



## The Skidmore® X-POT COMPACT® Engineering Specification

### CLOSED LOOP HEATING AND COOLING WATER TREATMENT SYSTEM

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. This section specifies cleaning and treatment of circulating HVAC water systems, including the following:

1. Closed Loop Cooling Systems
2. Closed Loop Heating Systems

##### 1.2 REFERENCES

A. ASHRAE 2015 HVAC APPLICATIONS

- Chapter 49 Section 49.1, 49.2, 49.4, 49.9, 49.18

##### 1.3 DESCRIPTION

A. The Skidmore® X-POT COMPACT® assists Hydronic Heating and Cooling Systems to remain reliable and run at their intended design capabilities, by keeping the Thermal Fluid within the system filtered, clean and free from suspended particulates. This also allows Chemical Inhibitor's and Biocides to remain effective thus reducing the accumulation of Corrosion, Scale and Bio-film deposits which would otherwise cause flow loss, degradation of plant and pipeline material, as well as reduced system reliability, increased operational costs and reactive maintenance costs, water losses and reduced lifespan of system components.

This is achieved by a combination of functions, as the X-POT acts as an all-in one:

- Magnetic Filter
- Cartridge Filter (down to 0.5 micron)
- Shot Feeder (For adding Water Treatment Chemicals)

#### PART 2 - PRODUCTS

##### 2.1 SLIPSTREAM WATER FILTRATION AND TREATMENT DEVICE

A. The Contractor shall furnish and install a full slipstream filtration device that incorporates a



shot feeder, magnetic filter and cartridge filter all in one device as shown and detailed on the contract documents. The product provided shall be the Skidmore® X-POT COMPACT® manufactured by Skidmore of Benton Harbor, MI or an approved substitution.

**B. Product Description**

The product shall be all stainless steel construction including all valves and fittings. Maximum working pressure shall be 150psi with flow rates up to 6.3 Gal/min with a temperature range of 32 to 200F. Dosing capacity shall be a minimum of 1.18 Gallons and Cartridge Filtration range to be no less than 100 to 0.5µ. Magnetic filtration shall consist of no less than four (4) rare earth magnets designed for easy removal and cleaning. Unit to include an automatic air vent. Total system volume capacity shall be no more than 9,130 Gallons. The product must be provided with ½" isolation and drain valves and an insulation jacket. The product must be provided with self-supporting wall-mounting brackets.

**C. Spare Parts**

The product shall be furnished with a quantity of one (1), 100µ, start-up filter.

**PART 3 - EXECUTION**

**3.1 EXAMINATION**

- A. Verify field conditions and suitability for installation according to manufacturer's published installation data.

**3.2 INSTALLATION OF SYSTEM EQUIPMENT**

- A. Contractor or supplier shall furnish X-POT insulation, sight flow indicator and automatic balancing valve as part of the installation.
- B. Install equipment per manufacturer's published O&M Manual

**3.4 EQUIPMENT MAINTENANCE**

- A. To ensure optimal equipment performance and system protection, clean magnet grates, check filters and test water chemistry quarterly. Replace filters and add inhibitor as required.