


External De-beaded Tools

Operating Instructions

Models: 125mm, 400mm, 630mm, 900mm

Revision: 02



Helping you make the right connections.

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01. Introduction

General Description

The De-beading tool is designed to remove the external bead left behind after butt fusion welding.

This unit is design and manufactured to meet the requirements of National Grid Gas Industry Standards GIS/PL2-3 Part 3 Butt Fusion Machines and Ancillary Equipment.

These products External De-Beading Tools have been manufactured, inspected and tested in accordance with the ISO9001 quality control systems and procedures in place at Caldervale Technology Ltd, Dewsbury.



This tool has a sharp blade that is not always easily visible, care should be taken to ensure this blade does not cause harm to any persons or damage to any equipment or pipe.

The blade protector should always be applied when not in use.

Important!

This tool should be used in accordance with the pipe manufacturers' recommendations and in line with local codes of practice.

This manual outlines the operation of the tool and 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.

Before Using

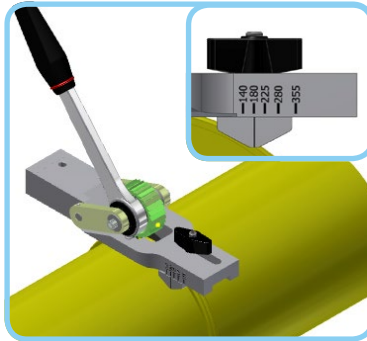
It is important to ensure all component parts are present and in serviceable condition.

02. Safety Instructions

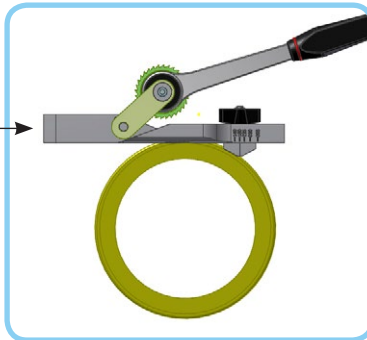
1. Read and understand the whole instruction booklet before using the tool.
2. It is imperative that all possible precautions are made to avoid unexpected pipe movement when the tool is being use.
3. Never use the tool on pipes that are not within the specified dimensions.
4. Operatives should wear eye protection, gloves, safety headwear and footwear when using the equipment.

03. Operation

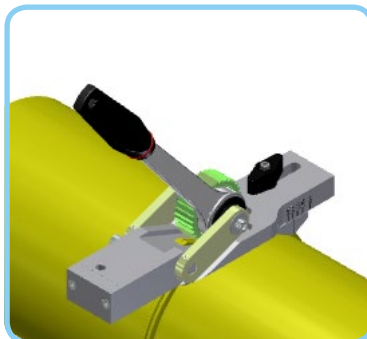
Instructions for Use



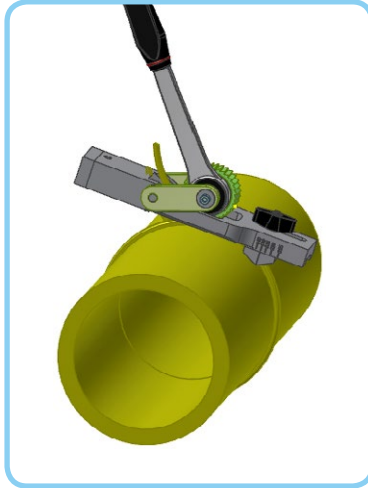
1. Raise the ratchet drive wheel and set the adjustment block to the pipe size been used. Remove blade.



2. Drive the blade into the bead until you have approximately 25-30mm of free bead (a mallet may be used on the back of the de-beader to achieve this).



