

OPERATING MANUAL
**PORTABLE
FLARING DEVICE
TYPE: UNIPRESS 642 H**



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Manufacturer	Gates Tube Fittings GmbH
Address	Kolumbusstrasse 54 53881 Euskirchen
Tel	+49 2251 1256-0
Fax	+49 2251 1256-400
Email	gatescsir@gates.com
Internet	www.gates.com

1. FOR YOUR SAFETY

INTENDED USE

The portable flange device is exclusively used for the assembly of tube connections, which are indicated by the manufacturer.

Another or beyond going use is not considered than intended.

The manufacturer of the machine is not responsible for damages which are happened by inadequate operating.

TECHNICAL SAFETY

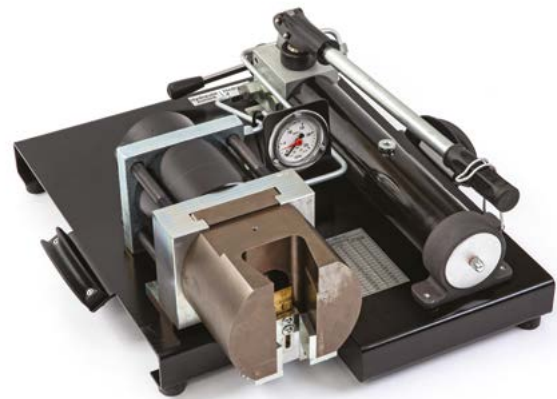
- Examine the device for visible damages. A defective equipment may not be used.
- The device is built in accordance with current safety requirements. Unauthorised repairs or modifications could result in unforeseen dangers for the user for which the manufacturer cannot accept responsibility. Repairs should only be undertaken by skilled engineers and in accordance with the maintenance instructions of the manufacturer.
- Faulty components must only be exchanged for original spare parts. Only when these parts are fitted the safety standards of the device can be guaranteed.
- Accessory parts or driving units may be fitted when expressly approved by the manufacturer. If other parts are used, guarantee, performance and product liability claims may be invalidated.
- During transportation safety shoes with toe protection have to be worn.
- As hand protection during operation, the design keeps automatically both hands of the user in action on the tube and the hand pump lever. Take care that other people do not help in the area of the tools or hand pump during presetting.

2. SPECIFICATION

The flaring device is a portable equipment for the professional and simple pre-assembly of 37° tube flaring for hydraulic connections.

Tubes from 6 - 42 mm can be flared with the device.

The flaring device consists of a hydraulic driven device and a handoperated hydraulic pump conveniently assembled on a transportable steel frame. The device is reliable, simple to operate, and easy to transport!



FEATURES, ADVANTAGES AND BENEFITS

- **Optimal** - Even large tubing dimensions can be flared without extreme energy with the standard tools.
- **Ideal** - The flange device does not need a current supply. It's ideal for serial production, particularly in tube manipulation for mobile hydraulics.
- **Controlled assembly** – After pre-assembly, the tube joint can be easily inspected before final assembly. Therefore, this mandatory step in fitting assembly is less likely to be forgotten.

TECHNICAL DATA

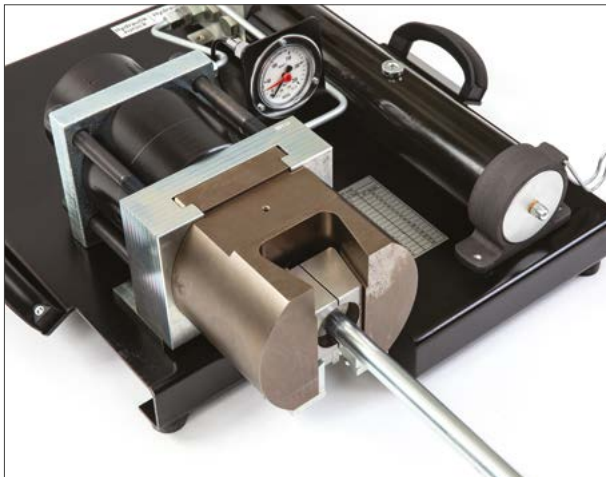
- For tubes from 6 – 42 mm outside diameter
- For flaring at a 37° angle
- Drive via hand-operated hydraulic pump
- Supplied with a 37° cone and flaring dies
- Weight approx 35 kg
- Working pressure 200 bar
- Length 450 mm
- Width 350 mm
- Height 180
- Color blue

3. FIRST USE OF THE DEVICE

- Take care that the machine cannot slit away at the flaring. It might be necessary to support the machine when making large diameter assemblies.
- Take care that only actual assembly dies are used. See table of instructions depth in the assembly instructions.
- The tank cap on the hand pump can remain closed. It must be closed for transportation.
- Unlock transportation clip from hand pump lever.
- Carefully check the assembly result according to the relevant fitting assembly instructions.

