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AMS Curing Oven Generic Guide || Operator Manual || Quick Reference Sheet

A. Receiving your oven

Upon delivery of the oven, inspect oven for damage before signing paperwork. Once paperwork is signed, unless damage is discussed and noted, the freight company is most likely free and clear of any insurance claims on possible damage.

Damages to look for:

- Dents and scratches
- Bent Parts
- Shattered Parts
- Missing Parts
- Broken Parts
- Other defects or oddities that do not below on a new machine

B. Moving the oven in place and pre-electrical checks

Move the oven into position in the factory. A pallet jack or forklift may be needed. If the oven is to be rolled into place, be sure to grab and push the oven on the painted tan steel frame. Do not place heavy forces on other areas of the oven as some parts may not be able to handle bending and pulling forces associated.

Once in place, do not hook up the electrical power! Make sure a qualified industrial electrician (not a residential electrician) is on site for inspection and assistance. First, open the oven doors which are spring assisted. Also open up the electrical cabinet. Inspect the electrical cabinet for loose connections as occasionally during shipment things can become loose. Gently tug on the wires one at a time and make sure they do not come loose. If they come loose, re install and re torque the connection, contact AMS to let them know as well. There may be some wires that need to be hooked up, they may be disconnected for shipment. Follow labels on the machine and contact AMS if assistance is needed.

After the electrical wire check, the resistances to each of the heater zones need to be checked and confirmed with the numbers on the AMS test sheet. Also check the connections to ground to make sure there are no shorts.

Once resistances are checked, power can be connected. On the oven heavy gauge wire is used, so it is smart to tighten it up, let it rest for 15-30 minutes and then re-torque. Copper is soft and malleable. It has a tendency to form to the terminal and can come loose if not re-tightened. Make sure electrical power to the machine is dead (off, disconnected, etc).

If the power cord is properly connected and torque, check the breakers in the electrical cabinet. Turn all of them off (green). Also turn off all switches (On/Off) near the temperature controllers at the operator panel. Power can now be applied to the oven. Check the power distribution block for proper 3 phase power 480V or 240V depending on the oven you ordered. Once proper power is applied and checked, the breakers can be turned on inside the main electrical box, one at a time.

Power supplies should light up, transformers should be active and motor controls etc. Should all be under power. Check voltages at power supplies and transformers for proper operation.

The oven can now be tested on site prior to operation. Check to make sure the conveyor belt (if applicable) is installed and there are no rips or problems. Press the start button on the operator panel and adjust the line speed with the potentiometer. Adjust then tension as necessary. When the oven is actually under heat, the belt will grow and tension will have to be adjusted. Belts will wear out quickly depending on process parameters.

Individual oven zones are the last items to be tested and most important. They should be turned on individually. An amp clamp needs to be on hand to check proper amp draw. Have the electrician contact AMS to review this procedure. 561-833-9898.

Oven Test Specifications

Hot Box _____

Zone 1 _____

Zone 2 _____

Zone 3 _____

Zone 4 _____

Additional Notes _____

General Instructions on operating the machine (Process parameters are up to customer)

Start and Stop the Conveyor
Press the green start button to make the conveyor go
Press the red button to make the conveyor stop
Adjust the knob to change speed

Temperature Controller
Adjust temperature controller based off of hardware manual provided

Belt Adjustment
Adjust the belt tension so the belt is not sagging. Too tight will damage the belt and cause premature wear. All belts and ovens are custom so exact tension will vary. Each customer will vary.

Recommended Spare Parts List

Belt (every 1-3 months)
AMS Part #PAN-769.3/6

Secondary Oven Heaters
Tubular Steel Heaters 240V
AMS Part #77/8/3kw

Hot Box Glass Heaters
Quartz Tube Heaters 240V
AMS Part #26-5/8/1500-240

Solid State Relays
AMS Part#AD-SSR-24DC