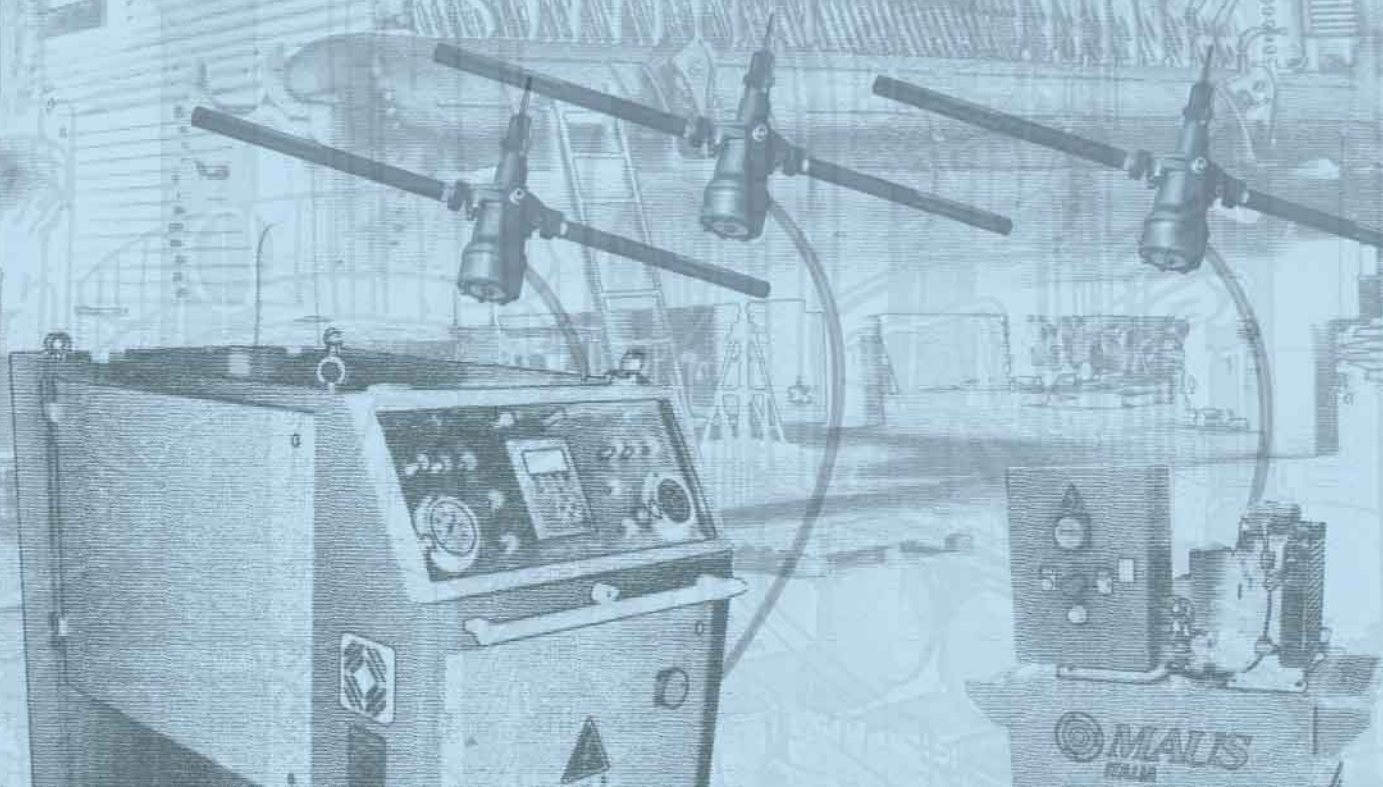


NEW

 **MAUS**
ITALIA

Hydrol
Tube boiler and furnace
rolling equipment



 **MAUS**
ITALIA

High productivity

High power with lightweight heads

Rugged construction

Suitable for difficult access areas

Easy handling

Excellent tube rolling quality

Durability and reliability

Minimized maintenance

Noiseless

Long life lasting

Highest Productivity
Mod. 40.2 with No. 2 Tube Rolling Heads
performs up to 240 expansions/hour

