



**INSTALLATION AND OPERATION OF DEI STEAM NOZZLES**

**Prior To Installation**

1. Check the steam supply pressure and make sure it is maintained at a constant level, or within a specified range.
2. Check to be sure all valves are in the tight closed position.  
**Place a lockout/tagout on the main steam supply.**

**Installation**

1. Provide a separate nozzle for each piece of equipment or apparatus.
2. Tap steam supply off the top of the steam main to obtain dry steam and to avoid steam line condensate.
3. Install a shut-off valve before and after the steam nozzle to allow maintenance work without steam main shutdown.
4. Pipe condensate discharge line to the lowest point from the equipment to avoid water pockets and or water hammer.
5. Install the strainer and blowdown valve provided ahead of the nozzle to keep rust, dirt and scale from entering the steam nozzle. The blowdown valve will allow foreign material to be removed from the strainer.
6. Install unions either side of the steam nozzle system to allow easy removal and/or access for service of the steam trap.
7. Install a check valve downstream of the steam nozzle to prevent condensate backflow.
8. **Do not** install a bypass unless there is an urgent need for one. Bypasses are often left open--causing loss of steam and inefficient operation of equipment.

**NOTE: The Steam Nozzle must be installed with Teflon tape. Do not use pipe dope under any circumstances.**

9. To ensure warranty coverage, you must attach the date code label tag (attach with wire included with tag) on to the steam nozzle after installation.



### **After Steam Nozzle Installation**

1. Check that all required valves are in the full open position (supply, upstream shutoff, downstream shutoff).
2. Check steam pressure. It should be at or above the **minimum** required pressure.
3. Shoot the pipe before and after the Steam Nozzle (both sides within 3") with an infrared gun to get the temperature across the nozzle. There should be a minimum of 10 -15 degree drop after the Steam Nozzle.
4. Open the strainer/blowdown. There should be an initial gust of condensate and steam as the blowdown is opened, followed by a continuous flow of live steam.

### **Seasonal Changes**

At the beginning of every heating season the system should be blown down to remove any built-up scaling in the piping system. The steam strainer should be taken apart, cleaned and inspected a minimum of once a year.

### **If there are condensate removal problems, check the following before contacting us.**

1. Check steam pressure to equipment.
2. Blow-down steam strainer. Clean the strainer.
3. Check all shut-off valves make sure all are in the open position.
4. Check control valve to equipment . Is system under proper control?
5. Check condensate return receivers to verify proper pumping of condensate.
6. Verify proper operation of related equipment