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Small Electrofusion Saddle Branch Installation Manual With Smart Joint Clamping System

Applicable to

Branch 63mm* Main Pipe 250mm-800mm saddle

Branch 110mm* Main Pipe 355mm-800mm saddle

Branch 125mm*Main Pipe 355mm-800mm saddle

Other branches, pls add one electrofusion reducer.





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1. Electrofusion saddle branch introduction

Electrofusion saddle branch offers an easy, economic and ideal solution to get a branch for a large main PE pipe. With Smart Joint designed safe, reliable clamping tool kits, the joint can be guaranteed strong enough. Compare to traditional fabricated tee, or injected reducing tee with reducers fabricated, smart joint electrofusion saddle solution is easier and much cheaper.

Electrofusion saddle branch has the followed advantages:

A、 There is no need to consider in advance about the location of branches in main PE pipe construction, without concerns on the branch location, the design of main pipe is free from restriction. Electrofusion saddle branch can be placed and installed easily where the branch is needed after the completion of the main pipe installation.

B、 The branches part also can adopt electrofusion, which is more convenient than butt fusion and saves time, no need to move the heavy butt fusion machine everywhere.

C. It helps to reduce the cost for both fittings and construction.

2、 Electrofusion saddle branch fusion procedures:

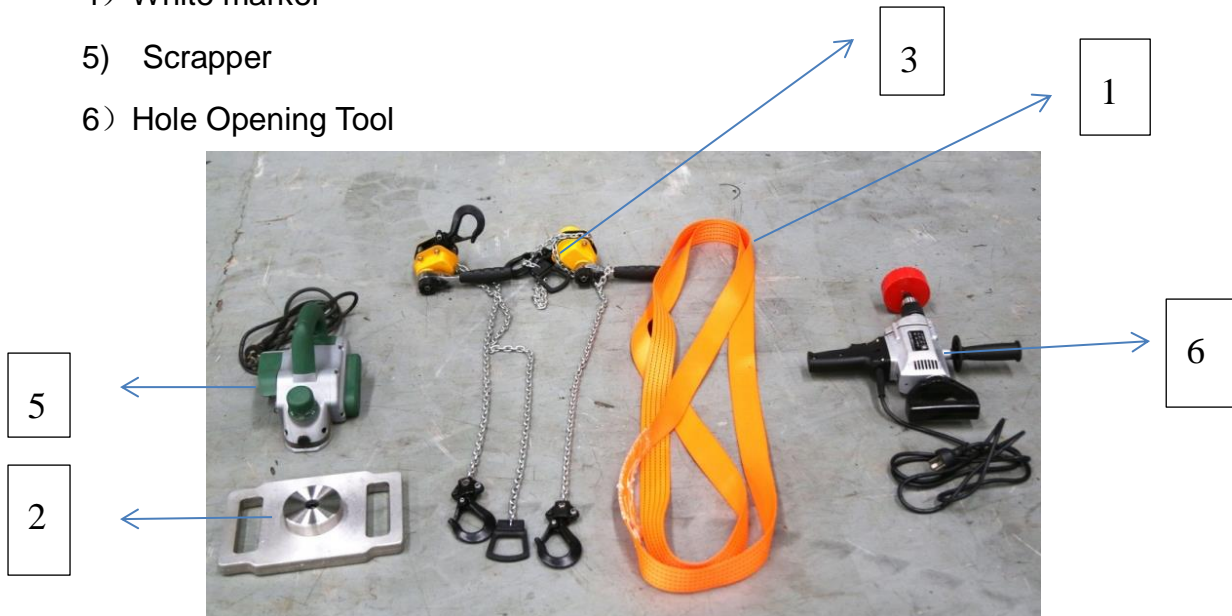
Preparations

2.1 Fusion equipment

Electrofusion equipment should comply with ISO 12176-2:2008 standard with barcode reading function.

2.2 Fusion assistive tools/auxiliaries

- 1) Bonding strap with load above 3t
- 2) Clamp Press Plate
- 3) Chain blocks with load above 0.5t
- 4) White marker
- 5) Scrapper
- 6) Hole Opening Tool



