



OPERATING INSTRUCTIONS FOR Hydraulic Re-rounding Clamps 400mm to 630mm

- 1. Machine to be operated by trained personnel.**
- 2. Instructions to be read before use.**

Hy-Ram Mansfield
Pelham Street
Mansfield
Nottinghamshire
NG18 2EY

Hy-Ram Bury
9 Portland
Industrial Estate
Portland Street
Bury
Lancashire
BL9 6EY

Hy-Ram Enfield
Unit 2, Riverwalk
Business Park
Riverwalk Road
Enfield
EN3 7QN

Hy-Ram Livingston
18 Napier Square
Houstoun Road
Trading Estate
Livingston
West Lothian
EH54 5DG

Tel: 01623 422982
Fax: 01623 661022

Tel: 0161 7641721
Fax: 0161 7620577

Tel: 0208 805 8010
Fax: 0208 805 6010

TEL: 01506 440233
Fax: 01506 440266

Important!

This manual outlines the operation of the hydraulic large diameter pipe re-rounding clamps. 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.

The equipment has been designed to re-round the P.E. pipe. from 400mm to 630mm (dependant on model) prior to carrying out the electrofusion jointing process on SDR11 and SDR17 pipe work in accordance with Gas Industry Standards GIS/PL2-5:2006 Part 5 Electrofusion ancillary tooling. Pipe is re-rounded by using a hydraulic unit, and can then be locked off in position, whilst the pipe is re-rounded. The units have been manufactured so that inserts can be fitted and used on various pipe dimensions.

These clamps will not cure flattening in previously squeezed off pipe, where the clamp comes into contact with scraped pipe, the area must be re-scraped before fitting into the electrofusion coupler

First Use

Before operating the clamp for the first time, the re-rounder must have its hydraulic circuit 'purged' to eliminate any possible air in the system.

Air can collect in the hydraulic system when hoses or tools are connected and this can lead to problems in operation. To bleed the system run the tool or ram through 3-4 cycles (pumping to full extension then releasing) without any load. At the same time make sure that the tool or ram is kept lower than the pump so that the air can travel back to the oil reservoir in the pump. Then bleed the pump oil reservoir. Top up the pump with oil if necessary.

Before using

It is important to ensure all component parts are present and in serviceable condition. Check the pump, hose and connectors for damage. Ensure the reducing inserts are fitted with the correct screws

Safety Instructions

1. It is imperative that all possible precautions are made to avoid unexpected movement of the tool during use.
2. Never operate the hydraulic cylinder beyond its maximum stroke.
3. The pump is fitted with a safety valve to stop overloading. This is factory set and **MUST NOT** be tampered with.

4. The clamps are heavy between 60Kg & 90Kg dependant on model care should be taken when in use.
5. To avoid injury the re-rounder should be closed and secured and the safety chains latched in position with the hydraulic cylinder extended for transportation, lifting must be by 2 persons.
6. Operatives should wear eye protection, gloves, safety headwear & footwear when using the equipment.

Instructions for use.

1. The tool consists of a steel 3 segment body with hinges and transportation eyes, a hydraulic pump and optional liner shells to increase the operating range of the tool.
2. The tool should ideally be positioned onto the pipe using a suitable powered lifting device. Chains and shackles or webbing slings should be connected through the eyebolts or lifting handles to allow ease of movement. The tool should never be opened more that the length of the safety chain, neither should the safety chain ever be removed or left disconnected.
3. When the tool is correctly positioned, the cylinder eyebolt should be positioned so that the clevis pin can be passed through the first clevis plate, the eyebolt and the second clevis plate easily.
4. The hose connector from the pump can then be fitted to the coupler on the hydraulic cylinder, to do this, ensure the coupling locknut is free to rotate and at the base of the stem nearest the cylinder.
5. After wiping to remove loose dirt etc. firmly insert the probe on the hose into the cavity in the cylinder coupler and fully lock in position with the locknut.
6. To close the segmented body together and initiate the re rounding effect, ensure the open/close valve on the pump is shut prior to operating the pump handle in a regular motion.
7. Pressure will build up inside the cylinder forcing the piston to move and thereby close the segments together.
8. Allow sufficient time for the re-rounding effect to take place prior to releasing the cylinder pressure by opening the open/close valve on the pump.

Instructions for removal after pipe re-rounding.

Care must be taken on removing the clamp to ensure injury to operatives is avoided.

Transport and Storage

1. Release the pressure in the circuit by opening the valve on the pump unit.
2. Release the hydraulic couplers/hose between the pump and cylinder.
3. Remove the eye bolt pin this will allow the re-rounder to relax around the pipe.
4. It should be possible to now lift the re-rounder clear of the pipe.
5. Care should be taken not to cause damage to the already re-rounded pipe end.

IMPORTANT: When hydraulic equipment is not in use:

1. Store the tool in an upright position.
2. Clean the equipment.
3. Store in a clean damp free environment
4. Make sure the store is not subject to extreme temperature changes
5. Ensure the pressure in the cylinder is released.

Maintenance

Hydraulic cylinder cleaned and dirt free.

Lubricate all moving parts at regular intervals.

Use only OEM spare parts (NIKE)

NOTE: AN EXCESS OF OIL WILL RENDER THE PUMP INOPERATIVE

Use only hydraulic oil type HL or HM (30cSt at 40°C)

Tool

Grease and check screw threads at regular intervals.

Inspect and replace damaged security chains.

Inspect and lubricate all moving components if necessary.

Hy-Ram Engineering Co. Ltd
Tel : + 44 1623 422 982 Fax : + 44 1623 661 022