

6 EASY STEPS TO CUTTING DUCTILE IRON PIPE

DO IT RIGHT IN THE FIELD

If it becomes necessary to cut Ductile Iron Pipe (DI pipe) in the field, it's important to know how to properly and efficiently perform this task to avoid adding time and expense to your installation project. During the manufacturing process, DI pipe may slightly deviate in outside diameter and ovality due to the heating and cooling of the iron during the annealing process. Always measure before every DI pipe field cut. **To correctly measure and cut DI pipe, be sure to follow these 6 easy steps.**



GATHER TOOLS

Outside Diameter (OD)
Tape Measure,
Chalk, Crayon, or Marking Paint,
K-12 Gas-Powered Saw
with abrasive wheel,
Angle Grinder, and
Company Required Personal
Protective Equipment (PPE)



SELECT PIPE

Ensure the pipe is suitable for cutting. All pipe 12 inches and smaller can be cut starting 2 feet from the face of the bell to the end of the spigot. If 14-inch and larger pipe needs to be field cut, look for the green paint on the bell face. These have been factory measured and deemed good for cuts.



MEASURE

Using a tape and the DI pipe outside diameter chart (shown below), check the circumference and ovality of the pipe. It can be checked by measuring around the pipe and across the horizontal and vertical axis. This will make sure the cut area will make a good seal into a bell or fitting.

In the field, a mechanical joint gland can be used as a gauging device.



MARK

Mark a line around the circumference of the pipe where you have measured. Have a co-worker help roll the pipe as its marked so you can keep a straight line. McWane Ductile recommends using Markal paint sticks or something similar.



CUT

Use the K-12 Saw to make your cut. Have a co-worker roll the pipe to allow the saw-handler to focus on making a safe and straight cut. Be sure to wear proper PPE.



BEVEL

Use an angle grinder to bevel a 30° edge. If working with Tyton® Joint, a beveled cut is needed to avoid cutting, pushing, or rolling the gasket. Note: A bevel is not needed for Mechanical Joint Pipe or Fittings.

DUCTILE IRON PIPE OUTSIDE DIAMETER CHART

NOMINAL PIPE SIZE IN.	MIN. PIPE DIAMETER IN.	MAX. PIPE DIAMETER IN.	MIN. PIPE CIRCUMFERENCE IN.	MAX. PIPE CIRCUMFERENCE IN.
3	3.90	4.02	12-1/4	12-5/8
4	4.74	4.86	14-29/32	15-9/32
6	6.84	6.96	21-1/2	21-7/8
8	8.99	9.11	28-1/4	28-5/8
10	11.04	11.16	34-11/16	35-1/16
12	13.14	13.26	41-9/32	41-21/32
14	15.22	15.35	47-13/16	48-7/32
16	17.32	17.45	54-13/32	54-13/16
18	19.42	19.55	61	61-13/32
20	21.52	21.65	67-19/32	68
24	25.72	25.85	80-13/16	81-7/32
30	31.94	32.08	100-11/32	100-25/32
36	38.24	38.38	120-1/8	120-9/16

For more detailed instructions and a video, see our "How to Cut DI Pipe to Length" blog at McWaneDuctile.com/Blog.