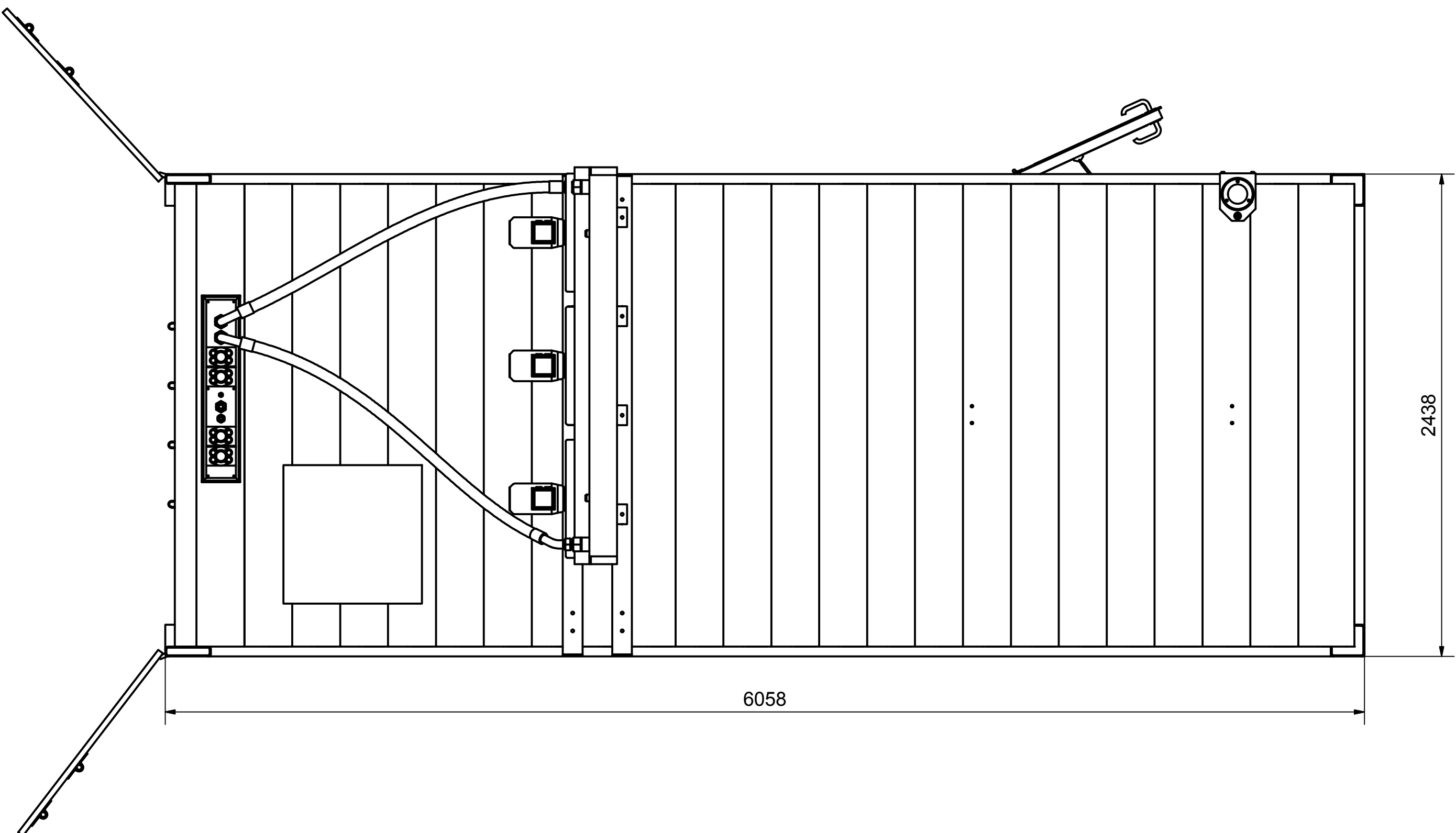
