



IN VIDEO

Hydro-pneumatic Presses

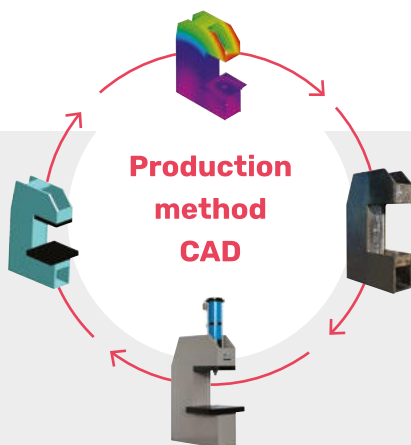
from 7 to 100 T



Hydro-pneumatic Presses

7T - 15T - 30T - 50T - 75T - 100T FRAME RANGE

Only pressed air type available.



Our cylinder is a compressed air cylinder with closed hydraulic circuits, which allows attaining the requested loads with a stroke which is triggered when the piston gets a resistance. The action is very simple and similar to pneumatic double effect cylinders. This technology thus combines the advantages of both pneumatic and hydraulic systems, without any adverse effects (these include for example, no noisy, dirty hydraulic motors, and low air consumption).

- **Rapidity**
- **Quality**
- **Quiet**
- **Power**
- **Economy**
- **No maintenance**

A very wide range of machines combining:

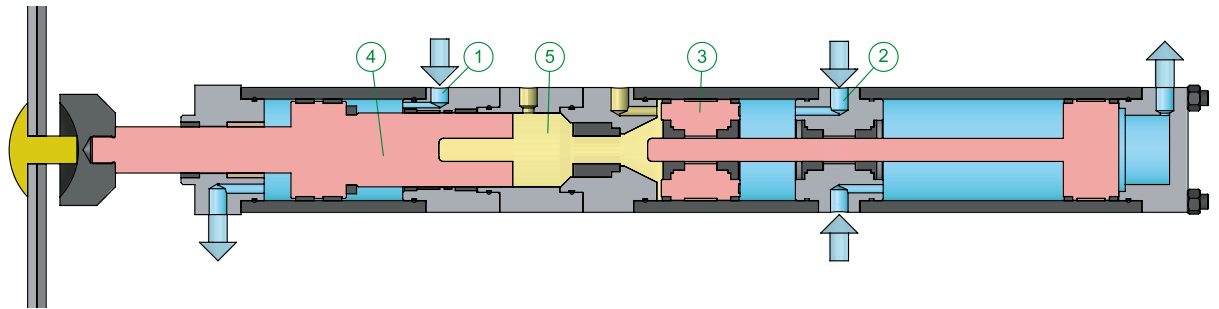
- 60+ different cylinders
- With 6 different frames

Hydro-pneumatic Presses

Explanatory Diagram of Operation

Step 1 the fast approach run without power

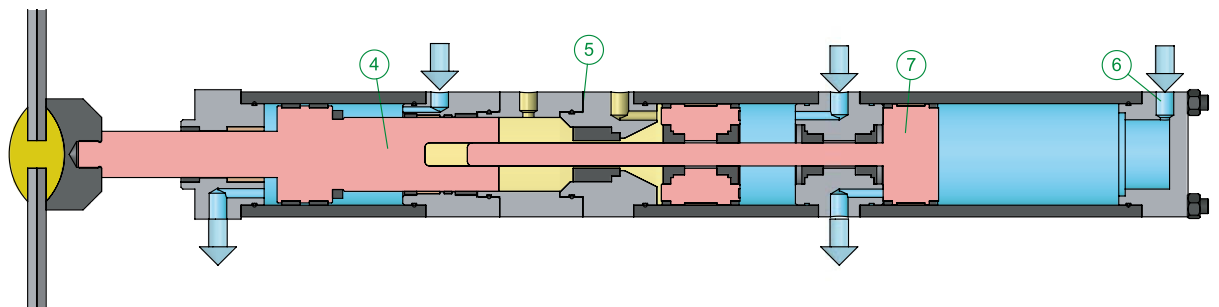
The cylinder is supplied with compressed air at the marks (1) and (2). The rapid yet controlled descent of the feed piston (3) and the slider (4) takes place until resistance is reached. In this step, the oil fills the hydraulic chamber (5).



