

# INSTALLATION SECTION

## **Narrow Body Tunnel Finishers**

**CFS40, CFS50, CFS90, CFS150, CFS300**



401 N. Lincoln ☎ P.O. Box 72 ☎ Colville, WA 99114-0072 ☎ U.S.A.

Tel: (509) 684-4505 ☎ Fax: (509) 684-4500

E-mail: [sales@colmacind.com](mailto:sales@colmacind.com) ☎ Website: [www.colmacind.com](http://www.colmacind.com)



---

## INSTALLATION

---

---

### INSTALLATION INSTRUCTIONS

---

Upon delivery, visually inspect the crate and visible parts for shipping damage. If the crate or cover is damaged, or signs of possible damage are evident, have the carrier note the condition on the shipping paper before the shipping receipt is signed, or advise the carrier of the condition when it is discovered.

Remove the crate and protective cover as soon as possible and check for internal damage or unsecured parts. A claim should be filed with the carrier as soon as possible for any damaged or missing parts.

The tunnel finisher should be set on a smooth, level floor. Make sure the machine is level. It is not necessary to bolt or lag this machine to the floor.

Careful consideration should be given to the placement of the machine for optimum productive flow and easy maintenance. A minimum of 24" (609.6 mm) should be allowed between the machine and closest structures.

✓ **NOTE:** The 24" (609.6 mm) is considered a minimum working and maintenance dimension and should be increased if possible.

---

### OPTIONAL LEVELING PAD INSTALLATION

---

Your machine's deck has been built to reduce corrosion caused by moisture collecting under the deck plate. For even better efficiency, optional Colmac leveling pads may be installed in each 1/2" (12.7 mm) hole on the deck angle.

1. Lift the tunnel from the pallet with a forklift or crane.
2. While the machine is lifted, install leveling pads by first removing the top nut, leaving the bottom nut and washer on the pad, and then slipping each pad into the 1/2" (12.7 mm) holes in the deck's angle.
3. Set the machine down and adjust the leveling pads.

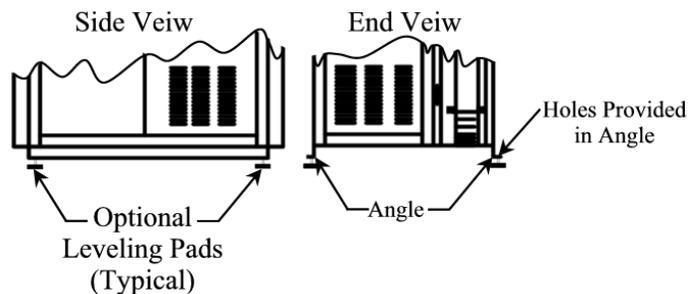


Figure 1

---

**SUPPLY CONNECTIONS**

---

---

**ELECTRICAL**

---

# **WARNING!!**

## **Machine Must Be Electrically Grounded!**

**Failure to attach an EARTH ground could result in damage to any solid state device!**

**DO NOT USE PLUMBING FOR GROUNDING!!!**

The tunnel has a manual disconnect which should be connected to the facility power system in accordance with local codes. Consult the "**Specification**" sheet to determine total amperage requirements of your system. Make sure the electrical supply voltage is the same as required by the machine.

At the first trial of the electrical connections, make sure the rotation of all blowers is as marked. Be sure to check each blower for proper rotation.

✓ **Do not wire any auxiliary equipment into the control box of this machine!**

---

**PROPER STEAM HOOK-UP**

---

*During the winter season, the factory will run antifreeze through the steam system and then blow it out to prevent frozen pipes in shipment. Before operating, open traps and purge; and also, check ASCO valves to be sure they are not stuck.*

Prior to steam hook-up, the pigtail and gauge need to be re-installed. These were removed before shipment to keep them from breaking off. Simply screw back in at the union as shown in (Figure 2).

The steam and return system connections are very important. Poor steam quality or incorrect connections directly affect its performance. (Reference Figure 3)

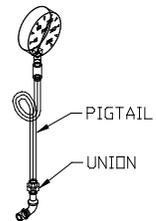


Figure 2

1. To insure adequate steam supply, the steam line should be 1-1/4" (32mm) or larger and the return line should be 3/4" (19mm). The factory recommends the larger supply sizes to compensate for line loss. Since the tunnel is equipped with steam traps, no additional traps are required. Never put one trap in line with another, as the traps will no longer function. Be sure to check all steam connections for leaks. A strainer should be put into the steam line. All steam lines should be insulated to prevent loss of heat and possible injury to personnel.
2. **Supply Line:** Connect the steam line to the top of the steam headers as shown in Figure 3 to insure a clean, dry steam supply.

