

	Zinc Nickel Plating & Passivation Line	Operating Instructions	23-109	Date: 07/08/2024
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System Power-up, Stand-by and Shutdown

System Power Up

The following procedure should be used to power up the system following a loss of power, shut down or an emergency stop.

1. Check compressed air and water inlet valves to the system are open.
2. Visually check around the line to ensure that the area is clear of personnel and equipment.
3. Move the main electrical isolator to the closed (on) position.
4. Close all local electrical isolators.
5. Reset the 'E' stops and ensure that none of the emergency stop buttons are depressed.
6. Press the 'control on' button on the main control panel.
7. Check to see if any fault messages are displayed on the HMI. If any fault messages are shown these should be investigated before continuing the system power up procedure
8. Follow LINE OPERATING INITIATION

Note: Some messages may appear during start up, e.g. solution temperature errors, oven fault condition, etc. The Drying oven must be reset locally on the oven panel. (See specific O&M for oven controls) section 5 -5.5 Caltherm.

Once all tanks are reading the correct temperatures, the drying oven has warmed up and there are no errors on the HMI, the system is ready to process.

System Standby

When the plant is not in use it should be left in auto mode. The following procedure should be followed:

1. Leave main isolators closed (on)
2. Leave 'E' stop circuits live.
3. Leave compressed air supply on.
4. Leave extraction system running with lids closed.

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Shut Down Procedure (for maintenance only)

**THE LINE SHOULD BE LEFT POWERED ON AT ALL TIMES UNLESS
MAINTENANCE IS BEING PERFORMED**

In order to shut down the plant, the following procedure should be followed:

1. Allow all processes to finish by stopping supply of components to the line.
2. Allow the Drying oven to continue to run and cool down after the last process cycle has finished.
3. Press an emergency stop button.
4. Turn the isolator on the main electrical panel to the open (off) position.
5. If carrying out maintenance with the line live, ensure maintenance mode is selected at the main panel using the “trapped” selection key and then remove the key to ensure the line is locked into maintenance mode. All functions are now manually driven using handheld HMI unit or local HMI controls on the line.