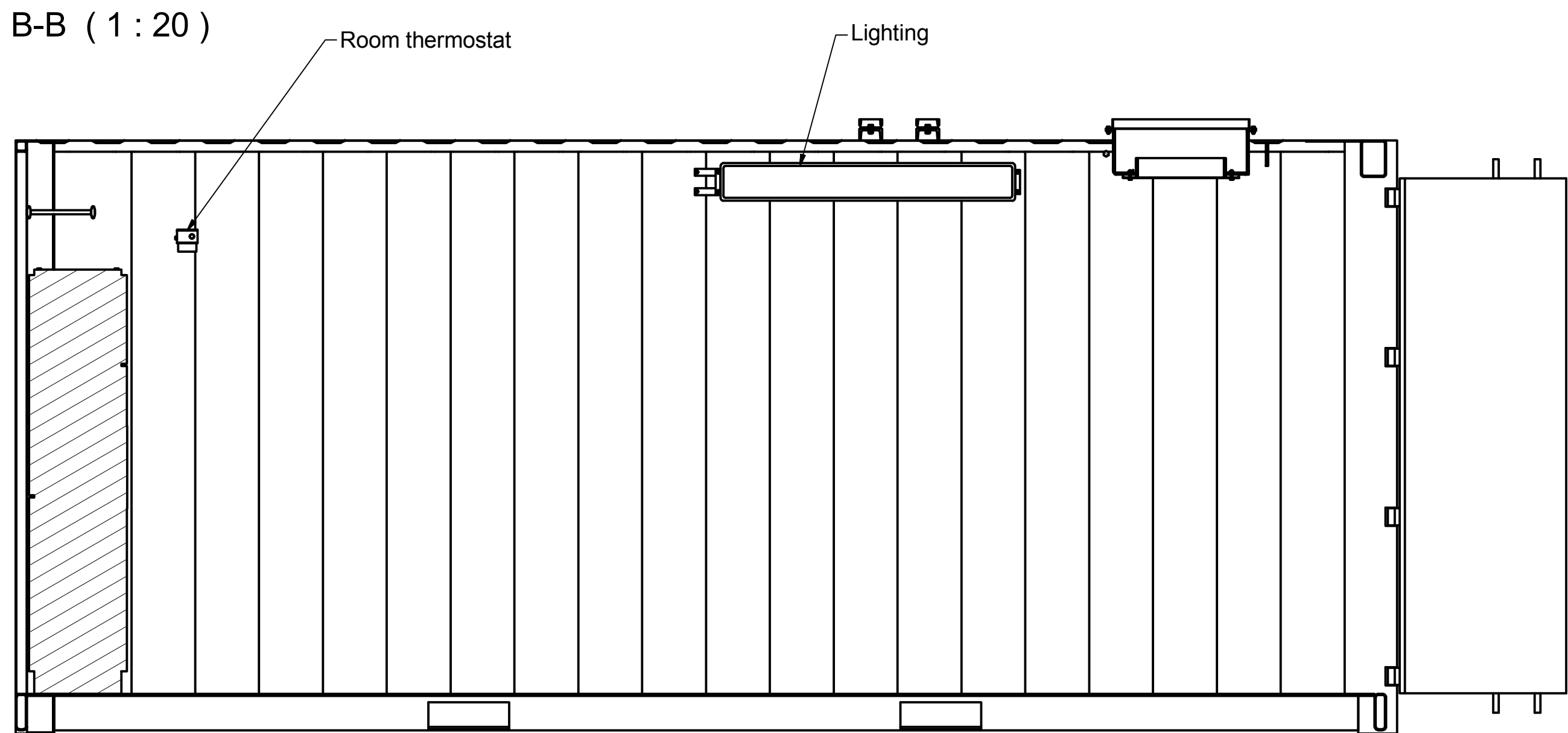
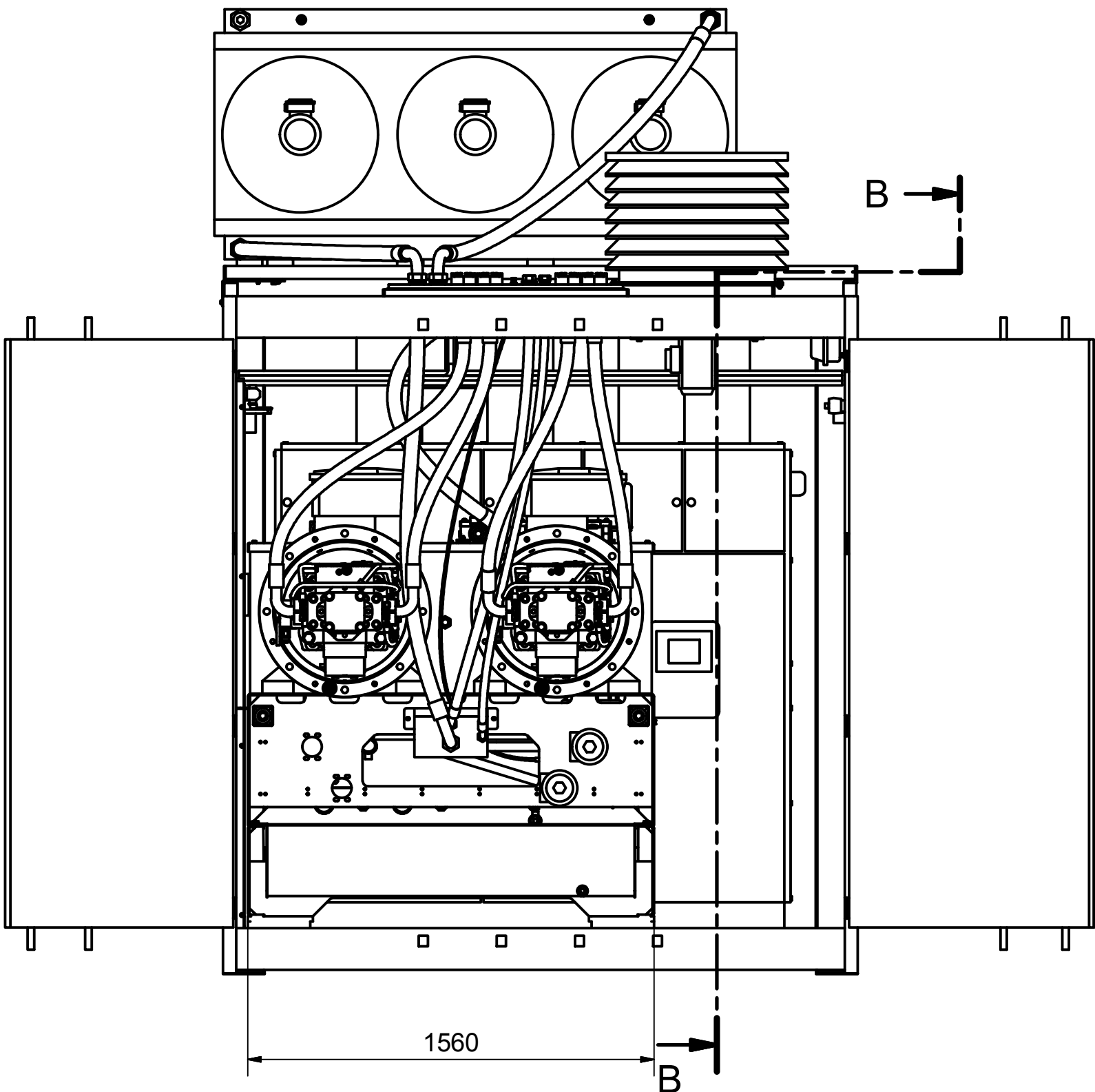
