# Operating Instructions Scraper Tool FWSG 710 L





The FWSG 710 L scraper is for use on PE pipes with a diameter ranging from 10" IPS – 28" IPS and 10" DIP – 20" DIP. It is designed to remove completely and effortlessly the layer of oxide in preparation for an electrofusion joint.

The design of the FWSG 710 L (Picture 1) allows scraping of the

pipe surface along the **entire** length of the **coupler** or **half** of it:

- Scraping the **entire** length of the coupler is required when a slide-over coupler is employed.
- Only **half** the coupler (up to where insertion will end) needs to be scraped when a simple fusion process is to be applied.

**FWSG 710 L** 8 1. Roller handle 2. Scraper blade 3. Housing 2 4. Clamping carriage 5. Twist grip knob 6 .Guide rollers 7. Blade housing 8. Blade holder 9. Quick release button 10. End plate

Picture 1



The appropriate dimension ranges are marked twice along the scraper's guide rod. The first marking nearer the front plate serves to set the areas to be scraped for a simple fusion process. The second marking nearer the end plate refers to the employment of slide-over couplers.

#### I. Preparation

- Remove obvious dirt particles from the pipe surface to be scraped (using for example a clean, grease free piece of cloth).
- Determine length of area to be scraped (= depth of insertion of coupler/moulded part + 0.2") and mark area with wavy lines using a FRIALEN<sup>®</sup>- marker.

#### II. Setting the equipment

- Set blade to correct position:
  - Press quick release button and bring blade housing close to front panel (Picture 2).

Picture 2



Picture 3



Picture 4

- Set clamping carriage in lower position:
  - Loosen twist grip knob.
  - By pressing against the twist grip knob, allows free movement of the clamping carriage. Move down clamping carriage (Picture 3).
- Set blade housing to scraping length required (single or double scraping length).
  - Press quick release button and set blade housing roughly to relevant dimension marking (Picture 2). The blade housing will end up on the left of the marking.
  - The position of the blade housing will be fine tuned by turning the roller handle until the marking line chosen as the dimension range is flush with the blade housing (Picture 4).



Attention!

Do not touch clamping carriage with scraper blade!

Table for setting different pipe dimensions: (IPS) and (DIP)

Setting marks on the scraper	12"	18"	28"
Pipe dimensions	10" 12"	14" 16" 18"	20" 22" 24" 28"



Picture 5



Picture 6



# III. Mounting of scraper

• Move scraper across pipe in such a way that the clamping carriage is inside the pipe and the scraper blade is on the surface of the pipe (Picture 5). The housing must be flush with the front edge of the pipe.



<u>Attention!</u> Do not run the blade over the pipe surface.

- Setting the clamping carriage.
  - Move the clamping carriage upwards until it is in contact with the pipe wall (Picture 3). The supporting arm of the clamping carriage should be roughly parallel to the pipe wall.
  - Tighten twist grip knob (Picture 6) until all four guide rollers rest on the pipe surface.

## IV. Scraping of pipe surface

• Turn equipment clockwise around the pipe end. By turning steadily, the pipe can be scraped up to the pipe end (Picture 7).



## Attention!

During scraping, the scraper must be pushed against the pipe end in order to avoid axial tilting!

Picture 7

#### V. Dismantling of the equipment

- Loosen twist grip knob and remove scraper from pipe.
- In order to prevent injuries or scraper damage, the blade housing should be moved up to the front plate on completion.

## VI. Preparing the fusion process

- Remove the swarf.
- Check scraping result.

If marking has not been completely removed, the scraping process has to be repeated from Point III.

- Apply a chamfer (about 0.08" 0.11") at the end of the pipe using a hand held scraper.
- Clean the pipe before fusion using PE cleaner with an absorbent, non-fibrous and undyed paper.
- Processing the FRIALEN<sup>®</sup>/ FRIAFIT<sup>®</sup> -coupler takes place according to the installation instructions.



Attention! The scraper must be kept clean and dry and always stored in its

and dry and always stored in its transporting case.

## VII. Replacing scraper blade



<u>Warning!</u> Risk of injury on the scraper blade.

Procedure:

- Release the TORX screw with the TORX spanner supplied.
- Remove blade.
- Insert new blade.
- Tighten the TORX screw with the TORX spanner.

Please note when replacing the blade that only blades dyed **blue** may be used.

Replacement blade set	Order-No.
FWSGE 5	T-613 324

## Warranty

The FWSG 710 L comes with a 12 month warranty. It excludes blade equipment or parts which wear out prematurely due to their environment (sand, soil etc.). The tool must be protected from dirt.

## **Operational safety**

The scraper tool FWSG 710 L is based on quality management according to DIN ISO 9001:2000 and was checked with operational safety in mind before dispatch. It is recommended to test it annually for its operational safety. Please contact our Service and Technical Equipment department:

#### IPEX/FRIATEC PE ELECTROFUSION SYSTEMS 426 Fairforest Way GREENVILLE, SC 29607

PHONE: 864-234-2044 (Direct Line) FAX.: 864-234-2060 CELL.: 864-616-5392 www.friatecusa.com E-Mail: thoeng@ipexinc.com

