Operating instructions and specifications for

# **Multi-Clamps**

Products by innovation not imitation



*Helping you make the right connections*<sup>™</sup>

Models covered by this manual: 2 way & 3 way Pipe restraining clamps

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# Specifications.

Materials:	Mild Steel EN1A Mild Steel EN3A Stainless Steel Aluminium Ebonite
Finish:	Silver zinc plated (Steel)
Product Code: Weight: Dimensions:	<b>01-16-001</b> K type clamp 63-250mm 2 way with single base x 0.75m overall 18 Kg's in toolbag. 630mm x 340mm x 270mm
Dimensions.	
Product Code:	<b>53MC2014</b> K type clamp 63-250mm 2 way single base with saw & guide 0.75m overall
Weight: Dimensions:	20Kg's in toolbag 630mm x 340mm x 270mm
Product Code:	<b>01-16-002</b> K type clamp 63-250mm 3 way without reducing plates for equal size tees, bends & elbows in toolbag
Weight: Dimensions:	32Kg's 940mm x 370mm x 230mm
Product Code:	<b>01-16-003</b> K type clamp 63-250mm 3 way for tees elbows & straight fittings with
Weight: Dimensions:	equal and reduced branches 30Kg's in toolbag 940mm x 370mm x 320mm
Product Code:	<b>01-16-006</b> Saw guide kit for 63-250mm K clamp
Weight: Dimensions:	4Kg's 70mm x 350mm x 300mm
Product Code:	<b>01-16-101</b> K type clamp 125-500mm 2 way with single base x 0.75m overall
Weight: Dimensions:	14Kg's 940mm x 370mm x 230mm

Product Code:	<b>01-16-102</b> K type clamp 125-500mm 2 way with angle maker & 2 bases x 1.7m
Weight: Dimensions:	overall 35Kg's 940mm x 370mm x 280mm
Product Code:	<b>01-16-105</b> K type clamp 125-500mm pair of adapter plates for reduced outlet fittings
Weight: Dimensions:	5Kg's 27mm x 100mm x 300mm
Product Code	K type clamp 125-500mm 3 way for tees elbows & straight fittings with equal branches saw guide
Weight: Dimensions:	53Kg's 950mm x 500mm x 330mm
Product Code:	<b>01-16-103</b> K type clamp 125-500mm 3 way for tees elbows & straight fittings with
Weight: Dimensions:	equal and reduced branches 48Kg's 950mm x 500mm x 330mm
Product Code:	<b>C9010358</b> Spare ratchet assembly 125- 500 K clamp
Weight: Dimensions:	

Product Code:

**C9010527** Spare webbing strap with steel hook 125-500mm K clamp

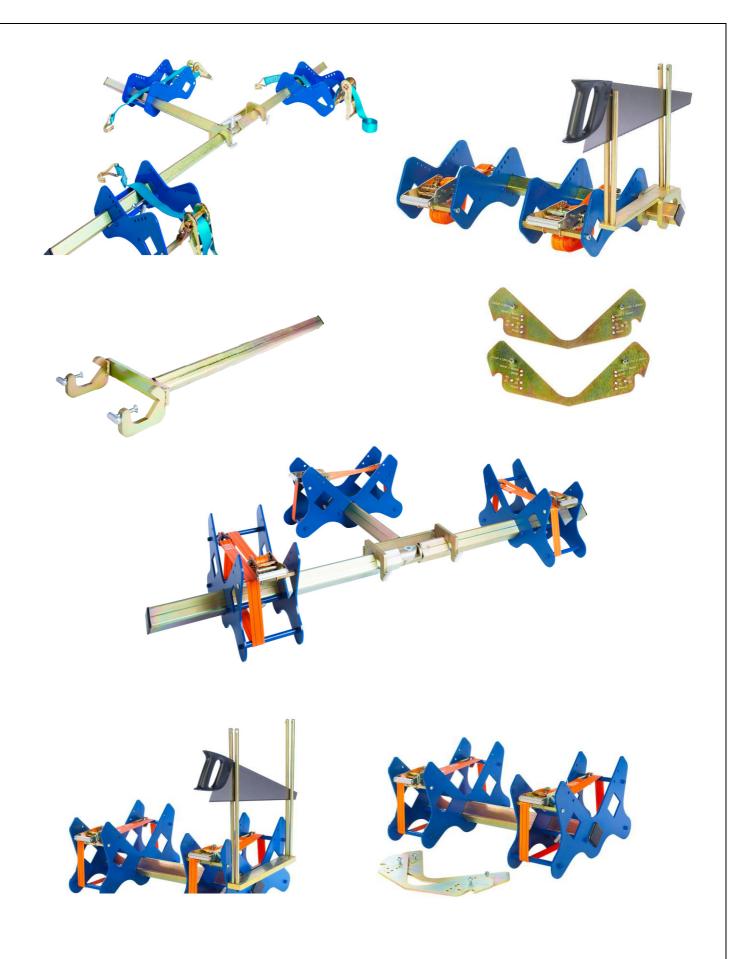
Weight: Dimensions: This unit is design and manufactured to meet the requirements of National Grid Gas Industry Standards GIS/PL2-7:2006 Part 5: Electrofusion ancillary tooling.