The easy tube expansion
inside drums



Hydrol

Tube boiler and furnace rolling equipment

Hydrol

Hydraulic tube rolling equipment for expansion of tubes **O.D. from 5/8" up to 8"** with programmed continuous cycle and adjustable speed (*Mod. 40.2*)

Hydrol advantage is that, compared to the conventional tube boiler rolling equipment, the use of small and light portable hydraulic tube rolling heads, particularly suitable for working in narrow spaces (i.e. inside boiler drums), provides for an high power.

The **Hydrol** equipment is composed in two parts: **hydraulic unit** and **portable heads**. Always responsive to the market demands, Maus Italia has designed and produced **two model of hydraulic unit**:

Hydrol 40.2

Professional model, thanks to the capability of handling two independent portable tube rolling heads, achieve top level of expansion quality and productivity.

Hydrol 20.1

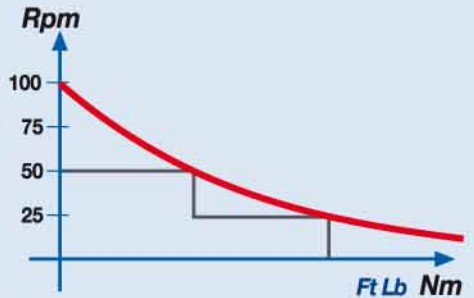
For low budgets and for small quantity of expansions.

Hydrol HM

Different **HM** hydraulic tube rolling heads sizes are available to cover main expansion technical requirements, in accordance with tube dimensions and required expansion characteristics.

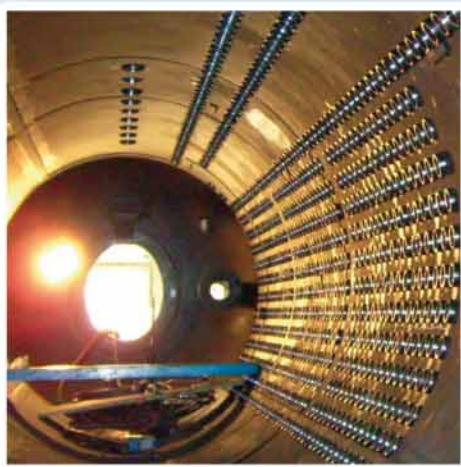
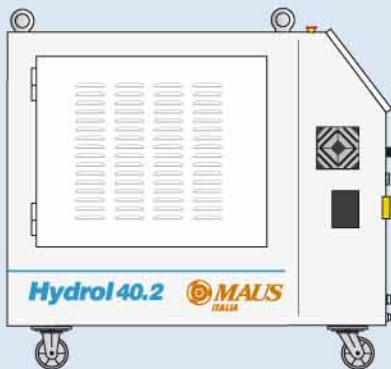
Hydrol HR

Fixed adapters for the connection to the tube expander.



Hydraulic unit

Portable heads



high
quality

Hydrol 40.2

Hydraulic double heads tube rolling equipment with digital electronic torque control

Hydrol 40.2 hydraulic unit allows to work simultaneously with two heads, each one independent for the other. This machine is recommended in case of repetitive jobs and where precision, power and speed are requested. The hydraulic twin hoses are comfortably wrapped on the two wheelers inside the unit. The expansion force is controlled by a microprocessor, included in the hydraulic unit.

with simultaneously double heads

The equipment is provided with:

- 1 **Hydrol 40.2** control unit
- 2 **HM** hydraulic rolling heads with 2 **HR** fixed adapters
- 2 high pressure **HTH/13** hydraulic twin hoses, 18 m (59.0 Ft)
- 2 self winding hoses wheels
- 2 manual or pedal remote control unit 20 m (65.6 Ft) long.
- Air/Oil radiator
- Oil heater

