

1619 - STEEL PIPE

SECTION 1619

STEEL PIPE

1619.1 DESCRIPTION

This specification governs steel pipe intended for various applications including protective encasements.

1619.2 REQUIREMENTS

a. General. The pipe is to comply with the design, dimensions, requirement for corrosion protection, and specific fabrication requirements as specified in the Contract Documents. Unless corrosion protection is specified, the pipe is to be provided in the as produced and as machined condition.

b. Material Specifications.

(1) Steel pipe for applications other than encasement is to comply with ASTM A 53, Types E and S, Grade B. As noted, the pipe may be electric resistance welded, Type E, or seamless, Type S. Furnace welded pipe, Type F, is not acceptable.

(2) When corrosion protection is specified, zinc coat the pipe by the hot dip galvanizing (HDG) process in compliance with ASTM A 53. Perform all welding and forming operations prior to HDG unless the size or configuration of the final product makes this impractical. If deviation from the desired sequencing is necessary, submit a request detailing the circumstances requiring the deviation and the procedures for repairing the damages to the coating, to the Engineer of Tests for review and approval prior to proceeding with the assembly.

(3) Steel pipe utilized for protective encasement is to comply with ASTM A 139, Grade B. The minimum acceptable wall thickness is 0.25 inch. The pipe ends are to be machined, chamfered, for welding according to the specifications of A 139.

1619.3 TEST METHODS

Conduct all tests required by the applicable ASTM specifications of **subsection 1619.2b**. Coating thickness may be measured by any one of the methods specified in ASTM B 633 and by eddy current methods, ASTM E 376 (B 244 may also be useful as a technique guideline), provided that appropriate calibration procedures and standards have been applied. The magnetic induction and eddy current methods are nondestructive in nature and are preferred. Destructive techniques, i.e., coating removal, may be utilized as referee methods.

1619.4 PREQUALIFICATION

Not applicable.

1619.5 BASIS OF ACCEPTANCE

a. Pipe other than encasement pipe.

(1) Submit for approval to the project Engineer and MRC a Type A certification (certified mill test report), as specified in **DIVISION 2600**, that comply with **subsection 1619.2**. Submit samples to the Engineer of Tests for evaluation and testing.

(2) Inspection and testing by field personnel of pipe for compliance with dimensional requirements and corrosion protection coating thickness when corrosion protection is specified. Measure the coating thickness according to any of the procedures of **subsection 1619.3**.

b. Encasement Pipe. Receipt and approval of a Type D certification as specified in **DIVISION 2600**.

c. The final disposition of all pipe will be completed at the final destination as the result of inspection for the quality of workmanship and the delivery condition.