OPERATING INSTRUCTIONS
FOR
EFRAC16-63 Uni Clamp

1. Machine to be operated by trained personnel.
2. Instructions to be read before use.
Product Data Sheet

Electro-Fusion Restraining Clamp EFRC (16-63mm)

<table>
<thead>
<tr>
<th>Product Code</th>
<th>089-000332</th>
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</thead>
<tbody>
<tr>
<td>Weight</td>
<td>1.8 Kg</td>
</tr>
<tr>
<td>Leading Dimensions</td>
<td>L: 195 W:185 H:155</td>
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</tbody>
</table>

Pipe Range: 16, 20, 25, 32, 40, 50 & 63mm.

Application: For positioning and clamping Electro-Fusion straight couplers / reducers (whilst maintaining centre line). Can also be used for clamping 45° and 90° Elbows.

Features: The Clamp is designed to restrain the movement and axially align the pipe during the electro-fusion process. Its design features enable the clamp to be adapted to be used on any diameter of pipe within the clamps range and gives small Re-Rounding properties.

Technical Data.

Materials: Steel 316L
Aluminium 6062
5083
Plastic Polyamide (Nylon)

Finish: Anodise Black/Silver

Design Specification:

Hy-ram Engineering Co. Ltd have designed and manufactured this unit to meet the requirements of National Grid Gas Industry Standards GIS/PL2-5:2006 Part 5: Electro-Fusion Ancillary Tooling.
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Hy-Ram Engineering Co Ltd has a policy of continuous improvement in product quality and design. Hy-Ram Engineering Co 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 Hy-Ram Engineering Co Ltd should be incorporated in the text. The manual should be passed to any subsequent holder or user of this product.

**General description.**

EFRAC 16-63 Uni clamps are designed for restraining the movement of small diameter couplers, elbows and reducers. They are designed to fit all pipe sizes from 20mm through to 63mm.

The clamps have rotating profile plates with pipe cutouts, allowing quick and easy changing of size for couplers and reducers.

The profile plates can be custom made for any sizes of pipe that may be specific to your line of work.
**Instructions for use.**

**Pipe Size**

1. Check pipe size and set profiles to suit by unscrewing Thumbscrew and rotating Profile
2. The Profiles located in their correct position by the Pin on Arms, then Re-tighten Thumbscrew.

N.B. The correct orientation of the profiles is with the required size faces each other.

**Fitting**

3. Turn the main black Knob anti-clockwise to allow clamp to open up.
4. Check there is sufficient clearance between the Profiles for the pipe.
5. Place tool over pipe and fitting to be clamped ensuring fitting is contained between the profiles. Turn the main black Knob clockwise to tighten the clamp.
6. There should be sufficient pressure so that the clamp will not slide on the pipes.

The fitting is now constrained ready for welding

**Removal**

7. Turn the main black Knob anti-clockwise to release clamp pressure. Remove tool from pipework.

Note: The clamp can also be adjusted to clamp elbows. Each arm can be set to straight, 45 or 90 degrees. All 4 arms of the clamp must be on the same setting for the jaws to match up correctly.
Certificate of calibration.

- This product has been inspected and tested in accordance with the ISO9001 quality control systems and procedures in place at Hy-Ram Engineering Co Ltd.
- 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 an EFRAC 16-63 Uni 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
Warranty Information.

1. Extent of Warranty.

(a) Hy-Ram Engineering Co 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 Hy-Ram Engineering Co Ltd receives, during the warranty period, notice of a defect in product which is covered by this warranty, Hy-Ram Engineering Co 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 Hy-Ram Engineering Co Ltd unless otherwise agreed. On-site warranty and repair or replacement services are available from authorised Hy-Ram Engineering Co Ltd service facilities world-wide.

(d) Customers shall prepay shipping charges for products returned to Hy-Ram Engineering Co Ltd for warranty service, and Hy-Ram Engineering Co 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.

Hy-Ram Engineering Co 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.

(b) And 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) Hy-Ram Engineering Co Ltd does not warrant the operation of any product to be uninterrupted or error free.

(b) Hy-Ram Engineering Co Ltd makes no other warranty of any kind, whether express or implied, with respect to its products. Hy-Ram Engineering Co 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. Hy-Ram Engineering Co 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 ............................................................................................................... 

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Type of tool ...........................................................................................................................................

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Serial number ....................................................................................................................................... 

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For Service and repair please contact:

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