3. Drop the ratchet drive wheel onto the bead.



4. Apply Pressure to the ratchet handle and move the tool around the pipe until the bead has been removed



Storage

IMPORTANT! When not in use always:

1. Ensure the tool is clean and dry before storing
2. Ensure the blade protector is applied and the cutter tip will not get damaged in transit as this can severely limit the quality and effectiveness of the bead removal process
3. Store the tool in the case provided

Routine Maintenance

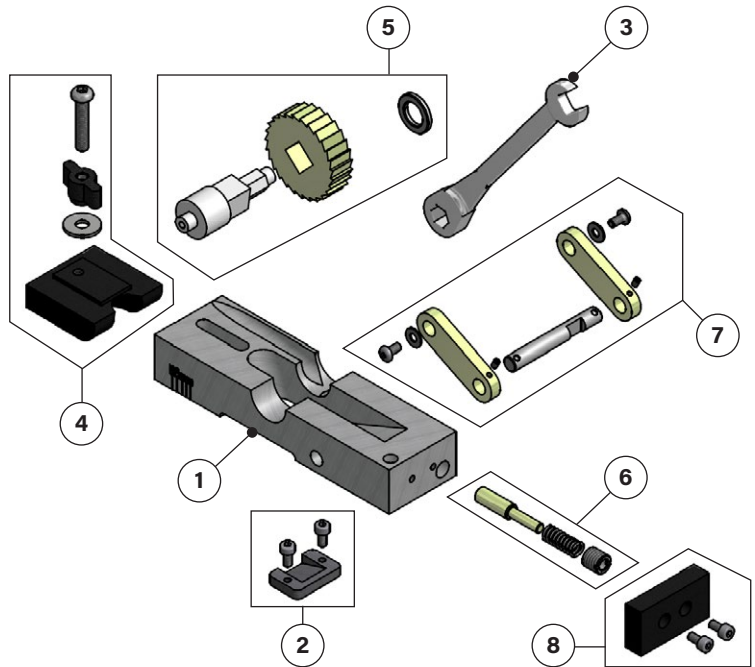
1. Check for correct movement and operation regularly.
2. Lubricate all moving parts at regular intervals before using.
3. It is important to ensure all components are present and in serviceable condition.
4. In addition the condition of the blade should be checked for damage and/or excessive wearing.
5. The blade can be replaced and spares are indicated in the parts diagrams of their respective tools

04. 125mm De-beader Specifications

Maximum Bead Width:	15mm
Pipe Diameter:	63 - 125mm (2 - 4 inch)
Materials:	Mild Steel, Aluminium, Nylon
Finish:	Yellow and Silver zinc plated (Steel), Natural (Aluminium), Black (Nylon)
Dimensions:	240mm x 70mm x 75mm
Weight:	0.8 kg
Product Code:	01-07-520



05. 125mm De-beader Parts Diagram



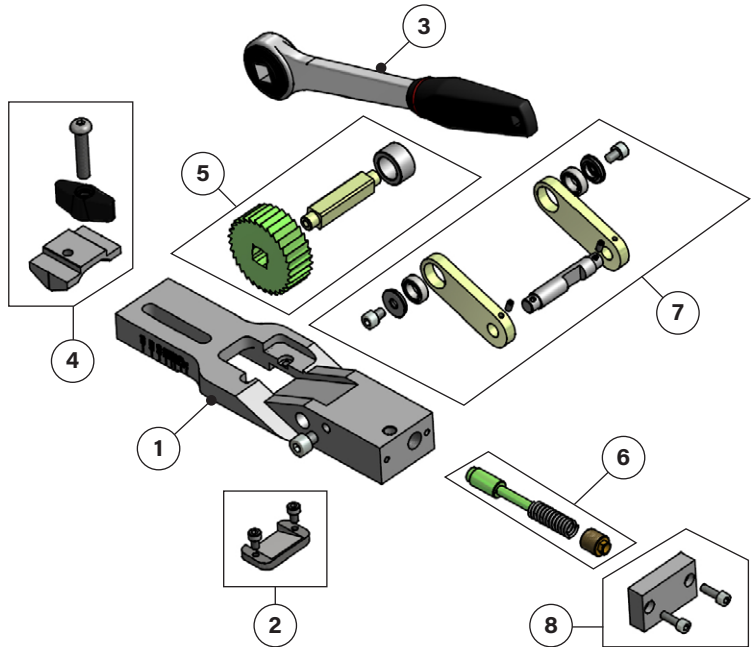
Part	Product Code	Description
1	Z01-07-542	Base Plate
2	Z01-07-587	Blade Kit
3	Z01-07-544	Ratchet
4	Z01-07-588	Adjustment Block Kit
5	Z01-07-589	Ratchet Wheel Repair Kit
6	Z01-07-590	Spring Loaded Plunger Repair Kit
7	Z01-07-591	Side Link Repair Kit
8	Z01-07-592	Wear Plate Kit