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.

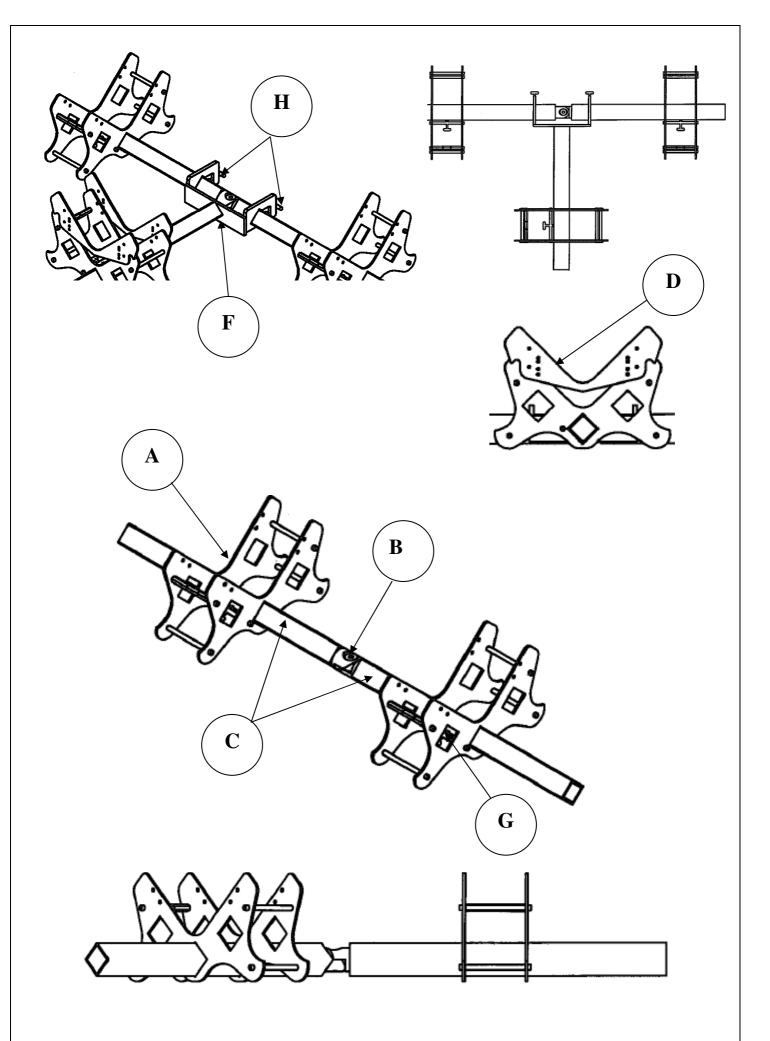
## Important!

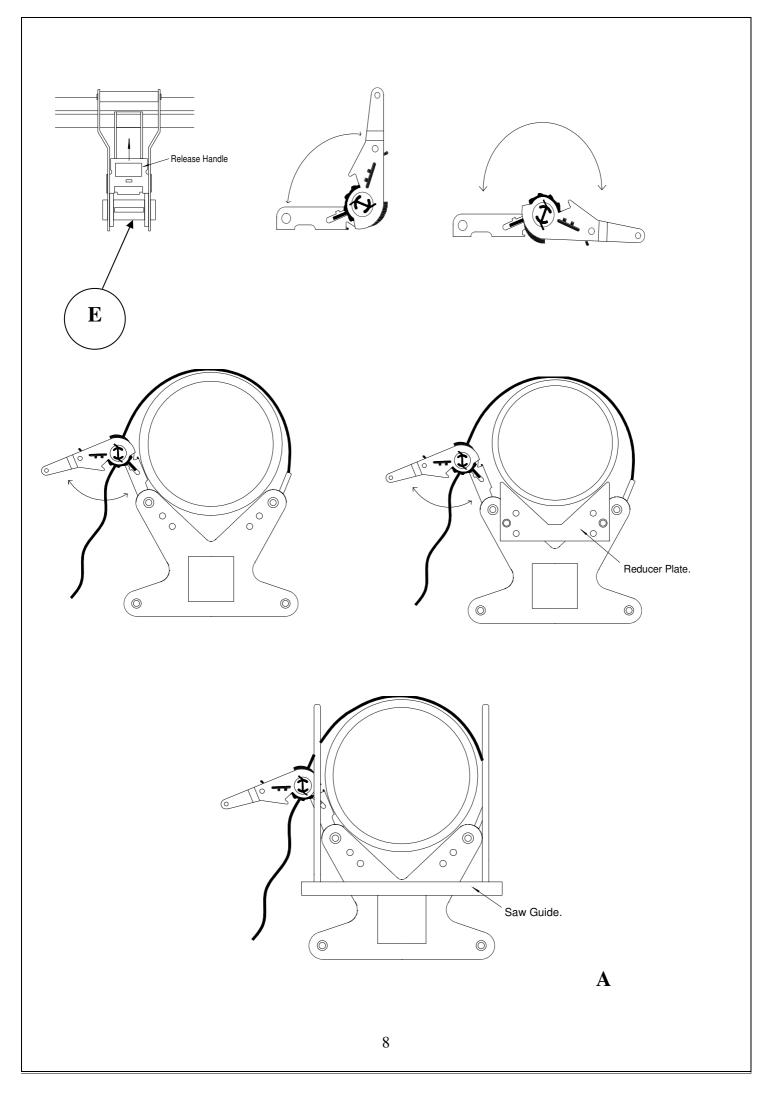
This manual outlines the operation of the electrofusion tooling.

