

RACC MOD20A USA VER15 EIBFRS

ELOFIT INCHES BUTT FUSION REPAIR SLEEVE (EIBFRS) is a safety/ repair system to be used when, in service, butt-welding cannot be guaranteed. BFRS can be installed on pressurized pipe made out of PE4710, PE3408 and PE2708/PE2406.

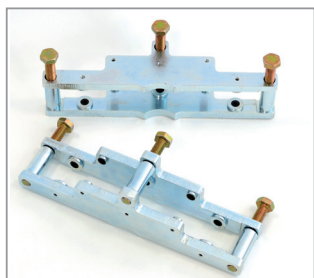
⚠ THE INSTALLATION OF THE EIBFRS NEEDS TO BE DONE UNDER THE FLOW OF GAS.

If this can not be guaranteed (end of line, branch to single users, etc.), the pressure must be reduced to a maximum of 7 PSI.

IF the BFRS is used on an area of pipe that has already been squeezed, you must first re-round the pipe before installing the fitting.

TOOLS (not included):

METAL CLAMPS



JUMPER CABLES

(nr.1 long cable + nr.2 short cables)



The maximum network pressure allowed to weld the BFRS on the pipe depends of the polyethylene grade and SDR of pipe.

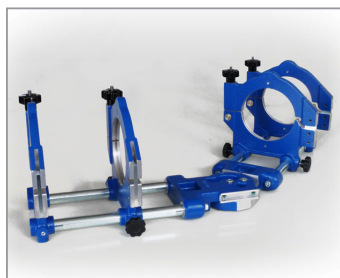
POLYETHYLENE GRADE	PRESSURE*
PE4710 (PE 100-SDR11)	125 psi - 10 bar
PE2406/2708/3408/3608 (PE 80-SDR11)	60 psi - 5 bar
PE2406/2708/3408/3608 (PE80-SDR13.5)	60 psi - 5 bar
PE2406/2708/3408/3608 (PE80-SDR15.5)	14.5 psi - 1 bar
PE80 (ALDYL)	60 psi - 5 bar

* maximum pressure operating during the welding

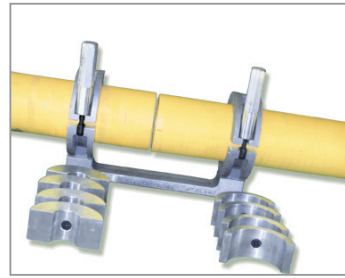
⚠ Max Angle between pipes 1.5°. Max misalignment 0.08"

ALIGNERS

mod: 00ALBFRS



mod: 12ECLAMP



1 Measure half length of the repair sleeve and mark the distance on each side of the pipe, starting from the bead; extend the marks all across the circumference of the pipe and identify the welding area with a marker.



⚠ DO NOT REMOVE THE BEAD

2 Scrape the part of the pipe where the repair sleeve will be welded and clean it with isopropanol and a soft wiping cotton cloth with no printing; wait until the clean parts are completely dry.

- Scrape 0.4" beyond the marked line.
- Scrape as close as possible to the bead.
- Take care not to damage the bead.



RECOMMENDATIONS FOR THEIR DISPOSAL: POLYETHYLENE USED FOR THIS ACCESSORY IS RECYCLABLE: DISPOSE THROUGH AUTHORISED CENTRES. DO NOT DISPERSE WRAPPING AND PACKAGING OF THE PRODUCT, RECYCLE THROUGH COLLECTION.

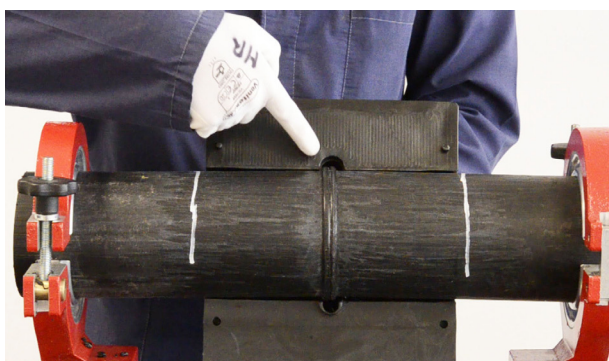
3 Mark on each side of the pipe a distance from the bead equal to half the length of the sleeve, so that the bead is in the middle of the sleeve.



4 Clean the inner part of the two half shells of the fitting with isopropanol and a soft wiping cotton cloth with no printing; wait until the clean parts are completely dry.

