A question that is often raised by engineers and owners concerns the hydrostatic proof testing of Fusible Brute™ pipe at the plant. Both AWWA C900 and C905 provide for the hydrostatic proof testing of pipe to verify the integrity of both the pipe and the bell. Each AWWA standard also allows for the modification of each testing protocol per agreement with the purchaser.

AWWA C900-07 standard states:

5.1.12 Hydrostatic proof test for pipe. Each length of pipe shall be proof tested in accordance with Sec. 4.3.3.3. (Hydrostatic integrity. The pipe, including any integral bell end or affixed coupling, shall not fail, balloon, burst, or weep when subjected to an internal pressure equal to 2.0 times its designated pressure class for a minimum dwell time of five seconds)

5.1.14 Optional test frequency. The purchaser or supplier may allow the manufacturer to conduct hydrostatic proof tests for pipes at frequencies other than required in Sec. 5.1.12. Each purchaser in the distribution chain shall be notified if this option is used.

AWWA C905-97 standard states:

5.1.8 Hydrostatic proof test for pipe. Each standard and random length of pipe shall be proof tested in accordance with Sec. 4.3.3.1 (Hydrostatic integrity. The pipe, including any integral bell end or affixed coupling, shall not fail, balloon, burst, or weep when subjected to an internal pressure equal to 2.0 times its pressure class for a minimum dwell time of five seconds)

5.1.9 Additional test requirements. The purchaser or supplier may allow the manufacturer to conduct hydrostatic proof tests for pipes at frequencies other than those required in Sec. 5.1.8.

IPEX Protocols:

IPEX, as the manufacturer, has implemented a hydrostatic testing protocol that meets the proof test requirement in each AWWA standard. Specifically, at the beginning and end of each run/lot of the extruder, one length, either 6.1 metre or 3 metre, is tested. Our distributors, as purchasers, have agreed to this testing frequency.

Note that as per both AWWA standards, a pipe burst strength (3.2 times the pressure class) test is performed at the required frequency.