SECTION 400589.13 - BASKET STRAINERS FOR PROCESS SERVICE

Note that this section has only been edited for NYSOGS standardization and has not been technically edited. The designer shall make all technical edits specific to the project for this section.

This Section specifies basket strainers for use in piping systems for water and wastewater treatment facilities.

Automatic straining equipment is specified in Section 466173. Process piping systems and appurtenances are specified in Divisions 40, 43, and 46.

Note that this section has only been edited for NYSOGS standardization and has not been technically edited. The design engineer shall make all technical edits specific to the project for this section.

1. GENERAL
   * + 1. SUMMARY
          1. Section Includes: Basket strainers.
          2. Related Requirements:

List other Sections directly related to or affecting Work of this Section. Include Sections specifying information expected to be found in this Section as well as Sections required to describe complete system or assembly requirements.

Section 466173 - Automatic Straining Equipment: Automatic self-cleaning strainers for continuous debris removal from piping systems that require uninterrupted flow.

* + - 1. REFERENCE STANDARDS

List reference standards included within text of this Section, with designations, numbers, and complete document titles.

* + - * 1. ASME International:

ASME B1.20.1 - Pipe Threads, General Purpose (Inch).

* + - * 1. ASTM International:

ASTM F1199 - Standard Specification for Cast (All Temperatures and Pressures) and Welded Pipe Line Strainers (150 psig and 150 degrees F Maximum).

ASTM F1200 - Standard Specification for Fabricated (Welded) Pipe Line Strainers (Above 150 psig and 150 degrees F).

* + - * 1. NSF International:

NSF 61 - Drinking Water System Components - Health Effects.

NSF 372 - Drinking Water System Components - Lead Content.

* + - 1. COORDINATION
         1. Coordinate Work of this Section with installation of process piping.
      2. SUBMITTALS

Only request submittals needed to verify compliance with Project requirements.

* + - * 1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
        2. Manufacturer’s installation instructions shall be provided along with the product data.
        3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
        4. Product Data: Submit manufacturer catalog information.
        5. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

Include separate Paragraphs for additional certifications.

* + - * 1. Manufacturer Instructions: Submit special procedures and setting dimensions.
        2. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
        3. Qualifications Statement:

Coordinate following Subparagraph with requirements specified in QUALIFICATIONS Article.

Submit qualifications for manufacturer.

* + - 1. CLOSEOUT SUBMITTALS
         1. Project Record Documents: Record actual locations of basket strainers.
      2. QUALITY ASSURANCE

Include this Article to specify compliance with overall reference standards affecting products and installation included in this Section.

* + - * 1. Materials in Contact with Potable Water: Certified to NSF Standards 61 and 372.

In following Paragraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

* + - * 1. Perform Work according to <**\_\_\_\_\_\_\_\_**> standards.

Include following Paragraph only when cost of acquiring specified standards is justified.

* + - * 1. Maintain <**\_\_\_\_\_\_\_\_**> [**copy**] [**copies**] of each standard affecting Work of this Section on Site.
      1. QUALIFICATIONS

Coordinate following Paragraph with requirements specified in SUBMITTALS Article.

* + - * 1. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum [**three**] <**\_\_\_\_\_\_\_\_**> years' [**documented**] experience.
      1. DELIVERY, STORAGE, AND HANDLING
         1. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
         2. Store materials according to manufacturer instructions.
         3. Protection:

Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.

Furnish temporary end caps and closures on piping and fittings and maintain in place until installation.

Provide additional protection according to manufacturer instructions.

* + - 1. EXISTING CONDITIONS
         1. Field Measurements:

Verify field measurements prior to fabrication.

Indicate field measurements on Shop Drawings.

* + - 1. WARRANTY

This Article extends warranty period beyond one year. Extended warranties may increase construction costs and State enforcement responsibilities. Specify warranties with caution.

* + - * 1. Furnish [**five**] <**\_\_\_\_\_\_\_\_**>-year manufacturer's warranty for basket strainers.

1. PRODUCTS
   * + 1. STRAINERS
          1. [Manufacturers](http://www.specagent.com/LookUp/?ulid=12697&mf=04&src=wd):

designer to provide two manufacturers and approved equivalent for all listed products.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

In following Paragraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

* + - * 1. Furnish materials according to <**\_\_\_\_\_\_\_\_**> standards.

Insert descriptive specifications below to identify Project requirements and to eliminate conflicts with products specified above.

* + - * 1. Description:

Simplex basket strainers are used where the pipeline may be shut down to clean or change baskets. Duplex basket strainers may operate continuously without having to be shut down for cleaning because when one basket is full, flow is shifted to other basket, which allows first basket to be removed, cleaned, or replaced.

Comply with ASTM [**F1199**] [**F1200**].

Type: Basket.

Port Size: [**1**] <**\_\_\_\_\_\_\_\_**> inch

Minimum Pressure Rating: [**150**] <**\_\_\_\_\_\_\_\_**> psig at 150 degrees F

* + - * 1. Materials:

Body: [**Cast bronze**] [**Cast iron**] [**Welded steel**] <**\_\_\_\_\_\_\_\_**>.

Cap: [**Bronze**] [**Iron**] <**\_\_\_\_\_\_\_\_**>.

* + - * 1. End Connections:

Flanged.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

Threaded, ASME B1.20.1

* + - * 1. Screen:

Material: Heavy gage, [**Type 316 stainless steel**] [**Monel**] <**\_\_\_\_\_\_\_\_**>.

Size: [**1/32**] [**1/16**] <**\_\_\_\_\_\_\_\_**> inch

Free Area: Minimum three times pipe cross-sectional area.

* + - * 1. Accessories:

Furnish threaded blow-off hole.

1. EXECUTION
   * + 1. EXAMINATION
          1. Verify that field dimensions are as indicated on [**Shop**] Drawings.
          2. Inspect existing flanges for nonstandard bolthole configurations or design and verify that new pipe and flanges mate properly.
       2. PREPARATION
          1. Thoroughly clean end connections before installation.
          2. Close pipe and equipment openings with caps or plugs during installation.
          3. Cleaning: Clean surfaces to remove foreign substances.
       3. INSTALLATION
          1. According to manufacturer instructions.
          2. Install strainers in accessible locations for cleaning.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

In following Paragraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

* + - * 1. Installation Standards: Install Work according to <**\_\_\_\_\_\_\_\_**> standards.
      1. FIELD QUALITY CONTROL
         1. After installation, inspect for interferences and proper supports.
         2. Repair damaged coatings with material equal to original coating.
      2. CLEANING
         1. Keep interior of basket strainers clean as installation progresses.
      3. DEMONSTRATION
         1. Demonstrate equipment startup, shutdown, routine maintenance, and emergency repair procedures to Director’s Representative

END OF SECTION 400589.13