Ductile Iron Pipe Handles The Stress

Ductile iron pipe’s durability in extreme conditions means that consumers have greater reliability for their water delivery than from weaker pipeline materials that crack under stress or wear down over time.

One of the reasons for Ductile iron pipe’s impressive resiliency lies in its strength, which allows us to use the most conservative design found in pressure pipe applications. Separate stress design is employed, where internal pressure and external loads are handled separately, and a nominal factor of safety of 2.0 is used in each design. Moreover, a 100 psi surge pressure allowance is added to the nominal pressure class of the pipe before applying the factor of safety. So, for Pressure Class 350 Ductile iron pipe, the design pressure is 900 psi. For technical details, please see DIPRA’s brochure on Design of Ductile Iron Pipe.

Ductile iron pipe withstands the stress of heavy loads over time...

and from sudden shocks or hazards such as earthquakes, hurricanes, and wildfires.

Please visit dipra.org and check out our Material Comparisons publications to learn why Ductile iron pipe is a long-term solution to our water delivery infrastructure needs.

Happy Thanksgiving,
Patrick Hogan
President, DIPRA