06. 400mm De-beader Specifications

Maximum Bead Width:	30mm
Pipe Diameter:	90 - 400mm (3 - 16 inch)
Materials:	Mild Steel, Aluminium, Nylon
Finish:	Yellow and Silver zinc plated (Steel), Natural (Aluminium), Black (Nylon)
Dimensions:	385mm x 85mm x 85mm
Weight:	1.8 kg
Product Code:	06-20-454



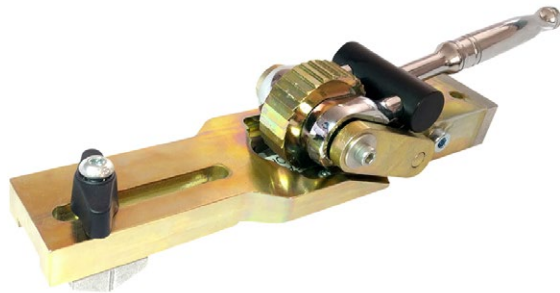
07. 400mm De-beader Parts Diagram



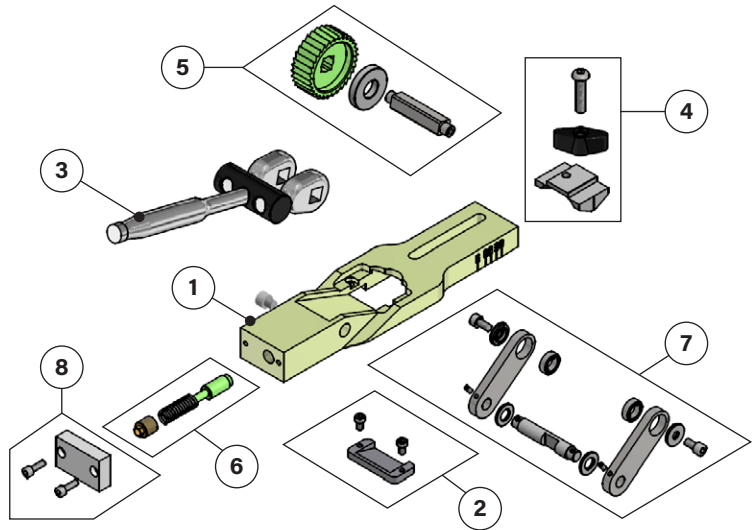
Part	Product Code	Description
1	Z01-07-572	Base Plate
2	Z01-07-581	Blade Kit
3	Z01-07-531	Ratchet
4	Z01-07-582	Adjustment Block Kit
5	Z01-07-583	Ratchet Wheel Repair Kit
6	Z01-07-584	Spring Loaded Plunger Repair Kit
7	Z01-07-585	Side Link Repair Kit
8	Z01-07-586	Wear Plate Kit

08. 630mm De-beader Specifications

Maximum Bead Width:	35mm
Pipe Diameter:	355 - 630mm (14 – 24 inch)
Materials:	Mild Steel, Aluminium, Nylon
Finish:	Yellow and Silver zinc plated (Steel), Natural (Aluminium), Black (Nylon)
Dimensions:	345mm x 85mm x 85mm
Weight:	3.4 kg
Product Code:	01-07-504



