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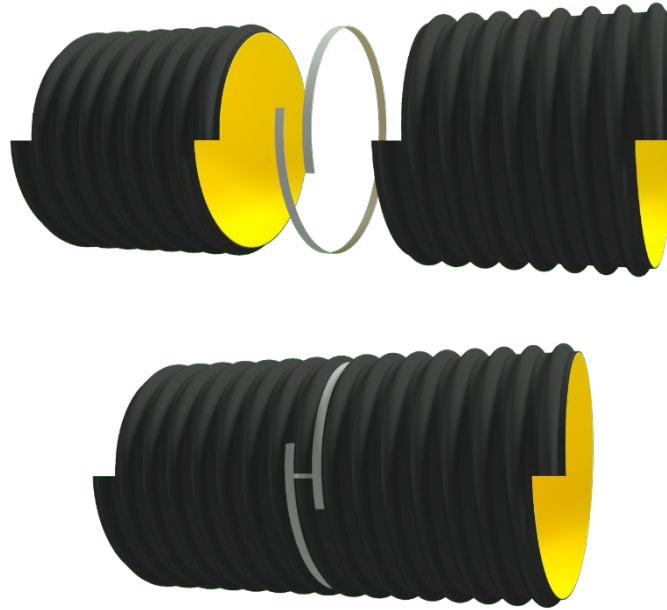
JOINING METHODS

ELECTROFUSION BAND WELDING INSTRUCTION

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ELECTROFUSION BAND WELDING MANUAL



Electrofusion band welding joining is a welding method formed by melting-cooling of outer surface of spiral corrugated pipe and inner surface of EF band at the connection line by PE band with on resistance and electrofusion welding machine.

Required Equipment



1. Reciprocating Saw



2. Electrofusion Welding Machine



3. Electrofusion Band



4. Hand Extruder



5. PE Welding Rod

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General Conditions

- Worker safety precautions should be taken during the operation.
- The ambient temperature of assembly area should be 0°C- 45°C. If the ambient temperature is not within limits, use a welding tent
- Welding area should be protected from sunlight and dirt. The ambient temperature of the welding should be 0°C and above. Welding is not recommended at below 0°C ambient temperature.
- Welding is not recommended in rainy weather.
- PE material should be used in the application.
- Pipe parts and electrofusion band surfaces should be clean.
- Inner metal hoop should be used in the pipe welding.
- Outer metal belt tension should be checked during pipe welding.
- Welding machine values should be set before starting welding.
- The connections between the EF band cable lug and electrofusion machine cable alligator clips should be connected carefully. The connection should not be broken during welding.

Application

1. The end of pipes are cut to fit each other by reciprocating saw.



2. EF band and pipe surfaces are cleaned before starting the welding.

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3. Inner metal hoop is placed to inside joint of the two pipes and is fixed. Centering is done.



4. The pipes are rotated until the two pipes ends come together.



5. Electrofusion band is wrapped around connection line of the two pipes with outer metal belt.
 - a. EF band is wrapped around pipes between the ribs.



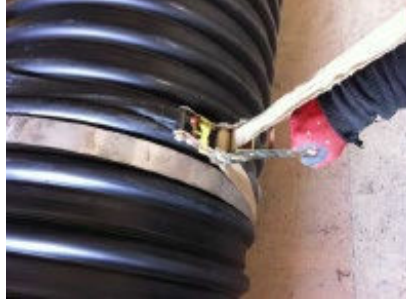
- b. Outer metal belt is wrapped over EF band.



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- c. Outer metal belt is stretched by ratchet strap.



6. Welding machine cable alligator clips are connected to electrofusion band cable lug. Electricity is supplied by preset welding machine.



7. Welding period is visually checked.
8. When the welding time is finished, the welding machine cable connections are disconnected.
9. The hand extruder is heated. Ø4 mm PE welding rod is placed into slot. Joint gaps is filled by the hand extruder.



10. Inner metal hoop is removed from the pipes.

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11. The joint gaps of inner the pipe is filled by hand extruder.
12. The welding area is visually inspected. If joint gap is detected, it is filled by hand extruder.
13. After welding and filling process is completed, wait min. 30 minutes for cooling.

**Welding times values are given by calculating the average, it can change completely with weather conditions.*

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