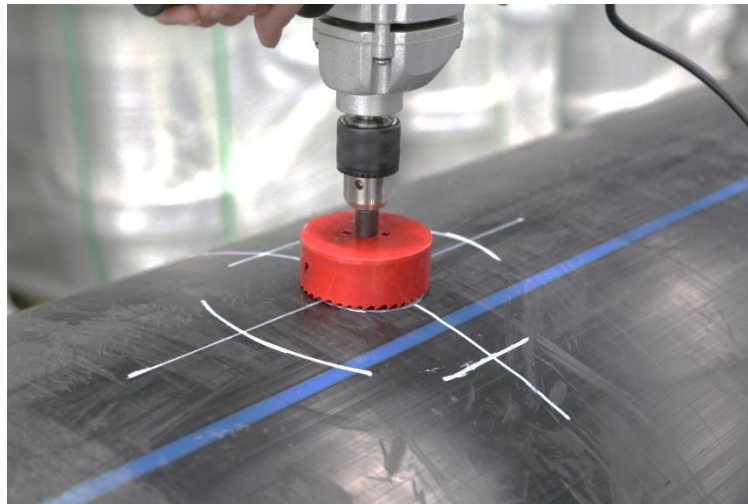
2.3 Fusion operation steps

2.3.1 Mark the fusion location of saddle branch as showed on followed pictures.



2.3.2 Make opening in the main pipe

Put the hole opening tool vertically on the marked zone of the inner diameter, turn on and open the hole on the pipe.



2.3.3 Scrape the fusion zone marked (The whole saddle bottom part area)

The scrapped depth must be within 0.2 to 0.3mm, then clean the fusion zone.



*** We suggest scrapping the fusion zone by electric planer to remove the oxidized surface, this is very important.**

2.3.4 Mark the intersection lines of the inside and outside again on scrapped zone.



2.3.5 Clamp the saddle branch to the main pipe, install the strap as the followed illustrated way.



(1) Put the saddle branch on the marked location, select the adaptor of branch inner size and screw on the press plate, put the press plate with inner adaptor on to the branch.

(2) Fix two chain blocks on the handles of press plate.

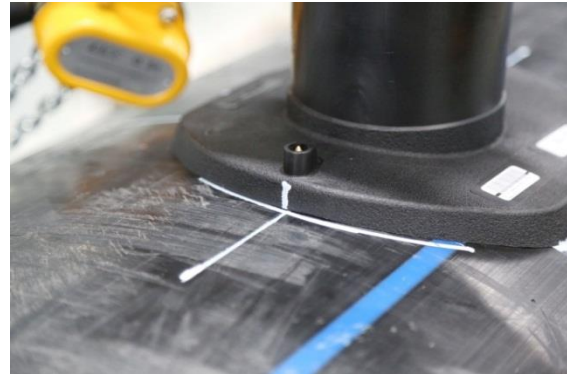
Adjust the length of strap to connect with the hooks of the chain blocks.





(3) Pull the wrench on the chain blocks , and fasten the saddle branch on the main pipe.

(4) The fusion work can be started only after the saddle branch and the mains are totally contacted well with allowed gap less than 1.5mm in any points.



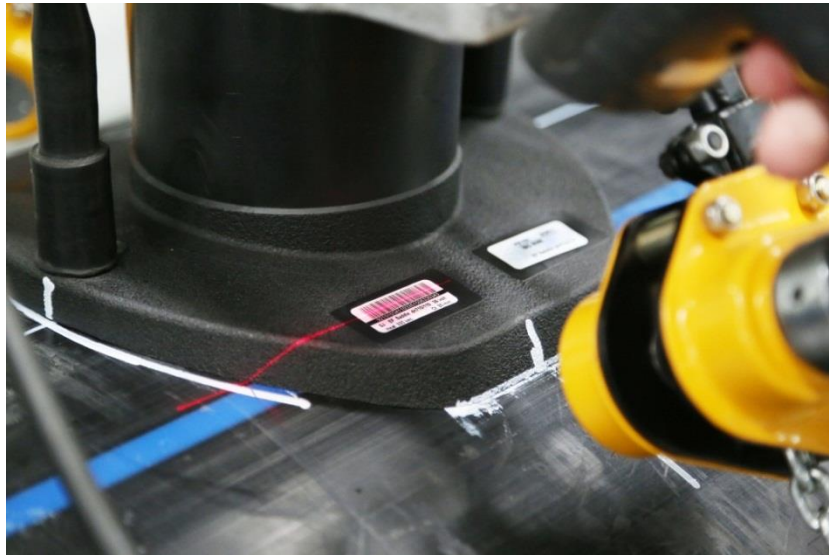
Remark: If the saddle branch is not fitted with the previous mark, it may cause the fusion failure.

2.4 Fusion

Start the fusion machine, contact the fusion machine with the electrofusion saddle adaptors.



Scan the barcode on the electrofusion saddle (or input the fusion parameter manually),then start the fusion.



2.5 Cooling

Keep the strap fastened till the cooling time ends.

2.6 Remove the strap

2.7 The branch part can be electrofused with a electrofusion coupler. Pls follow the installation operation manual of electrofusion coupler.