

Operating instructions and
specifications for

Surprep rotary scrapping tool for Protecta-line pipes 90-180mm

Products by innovation not imitation



Helping you make the right connections™

Models covered by this manual:

**Surprep Protecta-line pipe preparation
tools 90/110mm & 90/180mm**

INDEX.

Pictorial representation & product codes	3
Specifications	4
Safety Instructions	5
Schematic parts drawing	6
Instructions for use	6
Storage.....	9
Certificate of conformity.....	10
Certificate of calibration	11
Warranty information.....	12

Product code:

Part number	Product description
01-07-070	Protecta-line hand tool only 63mm
01-07-071	Protecta-line hand tool only 90-110mm
01-07-072	Protecta-line hand tool only 90-180mm
01-07-075	Expanding mandrel 63mm
01-07-076	Expanding mandrel 90-110mm
01-07-077	Expanding mandrel 125mm
01-07-078	Shell set 160mm
01-07-079	Shell set 180mm
01-07-080	Protecta-line spare peeling blade



Specifications.

Materials:	Mild Steel EN3A, Stainless steel, Aluminum, Brass & Tungsten Carbide
Finish:	Natural / Zinc passivate to mild steel
Dimensions:	L475 x W330 x H130mm
Depth of cut:	0.30mm.
Max: length of scrape	70mm, Feed per rotation 4.5mm
Weight:	Including tool box 5.85 Kg

This unit is design and manufactured to meet the requirements of National Grid Gas Industry Standards GIS/PL2-5:2006

Part 5: Electrofusion ancillary tooling.

Caldervale Technology Ltd has a policy of continuous improvement in product quality and design. Caldervale Technology Ltd therefore reserves the right to change the specification of its models at any time, without prior notice.

It is the responsibility of the operator to ensure that the PE pipe is suitable for pipe preparation if in doubt contact the PE pipe manufacturer for confirmation

Important!

This manual outlines the operation of the pipe surface preparation tooling for the scraping of Protecta-Line pipe prior to the electrofusion welding process.

This manual forms a part of the product to which it relates. It should be kept for the life of the product. Any amendments issued by Caldervale Technology Ltd should be incorporated in the text. The manual should be passed to any subsequent holder or user of this product.

General description.

It is essential that the Protecta-Line pipe is properly prepared prior to electrofusion jointing as it is necessary to remove the outer polyethylene coating and aluminium barrier before performing the electrofusion joint.

The Caldervale Protecta-Line scraper must be used for pipe end preparation as this equipment not only removes the outer layers, but prepares the core pipe for electrofusion jointing at the same time.

Before using

It is important to ensure all component parts are present and in serviceable condition. In addition, the condition of the cutting / peeling tip should be checked for damage or excessive wearing.

Safety Instructions

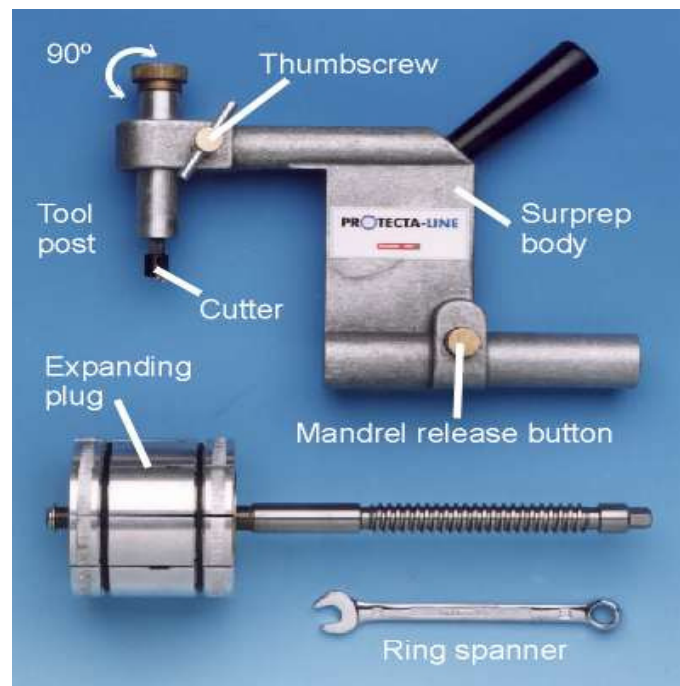
1. Read the instruction booklet before using the tool.
2. It is potentially dangerous to carry out electrofusion jointing with the aluminium barrier layer in place.
3. Electrofusion jointing is not recommended on protecta-line pipe for couplers less than 90mm

