

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

**MATERIAL SPECIFICATION
MS-218: “VALVES AND METERS”**

218.1 SCOPE

This specification governs the quality of valves and meters for use in water distribution systems.

218.2 MATERIALS

The material used in manufacturing valves and meters shall conform to the following requirements:

- a. Gate Valves: AWWA Standard C500.
- b. Butterfly Valves: AWWA Standard C504 for Rubber-Seated Butterfly Valves.
- c. Air-Release Valves, Air-Vacuum Relief Valves, Combination Air and Vacuum Relief Valves, Pressure Reducing Valves, and Pressure Relief Valves:

<u>Material</u>	<u>Specification</u>
Cast Iron	ASTM A-48, Class 30, or ASTM A-126, Class B
Bronze	ASTM-B-61, or ASTM B-62, Grade I
Stainless Steel	ASTM A-167, A-276, A-582 Type 302, 303, 304 or 304L
Cast Aluminum	ASTM B-179, C-355 or C-356

- d. Meters: AWWA Standard C-704.

218.3 CONNECTIONS

The connections may have internal or external ANSI threads or flanges conforming to AWWA C-207, or plain ends. Bolts for flanged connections may be either steel, stainless steel, or galvanized.

218.4 MANUFACTURER’S IDENTIFICATION

The manufacturer’s identification and model shall be clearly identifiable. The performance rating shall be in the manufacturer’s literature and may be stamped or painted on the valve or meter.