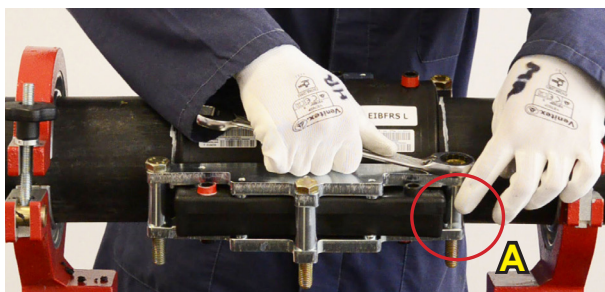
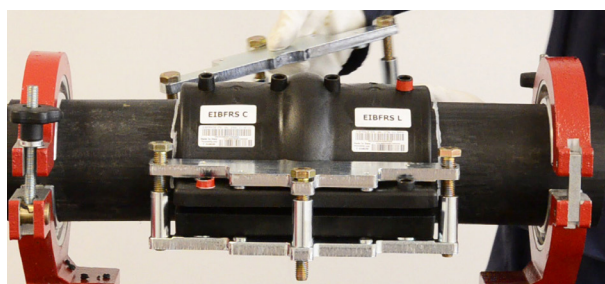


5 Install the two half shells on the pipe so that the bead is centered in the groove in the middle of the sleeve.

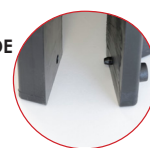


⚠ FOR SOME ELECTROFUSION PROCESSORS THE TOP HALF OF THE SHELL MAY NEED TO BE ROTATED AT AN ANGLE TO MAKE CONNECTING THE PINS EASIER

6 Put the metal clamps onto the plane parts of the lateral wings of the half shells. Tighten the bolts until the 1.614" (40 mm) **spacers "A"** can no longer rotate. Use a wrench with hexagonal head screw 19mm (metric).



✓ BEFORE TIGHTENING, CHECK THAT THE PINS BELOW THE SIDE FLAT AREAS PROPERLY FIT INTO THEIR GROOVES.



7 In any case before starting the fusion process, fit the alignment clamp and check if it is firmly secured on either side of the BFRS.

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8 PERFORM WELDING

✓ BEFORE BEGINNING THE WELDING SEQUENCE, ALWAYS CHECK THE RELIABILITY OF THE POWER SUPPLY SYSTEM, TO MAKE SURE THERE ARE NO INTERRUPTIONS DUE TO LACK OF POWER.

✓ THE FITTINGS REQUIRE 4.0mm CONNECTORS.

⚠ DON'T WELD IF WATER OR LEAKING GAS IS PRESENT

⚠ KEEP AT A SAFE DISTANCE DURING WELDING.

⚠ PERFORM WELDING ONLY IN AUTOMATIC MODE THROUGH BARCODE-DE SCAN: DO NOT PERFORM WELDING IN MANUAL MODE.

⚠ ALWAYS CHECK THE WELDING PARAMETERS ON THE DISPLAY.

Needed:

short jumper cables (x1)

long jumper cables (x1)

8.1 FUSION OF THE CENTRAL PARTS

8.1.1 UPPER CENTRAL PART

Connect the short jumper cable to the connector pins marked "B"; connect the two cables of the electrofusion machine to the connector pins marked "A" and "C".

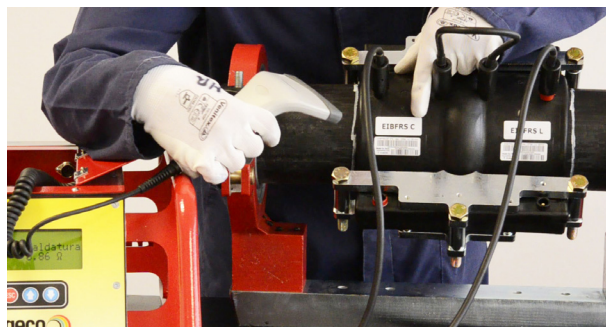
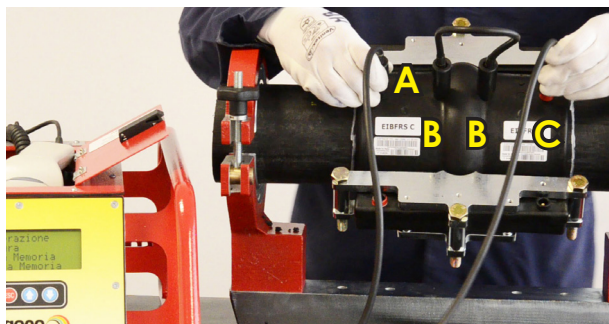
Scan the barcode marked "EIBFRS C" with the scanner to proceed with welding the upper central part of the repair sleeve on the pipe.

When the welding cycle is positively concluded, disconnect all the cables from the repair sleeve and proceed immediately to the following step.

⚠ AT THE END OF EACH WELDING CYCLE, MARK THE ACTUAL TIME (HOURS AND MINUTES) ON THE MODULE.

⚠ DO NOT REMOVE METAL CLAMPS.

