

	IR FURNACE DUST FREE CLEANING	DOC NBR: TEC-210
		APRVD: JMC 5/23/11
Procedure		PAGE 1 OF 1

CLEANING THE FURNACE.

To clean the furnace (furnace, dryer, or oven) of dust, proceed in the following order:

1.0 GENERAL

- 1.1 Make sure furnace is DISCONNECTED from facility power.
- 1.2 Remove panels to enable access to the high voltage safety enclosure (the one with circuit breaker, contactors and the furnace main transformer) and the lower electrical bays (the one with the 3 furnace phase transformers).
- 1.3 Use a vacuum cleaner to remove dust and debris from all areas.
- 1.4 Replace panels to cover these bays. DO NOT reconnect facility power.

2.0 CHAMBER

The insulation is soft, but has ridgizer on the surface to harden it (like anodizing) so mechanical cleaning / scrubbing is not advised. However, you can use air as described below.

- 2.1 Place a blower (~400 cfm or more) at the entrance opening of the furnace chamber. Tape the blower duct to the metal panel around the entrance opening.
- 2.2 Place a large fabric filter bag (cloth bag) at the exit opening of the furnace to trap the dust. Tape the fabric filter bag to the metal panel around exit opening.
- 2.3 Open the furnace process gas or CDA supply valve. Set flowmeter for each zone and cooling section to 75% full scale; baffles and transition tunnel to 50% full scale; and exhaust eductor venturis and lamp plenums to 100% open.
- 2.4 Operate the blower for over an hour to dislodge particles inside the chamber and trap them in the filter bag.
- 2.5 Shut down blower, remove duct from opening. Shut down furnace process gas. Remove filter bag.

3.0 ROLLERS

To pick up small particles (<5 µm) left on the belt rollers, use acetone or isopropyl alcohol on a lint-free cloth and wipe the roller surfaces. Do not pour acetone or alcohol directly onto the roller surface.

CAUTION: Make sure you use acetone or isopropyl alcohol. Other solvents or types of alcohol may have a detrimental affect on the EPDM roller surface. DO NOT get acetone on any of the painted or plastic surfaces of the furnace.

4.0 RESTORE POWER TO FURNACE

Start up furnace by pressing “ON” button on control console.

5.0 ULTRASONIC BELT CLEANER (if so equipped)

Cycle ultrasonic cleaner/dryer (UCD) to clean belt and immersion tank of debris. Make sure to run the cleaner long enough to clean the full length of belt.