4. OPERATION

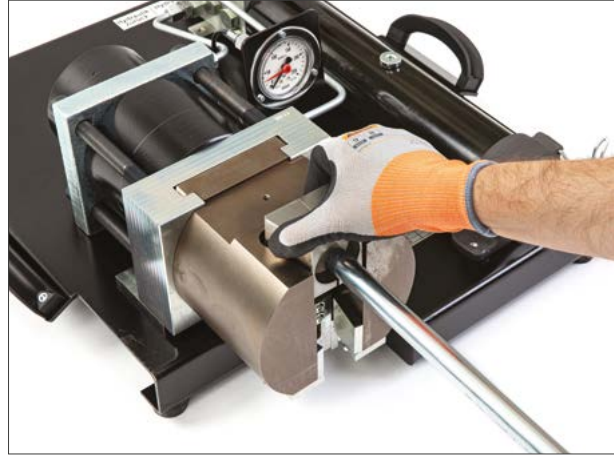
- Prepare tube and used Support sleeves, if necessary, according to assembly instructions.
- Select flaring dies according to tube size and series and place it into the tool carrier.
- Push nut and support sleeve on the tube.
- Place the tube into the flaring dies. Press the tube against the tube stop of the flaring device. Hold the tube firmly pressed in this position and pump with the lever of the hand pump.



- Take a look to the pressure gauge and continue to pump until the pointer has reached the pressure as indicated in the table.

GATES UNIPRESS 642 H			
TUBE - Ø (mm)	PRESSURE (BAR) FOR 37°	CHECKING DIA. FOR FLARED TUBE	
		MIN.	MAX.
6 x 1,0	15	9,1	10
6 x 1,5	15	9,1	10
8 x 1,0	20	11,3	12
8 x 1,5	20	11,3	12
10 x 1,0	15	13,1	14
10 x 1,5	20	13,1	14
12 x 1,0	20	15,3	16
12 x 1,5	25	15,3	16
12 x 2,0	30	15,3	16
14 x 2,0	35	18,6	19,6
15 x 1,5	25	19,1	20
16 x 2,0	40	20,6	22
16 x 2,5	55	20,6	22
18 x 1,5	50	23,2	24
18 x 2,0	55	23,2	24
20 x 2,0	65	25,6	26,8
20 x 2,5	80	25,6	26,8
22 x 1,5	65	26,5	27,5
22 x 2,0	70	26,5	27,5
25 x 2,5	90	31,1	33
25 x 3,0	100	31,1	33
28 x 1,5	90	32,7	33,3
28 x 2,0	100	32,7	33,3
30 x 3,0	120	37	38,7
30 x 4,0	125	37	38,7
35 x 2,0	125	41,8	42,7
35 x 3,0	150	41,8	42,7
38 x 4,0	160	46	47,2
38 x 5,0	195	46	47,2
42 x 2,0	145	48,8	49,8
42 x 3,0	160	48,8	49,8

- Put the valve on position **“Hydraulic backward”** and pump with the lever of the hand pump, until the piston has backed off. Then put the valve in position **“Hydraulic forward”** again.



- Lift the tube with the flaring die upwards out of the device.

- To release the tube, place the flaring die set in the opening provided in the device and tilt the tube to one side.



- Put the flaring dies set in the device again.

 **DANGER!**

Check assembly result before final installation!

5. TRANSPORT

In the case of transport close the tank cap and lock the hand lever of the pump.

6. FAULTS AND THEIR REMOVAL

- The device slips when tube is pressed against the tube stop of the flaring device. Place the device on a non-slip surface. If assembling large dimensions place the device in front of a fixture so that it cannot slide backwards.
- Oil leaks out – Always close the oil refill screw during transportation.
- No cylinder movement – Tighten the hand wheel at the pump.
- No cylinder movement – Check oil level and refill, if necessary.
- The cylinder does not withdraw – Open hand wheel at the pump completely.

7. MAINTENANCE

The flaring device is maintenance-free. The oil level check takes place at the tank cap of the hand pump. If necessary, refill in hydraulic oil of the type HLP 32 !

Examine the tools regularly for wear!

8. DISPOSAL

Old devices contain material, which can be used again. Please contact your local dealer for disposal of the device.



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