



COSMOIND USA



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**Electro Fusion  
Joining Manual**

**SADDLE**

## ■ Electrofusion Joining Manual

### – Saddle Installation

A. Mark at least three times the width of the saddle base on the pipe, centering on the intended fusion position between the marks. These marks indicate the length limit of cleaned pipe surface that should not be exceeded when wiping with alcohol in later steps. The purpose of this mark is to prevent wipe from contacting the surface of the uncleaned pipe and contamination from spreading to the surface of the pipe that has already been cleaned. Clean this area with isopropyl alcohol and wipe in one direction only to avoid crossing the boundary of the marked area. Allow the pipe to dry. Discard the wipe and do not reuse.



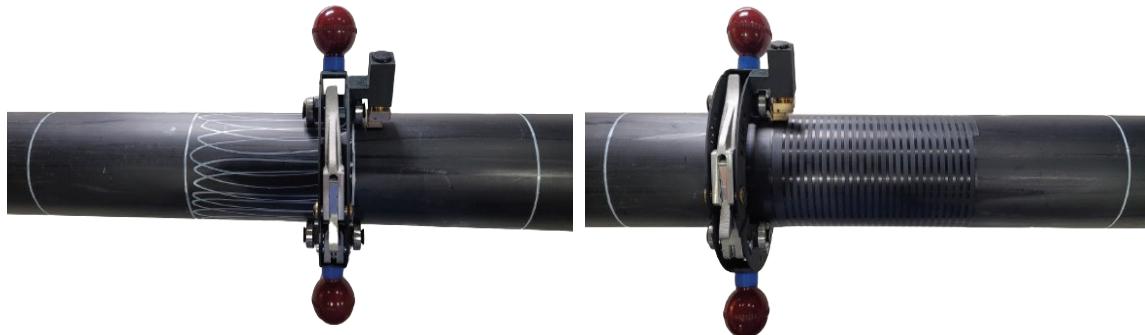
B. Mark slightly larger than the width of saddle to be installed. These marks indicate the scrape or peel length required to ensure that only scraped or peeled pipe touches the saddle fusion surface. It is recommended to scrape or peel slightly longer than required outside the fusion zone as visual evidence that proper preparation has been made.



C. Scribe witness marks on the pipe surface, or mark the area to be scraped or peeled in a criss-cross pattern.



D. Remove the surface layer by scraping or peeling the pipe to expose the clean virgin pipe surface.



E. Thoroughly inspect the scraped or peeled pipe surface to ensure all marks are removed and only virgin pipe surface is exposed. Remove the saddle from the bag and place it on the surface of the scraped or peeled pipe. Secure the pipe and saddle fitting assembly using a suitable clamping device.



F. Connect the control box leads to the fitting, verify that the proper fusion time and voltage are displayed on the control box, and fuse the joint. Do not leave the fusion unattended.

G. Do not move or disturb the joint for the minimum cooling time indicated in the control box after the fusion cycle has been completed. Mark the amount of time the clamp can be removed. Mark the joint location with any other information required by the pipeline owner.

H. Pressure test, tap, and backfill only after the minimum cooling time required for the fitting has elapsed.