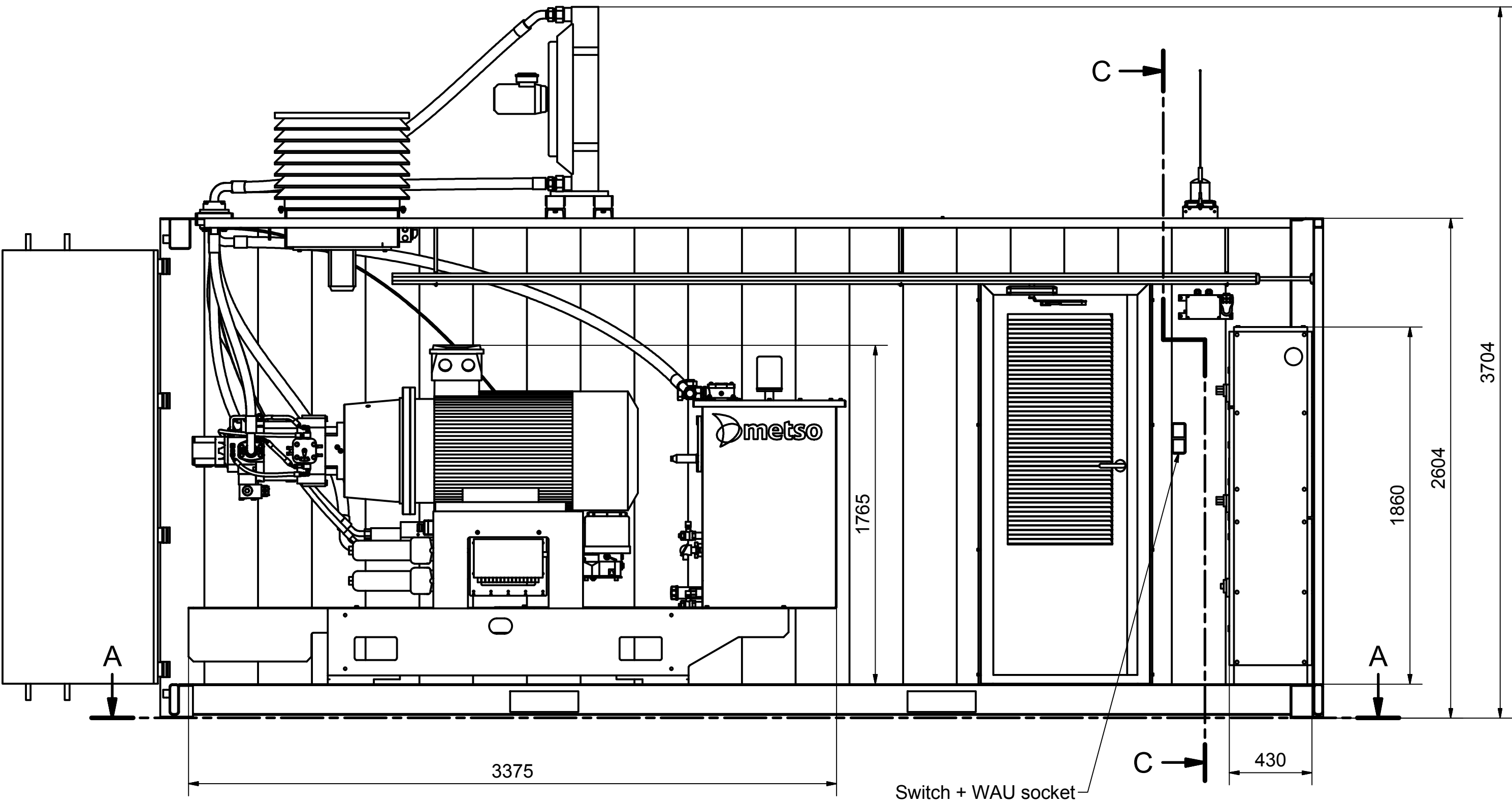