4. It is imperative that all possible precautions are made to avoid unexpected pipe movement when the tool is being use.
5. Never use the tool on pipes that are not within the specified dimensions.
6. The tool tip holder spring tension is factory set and **MUST NOT** be tampered without adequate training or instruction
7. Operatives should wear eye protection, gloves, safety headwear & footwear when using the equipment.

Instructions for use.

1. Measure the depth of the electrofusion fitting to be used. Place a mark on both pipes to show the position where the edge of the fitting will be.
2. Clamp the pipe to be prepared taking adequate care to avoid damage to the pipes outer covering.
3. Separate the mandrel from the body of the Surprep.
4. Hold the expanding plug and rotate the mandrel anti-clockwise until the plug is a light interference fit in the pipe bore.
5. Insert into pipe until edge of plug is level with edge of pipe. Expand plug further using the 10mm ring spanner. Do not over tighten so as to avoid pipe distortion.
6. Slide the body of the Surprep onto the mandrel, depress the release button and position the cutter, close to the edge of the pipe.
7. ***Note: The Protecta-Line Surprep cuts in an anti-clockwise direction, beginning at the edge of the pipe.***

8. Rotate the knob on the top of the tool post through 90°, against the spring tension, such that the cutter is in its raised position.
9. Loosen the body thumbscrew and position the cutter shoe on the edge of the pipe. Tighten the thumbscrew.
10. Rotate the knob on top of the post through 90° so that spring pressure is applied to the cutter.
11. Rotate the tool anti-clockwise in a smooth continuous motion.
12. Remove the surface of the pipe up to the depth mark drawn in step 1.



13. Rotate the knob on top of the tool post so that the spring pressure is released.
14. Use the hand scraper to remove the peeled strip from the pipe.

Caution do not attempt to break the peeled strip by pulling with bare hands, it has a sharp edge!

15. Inspect the prepared surface to ensure:

- i) All of the metallic layer has been removed.
- ii) All of the adhesive which bonds the metallic layer to the blue core has been removed.

16. If, for any reason, the prepared surface is not a uniform blue colour all over, then use the hand scraper to complete the preparation process.

Do not attempt a second pass with the Protecta-Line Surprep.

Instructions for removal after completion of pipe preparation.

- 1) On completion of the scrape, release the tool tip tension, ensuring that nothing comes into contact with the scraped area.
- 2) Remove the body from the mandrel by depressing the quick release button
- 3) Remove the complete mandrel by releasing the tension on the expanded mandrel head using the 10mm spanner

Storage

IMPORTANT: When not in use always –

1. Store the tool in a tool box.
2. Ensure the tool tip tension is released.

Maintenance

Lubricate all moving parts at regular intervals.

Tool

Grease check screw threads at regular intervals.



EC DECLARATION OF CONFORMITY

MACHINERY SUPPLIER: Caldervale Technology Limited

SUPPLIER'S ADDRESS: Bretfield Court,
Dewsbury,
WF12 9DB,
UK

Declares that the Machinery described below:

Make: CTL
Product: Maxifuse™ Pipe end preparation tools
Type: Surprep PT1
Reference No: 01-02-

Conforms to the following Directives:

98/37/EC Machinery (Safety) Regulations (as amended)

Meets the following standards:

Safety of Machinery

BS EN 12100: 2003, BS EN 982: 1996

Gas Industry Standard

GIS/PL2-5:2006 part 5 Electrofusion ancillary tooling

Complies with, or is designed and constructed so far as is possible to comply with the relevant essential health and safety requirements, taking into account the state of the art.