Technical data:

- Supply voltage 220/400 Vac - 50/60 Hz
- Power 11 Kw (5,5 Kw x 2)
- Tank capacity 200 Lt (53 GalUS)
- Flow rate 42 Lt x 2 (11 GalUS x 2)
- Max pressure 200 Bar (2900 Psi)
- Dim. 880 x 1540 x 1400 mm (35" x 61" x 56")
- Weight without hydraulic oil 550 Kg (1210 Lb)
- Weight with hydraulic oil 730 Kg (1610 Lb)
- Level of protection IP 55

Hydrol 20.1

Hydraulic single head tube rolling equipment with electric torque control

Hydrol 20.1 hydraulic unit, supplied with expansion setting control, has compact dimensions, for easy transport and movement on site. Torque value is regulated by an adjusting pressure setting on the hydraulic unit.

The equipment is provided with:

- 1 **Hydrol 20.1** control unit
- 1 **HM** hydraulic rolling head with 1 **HR** fixed adapters
- 2 high pressure **HS/10** hydraulic hoses, 10 m (32.8 Ft)
- 1 manual or pedal remote control unit 10 m (32.8 Ft) long.
- Air/Oil radiator

Technical data:

- Supply voltage 220/400 Vac 50/60 Hz
- Power 4,3 Kw
- Tank capacity 65 Lt (17 GalUS)
- Flow rate 20 Lt (5 GalUS)
- Max pressure 200 Bar (2900 Psi)
- Dim. 850 x 450 x 880 mm (34" x 18" x 35")
- Weight without hydraulic oil 110 Kg (240 Lb)
- Weight with hydraulic oil 168 Kg (370 Lb)
- Level of protection IP 55

Electric Box

Electric motor

Heat exchanger

Rolling torque adjustment

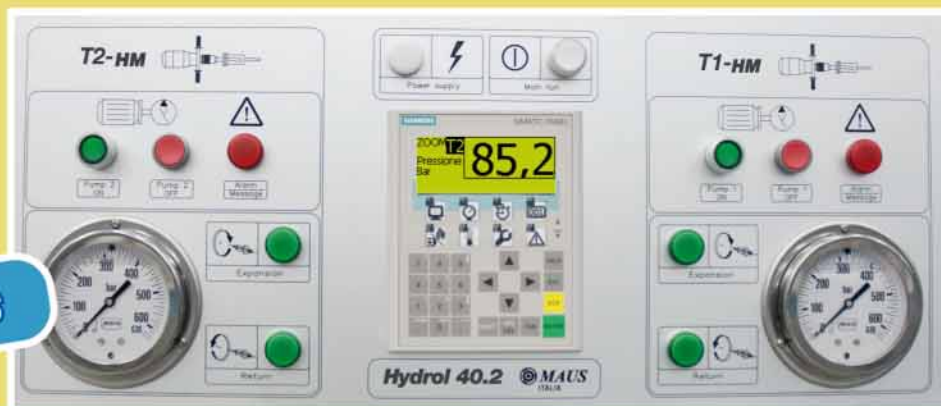
Solenoid valve: ahead/back/stop

Oil level indicator

Pressure gauge



Hydrol Tube boiler and furnace rolling equipment



2 tube rolling heads, operated by two independent thermostabilized hydraulic oil circuits, assure the repeatability and quality of tube expansion.

Hydrol 40.2 Pro

Continuous cycle digital controller

Hydrol 40.2 Pro

controller is the brain of the system. It is friendly-user, with LCD screen and dedicated software; it is protected by a solid metal casing.

It provides for automatic tolerance compensation both for the tube-sheet holes diameter and tube thickness. The result is an uniform seal for all tubes at the heat exchanger operating pressure.

