

SECTION 15100VALVES AND SPECIALTIES - GENERALPART 1 - GENERAL1.1 DESCRIPTION

- A. Work Included: Furnish, install, support, and test valves, gates, hydrants, cocks, stops, and faucets, when applicable, (hereinafter referred to as "valves") in the location(s) and of the size(s) and quantities shown on the Drawings and/or as specified herein.
- B. Related Work Specified Elsewhere (When Applicable):
 - 1. Surface preparation and shop coatings are specified in Section 09905.
 - 2. Field painting is specified in Division 9.
 - 3. Pipe, fittings, pipe hangers and supports, and piping insulation are specified in the appropriate Sections in this Division.
 - 4. Valves for plumbing, heating and air conditioning are specified in the appropriate Sections in this Division.

1.2 SUBMITTALS TO THE ENGINEER

- A. Submit shop drawings and operation and maintenance manuals in accordance with Section 01340 and the General Conditions of the Construction Contract.
- B. Catalog Data: Submit manufacturer's literature and illustrations for each size of valve furnished.
- C. Certificates: Submit manufacturer's certification that valves and accessories meet or exceed the requirements of these Specifications.

1.3 INSTALLATION

- A. Shipping:
 - 1. Prepare valves and accessories for shipment as required for complete protection.
 - 2. Seal valve ends to prevent entry of foreign matter into valve body.
 - 3. Box, crate, completely enclose, and protect valves and accessories from accumulations of foreign matter.
- B. Storage:
 - 1. Store valves and accessories in an area on the construction site protected from weather, moisture, or possible damage.
 - 2. Do not store valves or accessories directly on the ground.
- C. Handling: Handle valves and accessories to prevent damage of any nature to the interior and the exterior surfaces.

1.4 INSPECTION

- A. Carefully inspect all materials for:
 - 1. Defects in workmanship and materials.
 - 2. Removal of debris and foreign material in valve openings and seats.
 - 3. Proper functioning of all operating mechanisms.

4. Tightness of all nuts and bolts.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Materials are specified in appropriate Sections in this Division.
- B. The specifications direct attention to certain required features of the valves and gates but do not purport to cover all details entering into their design and construction. Nevertheless, the Contractor shall furnish the valves and gates complete in all details and ready for operation for the intended purpose.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION AND SHOP COATINGS

- A. Provide surface preparation and shop coatings in accordance with specification Section 09905.

3.2 INSTALLATION

- A. Install valves and accessories in strict accordance with manufacturer's instructions and recommendations, as shown on the Drawings and/or as specified herein.
- B. Carefully erect all valves and support them in their respective positions free from distortion and strain.
- C. Independently support all valves connected to pumps and equipment, and in piping systems that cannot support valves.
- D. Repair any scratches, marks and other types of surface damage etc. with original coating as supplied by the factory.
- E. Install valves such that "open" and "close" position indicators are easily visible.
- F. All valves (and actuators where specified) shall be installed in a manner that will provide for proper clearances and ease of operation. In addition, valve operators must be capable of being rotated in 90° increments to facilitate field installation.

3.3 ADJUSTMENTS

- A. Check and adjust all valves and accessories for smooth operation.

3.4 TESTING

- A. The Contractor shall test all valves and gates in the presence of the Engineer to demonstrate that each valve and gate complies with specified requirements and allowable leakage rates.

END OF SECTION