Modifications to the equipment without prior approval by the undersigned will render this Declaration null & void

For and on behalf of the Manufacturer:

Signature:

Gordon Lilley – Managing Director (CE Responsible Person)

Signed at: on:(date)

Signature of this Declaration of Conformity authorises the manufacturer or his authorised representative in the community to affix the CE Mark to the equipment

Certificate of calibration.

- This product has been inspected and tested in accordance with the ISO9001 quality control systems and procedures in place at Caldervale Technology Ltd, Dewsbury.
- This product has no calibration period, periodic, safety inspections should be carried out by the operator if in any doubt please contact the manufacturer for further information

Decommissioning & Disposal Instructions

These give the instructions for decommissioning and disposal of the equipment and confirm how it is to be taken out of service safely, in respect of the Essential Health and Safety Requirements.

- If a Maxifuse™ Pipe surface preparation tool has reached the end of its useful working life and cannot be refurbished it must be disposed of through a licensed scrap or waste disposal facility. Alternatively, a reverse engineering company could be used to strip the equipment for recycling purposes.
- Disposal is the responsibility of the Customer this can also be achieved by returning the product back to the manufacturer

Warranty Information.

1. Extent of Warranty.

- (a) Subject to clauses 2 and 3, Caldervale Technology Ltd warrants to the end-user customer that its products will be free from defects in materials and workmanship, for six months after the date of purchase by the end-user customer, subject to providing proof of purchase.
- (b) If Caldervale Technology Ltd receives, during the warranty period, notice of a defect in product which is covered by this warranty; Caldervale Technology Ltd shall either repair or replace the product, at its option. Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced.
- (c) All warranty work will be carried out by Caldervale Technology Ltd unless otherwise agreed. On-site warranty and repair or replacement services are available from authorised Caldervale Technology Ltd service facilities world-wide.
- (d) Customers shall prepay shipping charges for products returned to Caldervale Technology Ltd for warranty service, and Caldervale Technology Ltd will charge for return of the products back to the customer.
- (e) This warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from country to country in the world.

2. Pre-conditions for Warranty Application.

Caldervale Technology Ltd' warranty covers only those defects which arise as a result of normal use of the product, and this warranty shall only apply in the following circumstances:

- (a) All the instructions contained in the operating manual have been complied with; and
- (b) None of the following apply:
 - (i) Improper or inadequate maintenance;
 - (ii) Physical abuse;
 - (iii) Unauthorised modification, misuse or any use not in accordance with the operating manual and good industry practice;
 - (iv) Operation outside the products specifications;
 - (v) Improper site preparation or maintenance;
 - (vi) Faulty pipe.

3. Limitations of Warranty.

- (a) Caldervale Technology Ltd does not warrant the operation of any product to be uninterrupted or error free.
- (b) Caldervale Technology Ltd makes no other warranty of any kind, whether express or implied, with respect to its products. Caldervale Technology Ltd specifically disclaims the implied warranties of satisfactory quality and fitness for a particular purpose.
- (c) To the extent that this warranty statement is inconsistent with the law of the locality where the customer uses the product, this warranty statement shall be deemed modified by the minimum necessary to be consistent with such local law.
- (d) To the extent allowed by local law, the remedies provided in this warranty statement are the customer's sole and exclusive remedies.
- (e) This tool has been designed for the range of pipes available at the time of its design and development. Caldervale Technology Ltd can accept NO liability for the unit's ability or otherwise to work with new or different pipes that subsequently appear in the market place.

Please complete this information and keep it safely with your proof of purchase receipt. You will require it for any warranty claim.

Where purchased

Date of purchase

Name & address
of purchaser

Type of tool

Serial number

For Service and repair please contact:

Caldervale Technology Ltd

Bretfield Court

Dewsbury

West Yorkshire

WF12 9DB

United Kingdom

Tel: +44 (0)1924 469571

Fax: +44 (0)1924 460951

sales@caldertech.com

<http://www.caldertech.com>