Step 2 the slow working stroke with power

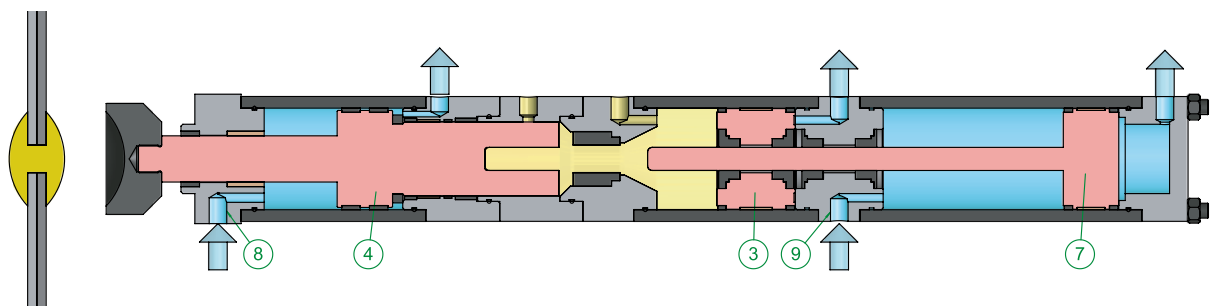
A control valve switches the pneumatic supply to the mark (6), the working piston (7) descends.

During this phase, the plunger rod of the working piston (7) enters in the hydraulic chamber (5), compresses the oil, which greatly increases the power of the slider (4).



Step 3 the return stroke and the stand-by position

The cylinder is supplied with compressed air on the marks (8) and (9). The slider (4), the feed piston (3) and the working piston (7) rise at high speed and remain held in the high position.

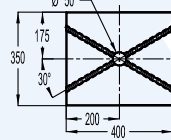
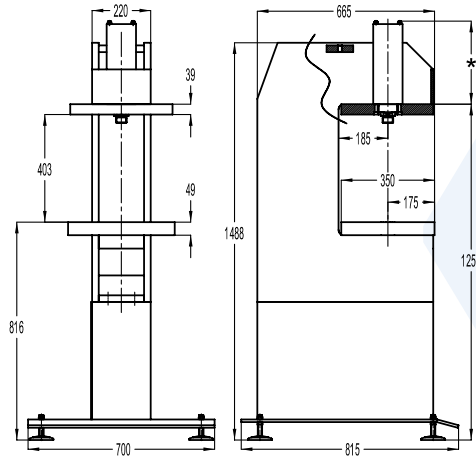


Hydro-pneumatic Presses

from 7 to 30 Tons



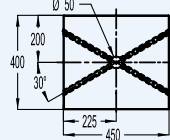
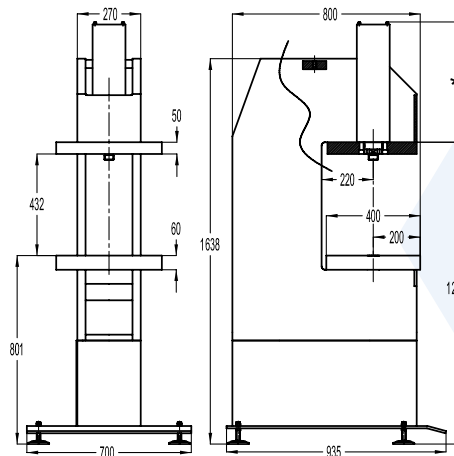
7 tons



