

ACIDIC CONDENSATE WASTEWATER pH TREATMENT SPECIFICATION

~ Condensing Boilers, Furnaces, Hot Water Heaters, Flue Economizers, Flue Drains~

Part 1 – GENERAL / **Heater Units with BTU Inputs of 1-225 MBH**

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications, apply to this Section.

1.2 SUMMARY

A. This section includes Fireside acidic condensate wastewater treatment.

B. Related Sections include the following:

1. Division 23 Section "Breeching, Chimney, and Stack Drains.

2. Division 23 Section "Acidic condensate collection and treatment.

3. Division 23 Section for control wiring for automatic pH treatment control of acidic condensate wastewater.

1.3 SUBMITTALS

A. Product Data: Include rated capacities; shipping; installed, and operating weights; furnished specialties and accessories for each model indicated.

B. Shop Drawings: Detailed equipment assemblies and indicated dimensions, required clearances, and method of field assembly, components, and location and size of each field connection.

C. Maintenance Data: Include in the maintenance manuals specified in division 1. Include parts list, and maintenance guide.

1.7 WARRANTY

A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents. Installing contractor shall provide one year of warranty parts and labor.

B. Special Warranty: Submit a written warranty, executed by the contractor for the Inline Tube Neutralizer.

C. Warranty Period: Shall be two year from date of Commissioning for manufacture's defects. The warranty does not include recharging of the tube.

PART 2 - PRODUCTS

2.1 MANUFACTURES

A. Available Manufactures: Manufacturer shall be a company specializing in the manufacturing of the products specified in this section with minimum five (5) years experience.

B. Service Access: Via clamped couplings.

C. Testing: Contractor shall test pH level at the outlet of the tube with a digital pH meter and submit a report to the design Engineer.

1.4 Manufactures

A. Manufacturers: JJM BOILER WORKS, INC. is the basis of design. Listed acceptable manufacturers shall be subject to compliance with the requirements. Provide pH treatment inline tube(s) by one of the following:

MODEL: **CBM-225** Acidic Condensate wastewater pH Treatment Inline Tube.

1. JJM Boiler Works, Inc.
2. Viessmann, USA
3. Nu-Con Company

The active ingredient shall be Magnesium Hydroxide Pellets. Limestone, calcite flakes, and marble chips will not be accepted on this project.

1.5 COMPONENTS:

- A. Two 2" Plastic snap clamps with mounting holes.
- B. Pre-charged Magnesium Hydroxide Pellet Tube.
- C. Two: .5" NPT x .75 O.D. Barb fittings.
- D. Two: Poly Coupling for Schedule 40 PVC pipe
- E. Four: Tube clamps
- F. Tube shall be Polypropylene one piece clear.

2.2 Product Rating:

- A. Shall be rated up to 225 MBH
- B. Flow rate shall be up to 1.70 GPH
- C. Horizontal Mounting Only.

2.3 COMMISSIONING:

1. Contractor shall engage a Factory-authorized service representative to provide startup service or commissioning may be done by the contractor. Start up to be performed only after complete boiler room operation is field verified by the installing contractor. One Year labor and parts warranty shall be provided by the contractor.