

November 17, 2020

Complimentary Web-Based Calculators For Design and Specification of Ductile Iron Pipe

DIPRA's four free calculators, available on our [website](#), assist in the design and specification of Ductile iron pipe. These calculators are based on equations, procedures and models that are found on corresponding technical publication PDFs linked to each calculator's web page.

DIPRA Calculators



Design of Ductile Iron Pipe

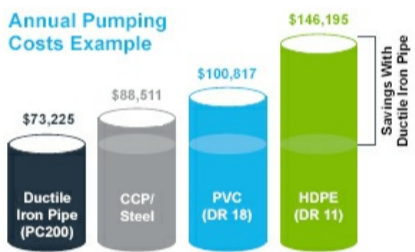
on Supports: Helps determine the class of pipe to use based on support dimensions and pipe length. The design addresses beam deflection, beam stress and stress at supports, and can be used for both aboveground and underground installations.

[Design of Ductile Iron Pipe on Supports calculator - Access now](#)

Hydraulic Analysis of Ductile Iron Pipe and Greenhouse Gas Emissions:

The typically larger than nominal inside diameter of Ductile iron pipe provides an advantage compared to other pipe materials, resulting in savings in pumping energy as well as greenhouse gas emissions. Lower pumping energy means less cost of electricity to pump and fewer greenhouse gas emissions.

Annual Pumping Costs Example



[Hydraulic Analysis calculator - Access now](#)



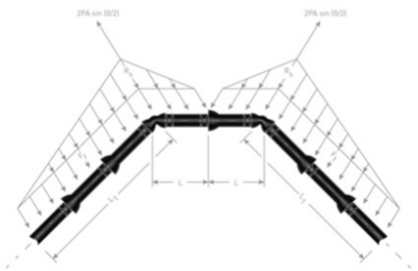
Thickness Design of Ductile Iron Pipe:

Following the procedures in the ANSI/AWWA C150/A21.50, determine the most appropriate class of Ductile iron pipe to choose based on project design criteria. The C150 standard provides the most conservative approach to pipe wall thickness design found in the water and wastewater pipeline industry.

[Thickness Design calculator - Access now](#)

Thrust Restraint Design for Ductile Iron Pipe:

Aids designers in determining the length of restrained joint required to offset the thrust forces in a pressure pipe installation. Calculations for elbows, reducers, tees and dead-ends are available, as are special installations where combined fittings are under design.



[Thrust Restraint Design calculator - Access now](#)

Click [here](#) to access technical publications on Ductile iron pipe design and application, or submit questions directly to our Regional Engineers [here](#).

Thank you,
Patrick Hogan
President, DIPRA