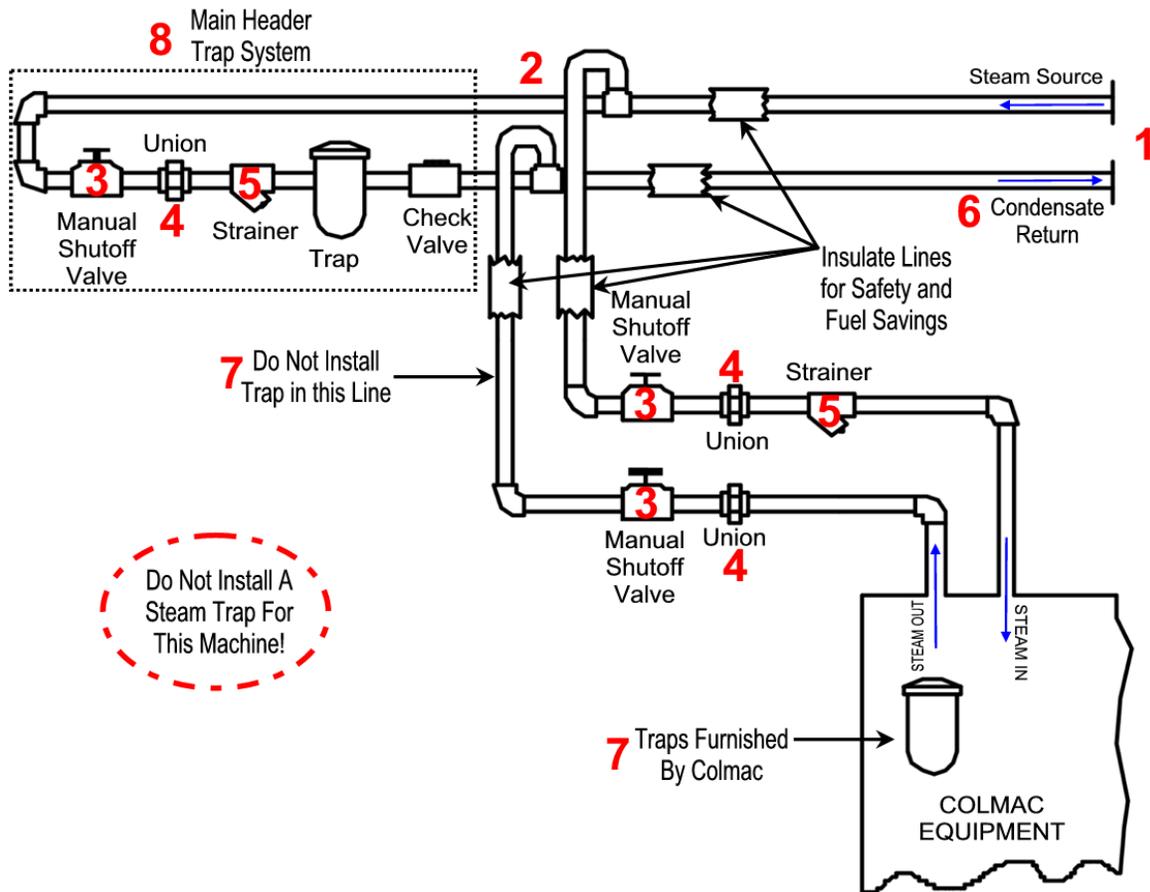


Figure 3

3. **Shut-off valves** installed ahead of the union and strainer on the "steam-in" and "steam-out" lines and between the union and return header on the "Main Header Trap System" (8), will simplify shut-off for repair and maintenance. "Ball" or "Gate" type valves are recommended for maximum flow.

4. **Unions** placed between the shut-off valve and the machine will simplify hook-up and disconnection between the steam supply and the machine.
5. The **strainer** is important to insure that the steam is free of foreign materials that could foul electric valves, traps and other components in the steam system of the machine.
6. **Condensate Return System:** Connect the condensate, return pipe to the top of the return header to prevent foreign material from being drained back into the return system of the machine.
7. **Do not install a steam trap for this machine.** Your Colmac Machine has traps and a check valve already installed as part of the return system. If a trap is installed outside the machine, the steam and return systems will not function properly.
8. To assure clean, unsaturated steam to your equipment, the main steam header(s) should be trapped. This will help prevent condensate in the steam lines and increase the efficiency of the steam-heated equipment.

---

## STEAM HEATING COIL

---

- Prior to initial startup, clean coil with a commercially available coil cleaner.
- To prevent plugging of tubes, clean the piping system and blow down all strainers prior to initial startup.
- On startup, feed steam to the coils slowly to avoid thermal shock loadings.
- Make sure the steam has been on for a minimum of 15 minutes prior to starting the fans or opening dampers.
- During initial startup, tighten all bolted connections once the system stabilizes at operating temperature.