Instructions for RATUL

RATUL

Installation:
Insert the mandrel of the RATUL into the pipe (Fig. 2).

Expand the spacers by rotating the knob clockwise until the mandrel is locked inside the pipe (Fig. 3).
Hold the pipe with one end and rotate the body of the scraper with the other hand clockwise until the desired scraping length is reached (Fig.4). Holes are present on the scarper body to facilitate the rotating by the use of a tool.

![Fig. 4](image)

Loosen the spacers to remove the scraper from inside the pipe (Fig.5)

![Fig. 5](image)

Make sure you removed completely the layers of liner and external glue. Scrape away any deposit left using the manual scraper (model RAM2).

**N.B.: the RATUL scraper is available in the following sizes:**

- RATUL 50 (Ø 50)
- RATUL 63 (Ø 63)