⚠ PROCEED IMMEDIATELY TO THE FOLLOWING STEP (DON'T WAIT FOR COOLING TIME)



8.1.2 LOWER CENTRAL PART

Connect the short jumper cable to the connector pins marked "B"; connect the two cables of the electrofusion machine to the connector pins marked "A" and "C".

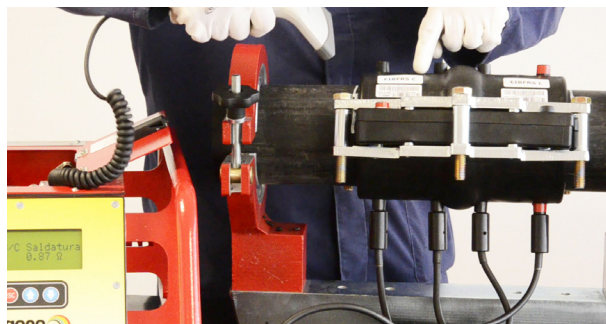
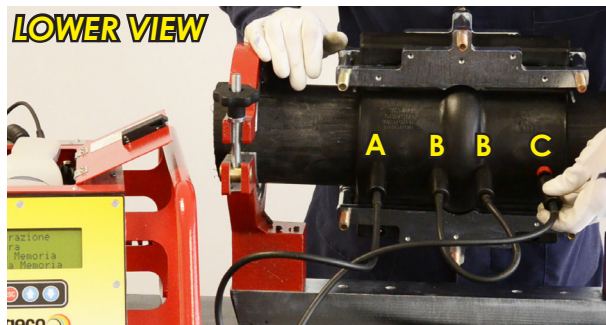
Scan again the barcode marked "EIBFRS C" with the scanner to proceed with welding the lower central part of the repair sleeve on the pipe.

When the welding cycle is positively concluded, disconnect all the cables from the repair sleeve and proceed immediately to the following step.

⚠ AT THE END OF EACH WELDING CYCLE, MARK THE ACTUAL TIME (HOURS AND MINUTES) ON THE MODULE.

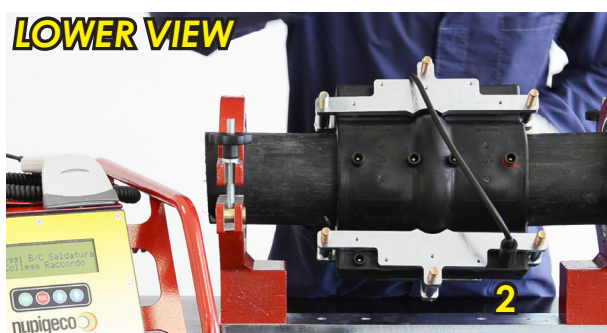
⚠ DO NOT REMOVE METAL CLAMPS

⚠ PROCEED IMMEDIATELY TO THE FOLLOWING STEP (DON'T WAIT FOR COOLING TIME).



8.2 FUSION OF THE LATERAL WINGS

8.2.1 Connect the long jumper cable to the connector pins marked “2” on both lateral wings (upper and lower side).



8.2.2 Connect the two cables of the electrofusion machine to the connector pins marked “1” on both lateral wings (upper and lower side).



8.2.3 Scan the barcode marked “EIBFRSL” with the scanner and proceed with welding the lateral wings of the repair sleeve.



8.2.4 When the welding cycle is positively concluded, wait for the completion of the cooling time indicated on the bar code (not less than 30 min), then remove the metal clamps and the aligner.

⚠ AT THE END OF EACH WELDING CYCLE, MARK THE ACTUAL TIME (HOURS AND MINUTES) ON THE MODULE.

⚠ DON'T STRESS OR BURY THE PIPELINE BEFORE THE COMPLETION OF THE COOLING TIME INDICATED ON THE BARCODE.

⚠ DO NOT REMOVE METAL CLAMPS BEFORE THE COMPLETION OF THE COOLING TIME.

⚠ IN CASE OF WELDING INTERRUPTION OF ONE OF THE CENTRAL PARTS DUE TO LACK OF POWER, WAIT FOR THE FITTING TO COOL DOWN FOR NOT LESS THAN 1 HOUR, THEN RE-START FROM THE BEGINNING THE WELDING CYCLE OF THE PART AND CONTINUE WITH WELDING THE OTHER PARTS FOLLOWING THE INSTRUCTIONS.

⚠ IN CASE OF WELDING INTERRUPTION OF THE LATERAL WINGS DUE TO LACK OF POWER, WAIT FOR 10 MINUTES THEN RE-START THE WELDING CYCLE. IF IT IS IMPOSSIBLE TO RESTART THE WELDING CYCLE AFTER 10 MINUTES, PLEASE CONTACT THE SUPPLIER FOR WELDING SUPPORT.