- Programmed continuous cycle
 - Pressure
 - Cycle times
 - Oil temperature
 - Alarms
 - Messages
 - Working status (*manual, semi-automatic, automatic*)
- Tolerance repeatability +/-1%
- Selection of desired language
- Instantaneous visualisation of:
 - Rolling operation counting
 - Motor pressure

2 Heads

T1-HM
T2-HM

- Pump alarm indicator light
- Pump start push-button
- Pump stop push-button
- Pressure gauges
- Clockwise rotation indicator
- Anti-clockwise rotation indicator



2 hoses winding wheels

Improved easy-handling and hoses endurance

Emergency push button

Start push button

Speed Variator

Console



Fan cooler radiator

Cartridge for oil filter
connectors for
MC/100 or PE/900

2 Electric motors

Oil Plug
Oil level indicator

1/2" twin hose (T2-HM)

1/2" twin hose (T1-HM)

HM

Hydraulic tube rolling heads

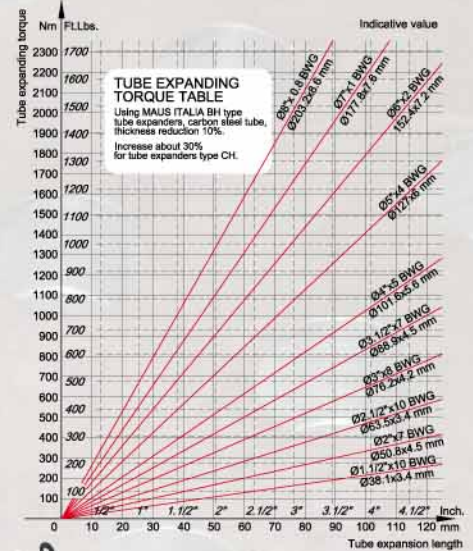
Different **HM** hydraulic tube rolling heads sizes are available to cover main expansion technical requirements, in accordance with tube dimensions and required expansion characteristics.

Suggested tube expanders
(see relative catalogue)

BH

CH

R/41



Tube O.D.

HM

Max torque
2900 psi max
200 bar max

RPM

Hydrol 20.1 Hydrol 40.2

Dim

Weight

Drive shank

HR

Tube O.D.		Cod.	Nm		Ft Lb		Min ÷ Max		Min ÷ Max		A x B		Kg	Lb	Ø		Cod.
mm	inches								mm	inches			mm	inches			
15,9 ÷ 25,4	5/8" ÷ 1"	HM-32	64	47	320 ÷ 640	160 ÷ 800	150x800	5.9"x31.5"	5,0	11,0	16,0	0.63					HR-16
25,4 ÷ 31,8	1" ÷ 1.1/4"	HM-50	150	110	190 ÷ 380	100 ÷ 800	200x1020	7.9"x40.2"	9,5	21,0							HR-25
25,4 ÷ 38,1	1" ÷ 1.1/2"	HM-80	220	160	125 ÷ 250	60 ÷ 510	205x1020	8.1"x40.2"	9,7	21,4	25,0	0.98					HR-25
31,8 ÷ 50,8	1.1/4" ÷ 2"	HM-100	280	210	100 ÷ 200	50 ÷ 410	210x1020	8.3"x40.2"	9,8	21,6							HR-32
31,8 ÷ 57,1	1.1/4" ÷ 2.1/4"	HM-125	340	250	80 ÷ 160	40 ÷ 320	215x1020	8.5"x40.2"	10,0	22,0							HR-32
44,4 ÷ 63,5	1.3/4" ÷ 2.1/2"	HM-200	500	370	50 ÷ 100	25 ÷ 200	240x1020	9.4"x40.2"	11,5	25,4							HR-40
50,8 ÷ 76,2	2" ÷ 3"	HM-315	690	510	32 ÷ 64	15 ÷ 130	260x1020	10.2"x40.2"	13,0	28,7	32,0	1.26					HR-32
63,5 ÷ 101,6	2.1/2" ÷ 4"	HM-350	820	610	30 ÷ 60	12 ÷ 110	270x1020	10.6"x40.2"	15,5	34,0							HR-40
76,2 ÷ 114,3	3" ÷ 4.1/2"	HM-400	1030	760	25 ÷ 50	10 ÷ 100	275x1020	10.8"x40.2"	16,3	36,0							HR-50
141,3	5.563"	HM-450 *	1200	880	22 ÷ 44	15 ÷ 90	285x1020	11.2"x40.2"	27,0	59,0	40,0	1.57					HR-40
168,3	6.625"	HM-500 *	1520	1120	19 ÷ 38	13 ÷ 80	400x1020	15.7"x40.2"	30,0	66,0							HR-50
219,1	8.625"	HM-800 *	2340	1730	12 ÷ 24	9 ÷ 52	425x1020	16.7"x40.2"	42,0	93,0	50,0	1.97"					HR-50