4 GROOVES FOR ANVIL STAKES Ø M 10
DIN 508 STANDARD



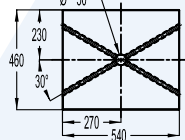
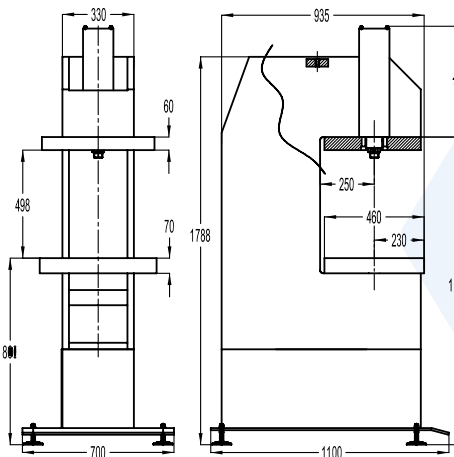
13 tons



4 GROOVES FOR ANVIL STAKES Ø M 12
DIN 508 STANDARD



30 tons



4 GROOVES FOR ANVIL STAKES Ø M 12
DIN 508 STANDARD



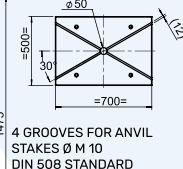
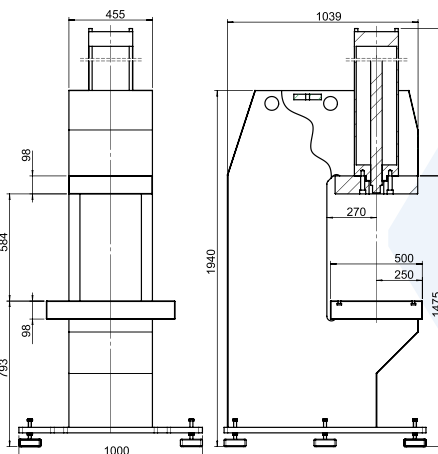
EXAMPLES

	7 tons range frame	13 tons range frame	30 tons range frame
Power *	6 910 ▶ 7 820 kg	13 380 ▶ 14 000 kg	28 300 kg ▶ 30 650 kg
Total stroke *	50 ▶ 400 mm	50 ▶ 300 mm	50 ▶ 400 mm
Travel *	6 ▶ 60 mm	6 ▶ 40 mm	6 ▶ 40 mm
Clear height	400 mm	430 mm	500 mm
Swan-neck depth	185 mm	220 mm	250 mm
Fixing of tool on cylinder	M30 x 2 x 25 mm	M30 x 2 x 25 mm	M39 x 2 x 35 mm
Total length of the cylinder *	650 ▶ 1 790 mm	695 ▶ 1 660 mm	800 ▶ 2 010 mm
Table	400 x 350 mm	450 x 400 mm	540 x 460 mm
Weight *	500 kg	750 kg	1 200 kg

* as per the choice of the cylinder

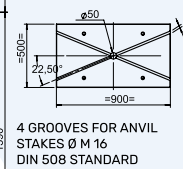
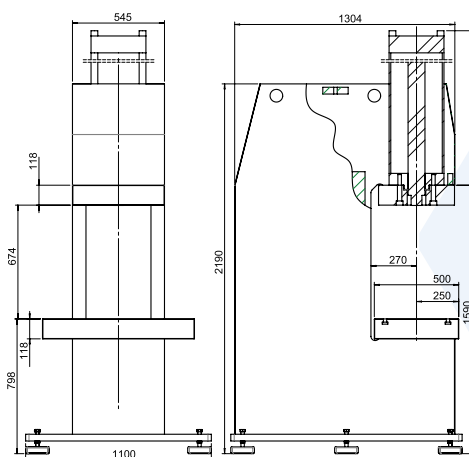
Hydro-pneumatic Presses

from 50 to 100 Tons



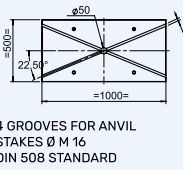
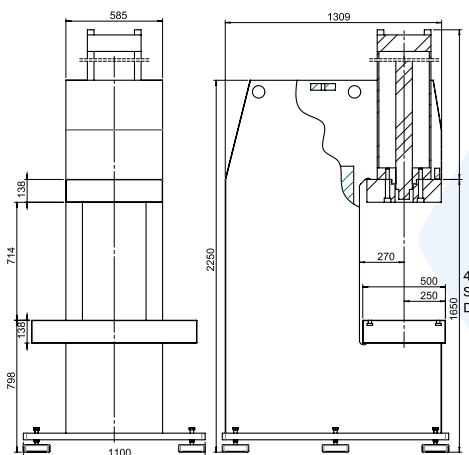
4 GROOVES FOR ANVIL STAKES Ø M 10 DIN 508 STANDARD

