

Metal Pipes

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ABSTRACT: There are two major types of metallic water pipe, Ductile Iron (DIP) and Welded Steel (WSP). This discussion will focus on the latter, WSP. There are many codes that govern the design or manufacture of WSP. Water pipe engineers designing a WSP system typically utilize the AWWA standards.

Water system owners in the United States have utilized WSP since 1858. Up until World War II, WSP was the pipe product of choice for large diameter needs. With the advent of Prestressed Concrete Pressure Pipe (PCCP) during the war (because most of the domestic steel production was going toward the war effort), two generations of owners have not utilized this excellent choice of pipe material for their large diameter water pipe needs. The City of Houston began specifying WSP as an alternate to PCCP in the 1980's.

This talk will describe the following items in general terms:

1. Standards governing WSP
 - A. AWWA C200 series
2. Design of WSP
 - A. Internal Pressure
 - B. External Loads
3. Corrosion Protection of WSP
 - A. Coatings
 - B. Cathodic Protection
4. Manufacture of WSP
 - A. Steel
 - B. Welding
5. Installation of WSP
 - A. Joints
 - B. Lengths
6. Performance

If you have any questions, please contact [Dr. C.Vipulanandan](#)
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