SECTION 15031

strainers

# general

## work of this section

### The Work of this Section includes providing strainers as indicated, complete and operable.

## reference codes and standards

### Reference Specification, Codes and Standards shall be in compliance with Section 15000.

## submittals

### Submittals shall comply with the requirements of Sections 01300 and 15000. In addition, the following shall be submitted:

#### Manufacturer's product data including catalog cuts.

#### Shop drawings showing details and dimensions.

# products

## general

### **General:** Only products certified as complying with the indicated requirements shall be provided. Strainers shall be of the Y-pattern type with flush connections, have cast iron or bronze bodies, stainless steel or Monel screens, and screwed ends for sizes 3 inches and smaller and flanged ends for sizes greater than 3 inches. They shall be designed for not less than 250 psi working pressure in sizes 3 inches and smaller, and 125 psi working pressure in sizes over 3 inches.

### **Equipment Requirements:** Unless otherwise indicated, the strainers shall be provided with the components as follows:

#### **Air and Gas Strainers:** Air and gas line strainers shall have a cast-iron body, with 40 mesh Monel screens packed with Everdur wool. Bronze bodies shall be provided with copper piping. Air line strainers shall be fitted with a brass blow off cock.

#### **Steam and Water Strainers:** Steam strainers shall have carbon steel body; water strainers shall have cast iron body. Bronze bodies shall be provided with copper piping. Strainers shall have 304 stainless steel screens and tapped and plugged blow off connections. Screen perforations shall be 0.020 inch for steam service and 0.045 inch for water service.

### PVC & CPVC Strainers

#### **Y-Strainers:** Sediment strainers shall be Y-type constructed from PVC or CPVC, O-rings shall be EPDM or Viton® Y-strainers shall have replaceable PVC, CPVC or type 316 stainless steel screens and O-ring sealed drain plugs with magnetic drain plug option. Threaded Y-Strainers shall have special reinforced (SR) threads. Y-strainers, sizes 1/2"- 2" shall be pressure rated to 150 psig, sizes 3" – 4" to 90 psig for water at 73°F.

#### **Basket Strainers:** Thermoplastic Basket Strainers shall be fabricated from PVC or CPVC, O-rings shall be EPDM or Viton®. Strainer baskets shall be perforated PVC, CPVC, or type 316 stainless steel perforated or wire mesh screen. Standard strainer perforations shall be 1/8" or 3/32" with a minimum open area ratio of 6:1, or specified perforation/mesh opening. Basket strainer sizes 2" – 8" shall have quick release clamp retained bonnet, sizes 10" - 12" shall have bolt on bonnet. Basket strainers shall be furnished with pressure release valve and safety pressure gauge. Unit shall be equipped with O-ring sealed drain plug at lower end. Basket strainer sizes 2" - 8" shall be pressure rated at 150 psig, sizes 10" – 12" to 50 psig for water at 73° F.

## manufacturers

### Armstrong

### Asahi America

### Crane Co

### G F Plastic Systems, Inc

### Spears

### Sureflow Equipment, Inc.

### Or approved equal

# execution

## installation

### **General:** Strainers shall be installed in accordance with the manufacturer's written installation instructions.

### Unless otherwise indicated, strainers shall be provided ahead of any control valves, regulators, steam and condensate traps, and where indicated, and they shall be preceded by shutoff valves.

end of section