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.



K Type Restraining Clamp.





## **General description.**

Maxifuse mains restraining clamps are designed for restraining the movement of medium diameter couplers, elbows and reducers and Tees. They are designed to fit pipe sizes from 63mm through to 250mm and also from 125mm to 500mm.

The clamps have adaptor plates which, when fitted allow the installer the option to electrofuse reducers with ease

An optional wooden carrying box is available on request along with a canvass carry bag

An optional saw and guide is available to allow easy cutting of the pipe to a square end.

#### **Before using**

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

## **Instructions for use.**

#### 2 way straight or angle joints equal ended.

2 base bars **C** should be joined together at point **B** and fixed loosely with the pivot screw. The 2 pipe support carriages **A** can be attached to the base bars through the diamond shaped hole, slid along the bars and fixed in the desired position with thumb screw **G**. The Tensioning ratchets **E** can now be operated to release the webbing straps and the pipes laid into the Vees. If an angle or elbow coupler is being used, the base bars can be set to the correct angle before being locked in position with the pivot screw, if a straight coupler is being used the base bars should be set at 180° and locked in position. After assembling the pipe and coupler in the clamp, the tapes can be passed over the pipes and the free ends located in the ratchet tensioners and the ratchets operated to position and secure the pipe and coupler assembly.

#### 3 way equal ended tee joints.

Assemble the clamp for a straight joint as described above but do not put the pipes into the carriages yet, take the 3 way adapter base **F** and position onto the base bars centrally around and underneath the angle making joint, tighten the 2 locking screws **H** fixing the adapter base onto the base bars to make a "T" shape. Take the third carriage supplied with the 3 way kit and slide onto the adapter base as described above loosening the ratchet to release the third webbing strap. Lay the pipes and tee onto the carriages and assemble the tee joint, secure and locate the pipes and fitting assembly into position as described above.

#### 2 way & 3 way joints with 1 reduced end.

Select which carriage is to hold the reduced size end, take the 2 reduction adapter plates  $\mathbf{D}$  and find the hole nearest the size of the required smaller pipe. Firmly attach the reduction adapter plates to the "K" plates of the appropriate carriage using screws into the correct hole. Assemble the joint in the clamp and secure with the webbing tapes as described above.

#### Using the Saw Guide.

The saw guide is used to make sure that the pipe ends are cut square. Rest the guide on top of the box section and then clamp it to the side of the K body with the clamping bar provided. A saw can then be fed between the two sets of bars keeping the cut straight.

The fitting is now constrained and ready for welding

#### **Removal**

The clamp can now be removed from the pipe and fitting once the cooling cycle has been achieved by means of releasing the tension on the ratchet assembly, and remove the clamps in reverse order

# **Certificate of conformity**

This product has been manufactured in accordance with the following standards:

- British Gas PL2: Part 5. Electrofusion ancillary tooling.
- European Communities machinery directive 89/392/EEC.

# 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<sup>™</sup> 63/250mm -125/500mm mains restraining clamp 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

EC DEC	LARATION 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 <sup>TM</sup> Mains restraining clamp 'K' Type			
Type:	63/250mm inc'-125/500mm inc'			
Reference No:				
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: (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				

# 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; and
  - (vi) Faulty pipe or fittings.

#### 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 fittings 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 fittings 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**

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