D	Power Pack foundation changed	2013.05.01	HS
C	Power Pack foundation and weight changed	2011.06.21	HS
B	Weight on Power Pack changed	2010.06.18	HS
A	Power Pack foundation changed	2010.04.21	HS
REV.	TEXT OF REVISION	DATE	SIGN.
 metso Metso Denmark A/S Vejlevej 5 DK-8700 Horsens Tel.: +45 7626 6400 www.metso.com/recycling		Scale 1:50	Drawn 2009.06.11 HS Check 2009.06.23 JK
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Dimensions without specified tolerances according to ISO 2768-mK and ISO 13920-BE .		GPS according to EN ISO 8015	
Title Shredder Foundation plan M&J EtaPreShred 6000 S		 Weight: _____ kg DRWG.No. 17 83 69 REV. D	



B	Cutting Table updated	2012.07.05	HS
A	Drawing updated	2011.07.06	EME
REV.	TEXT OF REVISION	DATE	SIGN.
 Metso Denmark A/S Vejlevej 5 DK-8700 Horsens Tel.: +45 7626 6400 www.metso.com/recycling		Scale 1:20	Drawn 2010.06.02 BBE
			Check 2010.06.02 KF
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Dimensions without specified tolerances according to ISO 2768-m and ISO 13920-BE			
Title Hopper 4-sided			Weight - kg
M&J EtaPreShred 6000 S		Drawn No. 18 12 24	Rev. B

A selection of components
are made invisible in this view
to show what is relevant.



Weights:

Container: 2,5 T
Power Pack: 5,1 T
Main panel: 1,0 T
Total weight: 8,6 T

The loads are with 2,6 T on footplates A
and B
distributed and with 1,7 T on footplates
C and D.

A Drawing updated		2011.07.04	EME
REV.	TEXT OF REVISION	DATE	SIGN.
		2011.02.03	BIL
		2011.02.08	JDH
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Dimensions without specified tolerances according to ISO 2768-m and ISO 13920-BE			
Container 20', arrangement drwg		kg	
M&J EtaPreShred 6000 S		18 32 22	A



M&J Eta®PreShred 6000 Stationary

Photos







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