50 tons



4 GROOVES FOR ANVIL STAKES Ø M 16 DIN 508 STANDARD

75 tons



4 GROOVES FOR ANVIL STAKES Ø M 16 DIN 508 STANDARD

100 tons



EXAMPLES

	50 tons range frame	75 tons range frame	100 tons range frame
Power *	45 900 kg ▶ 47 600 kg	72 700 kg	98 500 kg
Total stroke *	70 ▶ 400 mm	100 à 300 mm	100 à 300 mm
Travel *	6 ▶ 40 mm	10 ▶ 16 mm	8 ▶ 12 mm
Clear height	580 mm	670 mm	710 mm
Swan-neck depth	270 mm	270 mm	270 mm
Fixing of tool on cylinder	M42 x 2 x 40 mm	M64 x 2 x 60 mm	M64 x 2 x 60 mm
Total length of the cylinder *	957 ▶ 2084 mm	De 1329 ▶ 2288 mm	1329 ▶ 2288 mm
Table	700 x 500 mm	900 x 500 mm	1000 x 500 mm
Weight *	2 200 kg	4 500 kg	5 500 kg

* as per the choice of the cylinder

Versions of Control for Hydro-pneumatic Presses



Version 1 intended for integration by the customer

Only machine delivered, no controls, no equipment.



Version 2 running condition with two hand controls

Version 1 +

- Two hand controls with push buttons.
- Protection of side and top tables.
- Distributor, check valve, control valve of protection cover and pneumatic fittings.
- Regulation and lubrication filter (lockable).



Version 3 running condition with two hand or pedal controls

Version 2 +

- Pedal control for embedded tool work*
- 2-position key selector



1 - BIMANUAL OPERATION
2 - PEDAL OPERATION
(only for embedded tool)

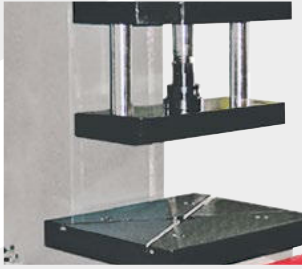


*Definition: The embedded tools must be intrinsically safe. Their corresponding openings and safety distances must be in compliance with the standards in force or must not exceed 6 mm. Any risk of additional deformation outside the embedded tools must be avoided.

Options

ANTI-ROTATION BY 2 COLUMNS

System of anti-rotation by 2 columns. (Loss of clear height).



COUNTER

5 digit counter with reset function.



ADDITIONAL REGULATOR

Additional regulator allowing working with a pressure from 0.5 to 6 bars.



EXHAUST FILTER

Complete exhaust filter system for reduction in pollution and noise levels (75 dB instead of 85).



3% REGULATOR

Power regulator, adjustable from 0.5 to 6 bars with dial pressure gauge ensuring a repetitiveness of the cycle and precision up to 3%.



EXHAUST RESTRICTOR

Press speed regulation by exhaust restrictor.



1% REGULATOR

Power regulator, adjustable from 0.5 to 6 bars with digital pressure gauge ensuring a repetitiveness of the cycle and precision up to 1%.



ANVIL STAKES

Set of 2 anvil stakes for securing the tools in T slots.



Additional options ///

- Bottom Dead center timeout, allowing:
 - Stalling the press from 0 to 15s at bottom dead center.
 - Ensuring attainment of bottom dead center thanks to a detection in the last mm.
- Special RAL paint.
- Press locking at bottom dead center by a support on the two hand controls and engaged by an impulse on the two hand control.
- Special services on request (press modifications, small tooling and fitting).

See pages 52 to 55