* Suitable for cracking furnace
see **Tube expanders F/500**



Hydrol

Tube boiler and furnace rolling equipment

HR

Adapters

The fixed adapters **HR** have cylindrical female shank for connection to the hydraulic heads model **HM**, and a female square in mm or inches for the connection to the tube expander.



Sample codes for ordering **HR** adapters:

HR-25-## + $\varnothing F$ 18 mm → **HR-25-18**
HR-32-## + $\varnothing F$ 3/4" → **HR-32-3/4"**

HR

Cod.	$\varnothing F$ mm inches	HM Head Cod.	Drive shank	
			mm	inches
HR-16-##	9-12 3/8"-1/2"	HM32	16,0	0.63
HR-25-##	9-12-14-16-18-20-22-24 3/8"-1/2"-3/4"-1"	HM50 ÷ HM125	25,0	0.98
HR-32-##	9-12-14-16-18-20-22-24 3/8"-1/2"-3/4"-1"	HM200 ÷ HM400	32,0	1.26
HR-40-##	On request	HM450 - HM500	40,0	1.57
HR-50-##	On request	HM800	50,0	1.97"

HS/10

Hydrol 20.1 hydraulic hose

3/8" hydraulic hose for connecting **Hydrol 20.1** unit to the **HM** hydraulic head, length 10 m (32.8 Ft), with quick fittings.



Other hose lengths 15 or 20 m (49.2 Ft or 65.6 Ft) on request.

HTH/13

Hydrol 40.2 twin hydraulic hose

1/2" twin hydraulic hoses for connecting **Hydrol 40.2** unit to the **HM** hydraulic head, length 18 m (59.0 Ft) with quick fittings. Other hose lengths on request.

Two self-winding hoses wheels, complete with blocking device for granting the operator an easy and fast hose release and handling.



Quick fitting to the motor

OIL-H68

Hydraulic oil for Hydrol 40.2

OIL-H46

Hydraulic oil for Hydrol 20.1



Available in can of 30 Lt (7.9 GalUS)

MC/100

Remote control (standard supply)

The **Hydrol** unit is inclusive of one (for **Hydrol 20.1**) or two (for **Hydrol 40.2**) remote controls (suitable for small or difficult reachable places) with three-push buttons for **start/reverse/emergency**. Standard electric cable is: 10 m (32.8 Ft) for **Hydrol 20.1**, 20 m (65.6 Ft) for **Hydrol 40.2**. Other lengths are available on request.



PE/900

Pedal switch remote control (optional)

The **Hydrol** unit can be supplied also with one (for **Hydrol 20.1**) or two (for **Hydrol 40.2**) pedal switch remote controls with three-feet push buttons for **start/reverse/emergency**. Standard electric cable is 10 m (32.8 Ft) for **Hydrol 20.1**, 20 m (65.6 Ft) for **Hydrol 40.2**. Other lengths are available on request.





MAUS ITALIA F. AGOSTINO & C. s.a.s.
SS PAULLESE KM 30
26010 BAGNOLO CREMASCO (CR)

Tel. +39 0373 2370
FAX +39 0373 237039
e-mail: expo@mausitalia.it
www.mausitalia.it