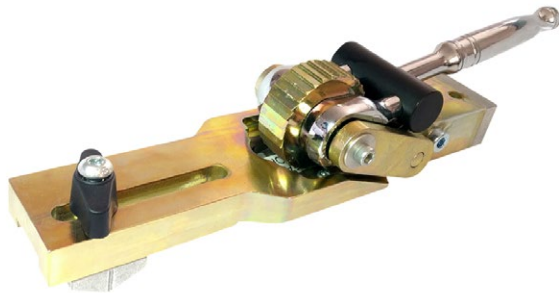
09. 630mm De-beader Parts Diagram



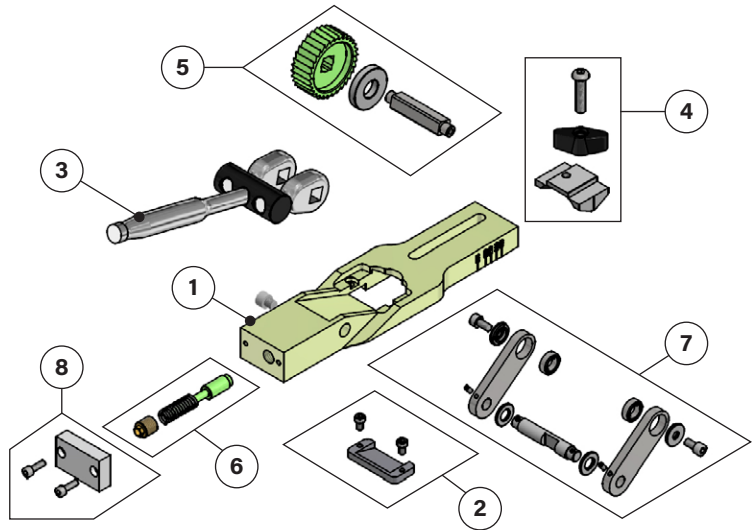
Part	Product Code	Description
1	Z01-07-600	Base Plate kit
2	Z01-07-601	Blade Kit
3	Z01-07-525	Ratchet
4	Z01-07-582	Adjustment Block Kit
5	Z01-07-603	Ratchet Wheel Repair Kit
6	Z01-07-584	Spring Loaded Plunger Repair Kit
7	Z01-07-605	Side Link Repair Kit
8	Z01-07-586	Wear Plate Kit

10. 900mm De-beader Specifications

Maximum Bead Width:	40mm
Pipe Diameter:	500 - 900mm (20 - 36 inch)
Materials:	Mild Steel, Aluminium, Nylon
Finish:	Yellow and Silver zinc plated (Steel), Natural (Aluminium), Black (Nylon)
Dimensions:	345mm x 85mm x 85mm
Weight:	3.5 kg
Product Code:	01-07-525



11. 900mm De-beader Parts Diagram



Part	Product Code	Description
1	Z01-07-610	Base Plate kit
2	Z01-07-611	Blade Kit
3	Z01-07-525	Ratchet
4	Z01-07-582	Adjustment Block Kit
5	Z01-07-603	Ratchet Wheel Repair Kit
6	Z01-07-584	Spring Loaded Plunger Repair Kit
7	Z01-07-605	Side Link Repair Kit
8	Z01-07-586	Wear Plate Kit

12. 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's 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 pipes.

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 of purchaser: _____

Address of purchaser: _____

Type of tool: _____

Serial number: _____

13. Certificate of Conformity



Certificate of Conformity

This document certifies that the product detailed below fully conforms to the following standard without derogation.

GIS-PL2-3:2015 Butt Fusion Machines and ancillary Equipment

ISO 12176-1:2017 Plastics pipes and fittings -- Equipment for fusion jointing polyethylene systems -- Part 1: Butt fusion

**External De-Beading Tools
125mm, 400mm, 630mm, 900mm**

March 2019

I. Smith
Managing Director



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CRN 2769288 | ISO 9001:2015 Certified FM 30989

14. Service and Repair

For service and repair please contact:

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This product has no specific calibration period, however periodic safety inspections should be carried out by the operator as specified in this manual, if in any doubt please contact the manufacturer for further information.

15. Decommissioning and Disposal

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 Environmental, Health and Safety Requirements.

- If a Caldertech De-Beading tool has reached the end of its useful working life and cannot be refurbished it must be sent to a licensed recycling facility for treatment. That will ensure the waste hierarchy requirements are met.
- End of life treatment is the responsibility of the Customer. This can also be achieved by returning the product back to the manufacturer if required.

INTERNATIONAL

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