# 6 EASY STEPS TO CUTTING DUCTILE IRON PIPE 

## DO IT RIGHT IN THE FIELD

It may be necessary to cut Ductile iron pipe (DI pipe) in the field. Knowing how to safely and efficiently perform this task is important 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 twice before cutting every piece of DI pipe. To correctly measure and cut DI pipe, follow these six easy steps.


## GATHER TOOLS

Recommended Tools: Direct-read Outside Diameter (OD) Tape Measure, Chalk, Crayon, or Marking Paint, K-12 Gas-Powered Saw with appropriate cutting wheel, Angle Grinder, and Company-Required Personal Protective Equipment (PPE)


## CUT PIPE

While wearing proper PPE and using a K-12 Saw, make the cut on the guideline around the pipe. Ensure the pipe does not roll while the saw is active and warn others to stay clear.


## SELECT PIPE

Ensure the pipe is suitable for cutting. All pipe 12 inches and smaller can be cut 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 suitable for cuts.


## BEVEL PIPE

Use an angle grinder to bevel a $30^{\circ}$ edge. If working with Tyton ${ }^{\circ}$ 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.


## MEASURE PIPE

Use the OD Tape and outside diameter chart (shown below) Confirm the OD at the intended location of the cut. After the cut, check ovality conformance by measuring across the cut face at several axes. A mechanical joint gland might also serve as an ovality gauge. Slight ovality is not uncommon and can be adjusted using a rounding kit.


## MARK PIPE

Use the OD Tape as a straight edge to draw a line or a series of dashes around the entire pipe circumference. Do not "eyeball it." This will ensure a straight cut and proper joint assembly. Markal ${ }^{\circledR}$ paint sticks or something similar work well to create a visible guideline to follow.

| DUCTILE IRON PIPE OUTSIDE DIAMETER CHART |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NOMINAL PIPE <br> SIZE IN. | MIN. PIPE <br> DIAMEIER IN. | MAX. PIPE <br> DIAMEIER IN. | MIN. PIPE <br> CIRCUMFERENCE IN. | MAX. PIPE <br> 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, see our blog and video on "How to Cut Ductile Iron Pipe to Length" at McWaneDuctile.com/Blog.

