# **Skidmore Vertical Condensate Neutralizer**

#### Installation, Operation and Maintenance Manual



# **A WARNING**

- 1. Skidmore condensate neutralizers should only be installed by a qualified professional.
- 2. Read all instructions before installing. Perform steps in the order given. Failure to comply could result in substantial property damage, severe personal injury, or death.
- Do not allow flue gases to vent through condensate neutralizer. All condensate drain lines must have a gas trap before entering the neutralization unit. Failure to comply could result in substantial property damage, severe personal injury or death.
- Skidmore neutralizers should only be connected to a condensate outlet that is installed per the appliance manufacturer's instructions. Failure to comply could result in substantial property damage, severe personal injury, or death.

### **MOUNTING OPTIONS**

- 1. It is recommended that Skidmore condensate neutralizers be installed as close as possible to the outlet of the gas trap. Refer to Fig. 1 for proper piping layout.
- 2. Care should be taken when selecting mounting hardware. It is recommended that a mounting bracket capable of supporting the weight of a fully
- 3. charged neutralizer kit be used. This will vary depending on the model.



#### SCN2-220VK

# IMPORTANT

- 1. All piping should be in accordance with relevant building and mechanical codes, as well as any local, state or federal regulations.
- 2. Do not connect more than one appliance to each neutralizer.
- 3. Neutralizer should be installed below all traps and condensate outlets.
- 4. Do not use pipe dope on threaded fittings use only Teflon tape. Skidmore Model SCN2V-220 may be installed in the vertical position. For horizontal installations, refer to Skidmore Tube Style IOM.
- 5. All piping should be in accordance with relevant building and mechanical codes, as well as any local, state or federal regulations.
- 6. Do not connect more than one appliance to each neutralizer.
- 7. Neutralizer should be installed below all traps and condensate outlets.
- 8. It is recommended that the neutralizer be installed before the condensate pump.
- 9. All condensate traps should be primed before commencing operation of the appliance.
- 10. Skidmore condensate neutralizer media should be replaced at least once a year or when pH falls below local regulations.

# INSTALLATION

- 1. Skidmore condensate neutralizers include built-in unions with ½" NPT tappings at either end.
- If using PVC pipe, apply Teflon tape to the threads of provided PVC socket adaptors and attach to neutralizer. Do not over tighten.
- 3. Identify suitable location for assembled condensate neutralizer. **Observe direction of flow as indicated on neutralizer**.
- 4. Position and secure the mounting brackets
- Prime and glue PVC pipe to fittings.
  Note: If using flexible tubing, be sure to use hose clamps at barb fittings.

**Note:** It is recommended that PVC pipe be used wherever possible as this will reduce any risk of tube kinking. Skidmore provides two  $\frac{1}{2}$ " M NPT x  $\frac{3}{4}$ " PVC socket adaptors for this purpose

- Route PVC pipe or tubing to drain or pump, maintaining a pitch of ¼" per foot.
- 7. Fill condensate trap with water until flow is established through neutralizer.
- 8. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.

MAINTENANCE

- 1. All service items should be undertaken by a qualified professional.
- 2. Visually inspect unit for signs of leaking or damage.
- Neutralizer media should be replaced at least once a year or when pH falls below local regulations. Neutralizer efficiency can only be determined by measuring pH level of condensate outflow.
- 4. Unscrew unions at both ends of neutralizer. If necessary, rotate cartridge to release O-ring.
- Remove cartridge and dispose of old media. Rinse inside of cartridge. Add replacement media. Replacement media kit #S22RCK-S
- 6. Check to make sure that O-rings are in place before reinstalling cartridge. Stainless steel screen must be on bottom end of cartridge when reinstalling. **Do not over-tighten**.
- 7. Prime flue gas trap with a minimum of 1 gallon of water.
- 8. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.

**NOTE:** Caution: Do not lose the O-rings at either end of cartridge.



