

## Manufacturing Electrofusion Couplers from HDPE Pipe Pieces

### Description

According to our experience in electrofusion fittings, the wire laying method is most suitable for a size range of more than 50mm. Let's say we want to make electrofusion fittings, for the range of more than 50mm using HDPE pipes with modified wall thickness. This method is feasible for the mentioned range but it is economical for big sizes of couplers that need big molds and big injection molding machines for the process of manufacturing. Then I propose to use it for a size of more than 160mm.

AHP developed method for this purpose. You will need to buy some equipment as below comments:

### Cuttings the Pipe to Pieces

In the first step you will cut the HDPE pipe with modified thickness to pieces. you have different options for cutting. Automatic saw cutters are most proper method.

### Forming the Outer Surface of the Piece

You have two options for forming outer surface:

- Manual lathe machine
- CNC lathe machine

If you want to use manual lathe machine for forming the outer surface you will need forming tools that will be used with manual machine.



## Drilling the Holes for Brass Connector Protector and Weld Indicators

Next step you will put the piece to drilling section.



## Wire Laying Process Using AHP CNC Wire Laying Machine

This process will be done in vertical or horizontal CNC Wire Laying machine from AHP PLASTIK MAKINA.



## Put Brass Terminal in Place Using Manual Press Machine

This is an easy step of pressing terminals to the ends of wires that lay in the process of wire laying.

## Weld Brass Terminal Protector in Case of Need

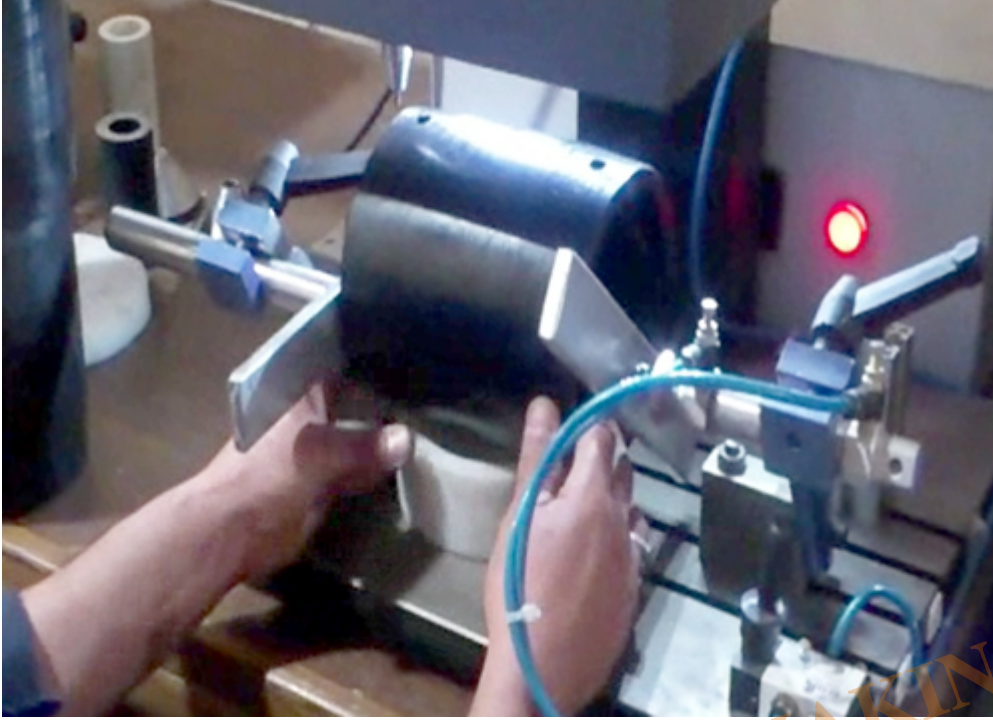
If you need, you can socket weld small plastic pieces that are manufactured using injection molding process, to protect brass terminals. This is done using manual socket welding machine.

## Put Stopper Plastic Rings Inside The Fittings

There is a snap rings that acts as stopper in the middle of socket fittings. If your standard for EF fittings that your product comply, mandate to have this ring, you need to put this plastic snap ring inside the fittings at the end step.

## Marking Using CNC Indent Marking

Depending on the standard your product is complying with, you can use two methods for marking. CNC indent marking, Laser marking. In some standards, laser marking is not acceptable because, after a while of burying the piece underground, markings have vanished from the surface. That's why you need to use indent marking in those cases.



## Barcode Label for Welding

The last step is to prepare the welding barcode sticker according to the welding parameters of the fittings. AHP will help you in preparing this barcode sticker.

### Category

1. Technology