

MSS SP-60-2017

Connecting Flange Joints between Tapping Sleeves and Tapping Valves

Standard Practice
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CONNECTING FLANGE JOINTS BETWEEN TAPPING SLEEVES AND TAPPING VALVES

PURPOSE

The purpose of this Standard Practice is to prevent interface and interference problems between tapping sleeves and tapping valves through the use of a positioning recess and mating raised face of the connecting flanges between tapping sleeves and tapping valves. The recess and raised face serve to ensure proper alignment of the tapping valve onto the tapping sleeve but do not affect the strength or the tightness of the joint.

1. SCOPE

1.1 This Standard Practice establishes flange and gasket dimensions which define the interface between tapping sleeves and tapping valves.

1.2 This Standard Practice establishes dimensions for these special connecting flanges and gaskets of nominal sizes from NPS 2 through NPS 60 (DN 50 through DN 1500) for water and sewerage systems.

1.3 This Standard Practice establishes pressure-temperature ratings for the connecting flanges.

2. DEFINITIONS (Reference Figure 1 Illustration)

2.1 **Joint** The “interface” or connecting joint between sleeves and tapping valves will be abbreviated as “joint” in this Standard Practice.

2.2 **Main** A pipe used in a water or sewerage system for distribution of water or collection of sewage.

2.3 **Manufacturer** The party producing products in accordance with this Standard Practice.

2.4 **NPS** Indicates “Nominal Pipe Size” (U.S. customary). A standard size identification number, not necessarily an actual dimension. The European or International designation equivalent to NPS is called DN (*diametre nominal/nominal diameter*) in which sizes are based on SI (metric) units.

Guidelines for SI (metric) data may be found in MSS SP-86.

2.5 **Purchaser** The party entering into a contract or agreement to purchase products manufactured in accordance with this Standard Practice.

2.6 **Tapping Machine** (also known as a drilling machine) A machine used to cut a hole into an existing pressurized or non-pressurized main through the use of a tapping sleeve and a tapping valve. The tapping machine is equipped with a cutter, which extends through the waterway of the tapping valve and sleeve branch to cut the hole into the main and remove the cut-out piece (coupon) upon retraction of the cutter. The tapping valve can then be closed to seal the branch connection while the tapping machine is removed from the valve and the branch pipeline is connected to the tapping valve.

2.7 **Tapping Sleeve** A fitting that can be assembled onto an existing main to make a branch or “tee” connection to the main with a tapping valve and tapping machine, without interruption of service. Tapping sleeves can be referenced in MSS SP-111 (Gray-Iron and Ductile-Iron) and MSS SP-124 (fabricated).