# **6 EASY STEPS TO CAD WELD ON DUCTILE IRON PIPE**



## DO IT RIGHT IN THE FIELD

Thermite welding, also known as CAD welding on Ductile iron (DI) pipe and products is a common practice in our industry to bond DI joints for cathodic protection. Utilizing the following tip sheet will help ensure a successful project.



## **OBTAIN EQUIPMENT**

Collect the proper equipment and safety supplies. You will need a handheld grinder/wire wheel brush, 2 lb. hammer, nickel disc and charge, an ignitor, stranded copper wire, and patch/coating for the weld.



#### **IGNITE CHARGE**

Close the box and ignite the charge. Allowing the weld to cool prior to removing the weld slag reduces potential for injury as well as reduces the potential to damage the polyethylene encasement, if used.



### SURFACE PREPARATION

Remove any debris or contaminates from the surface to be welded by using a handheld grinder to remove the peen from the DI pipe. A flat surface must be obtained to provide an adequate base for the weld.



#### REMOVE THE SLAG

Use a 2 lb. hammer to remove the slag from the weld. Strike the weld with the hammer to verify a good weld. In the event the wire/weld fails when struck, the surface must be prepared prior to repeating the CAD weld process.



## ASSEMBLE WELD KIT

Ensure the weld box has been cleaned before use. Place the weld box on the flat surface. Insert the nickel weld plate and charge. Close the box and apply downward pressure to ensure a tight seal.



#### **COVER WELDED AREA**

Install weld patches or coat the weld areas with an approved coating. All exposed DI surfaces, welded areas, and copper wire must be properly coated prior to completion of the project. For more detailed information and a helpful video, go to mcwaneductile.com/blog.







