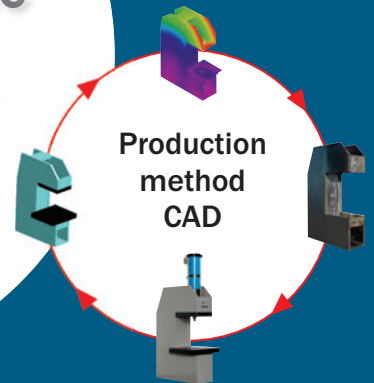
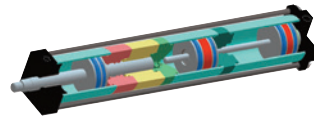


# Hydro-pneumatic presses from 7 to 30 T



## Hydropneumatic presses

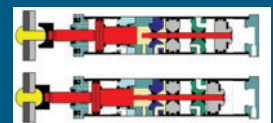
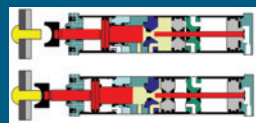
### 7 T, 13 T ET 30 T FRAME RANGE

#### We are proceeding with compressed air type... Only!

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 (no noisy and dirty hydraulic motors, low air consumption...).

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

The operating principle of EMG hydro-pneumatic cylinders is to divide the entire stroke into 3 parts: fast approach, working stroke and return stroke.



#### Fast approach:

The control valve injects compressed air into the piston chamber and actuates the working piston. The descent of the piston is quick but powerless: it is fast approach.

#### Working stroke:

When the working piston reaches the material, the control valve is reversed and triggers the 3/2 distributor which injects compressed air in the second piston chamber. The plunging shaft compresses oil and increases power.

#### Return stroke:

The control valve returns to its initial position. The air is evacuated by 3/2 distributor. The working pistons and traverse piston return to top speed in their initial position.

A very wide range of machines combining:

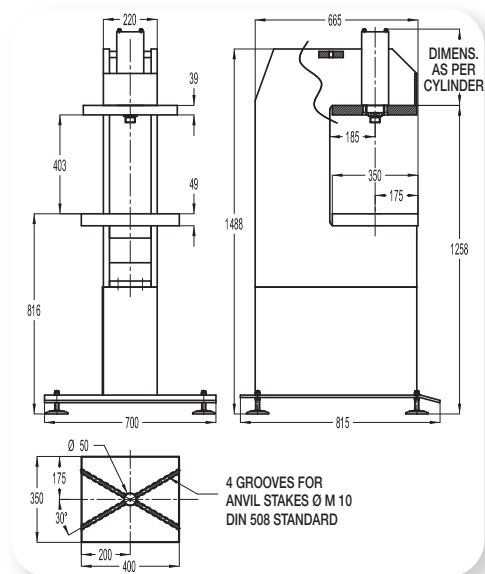
- 60+ different cylinders
- With 3 different frames

## Hydro-pneumatic presses from 7 to 30 T

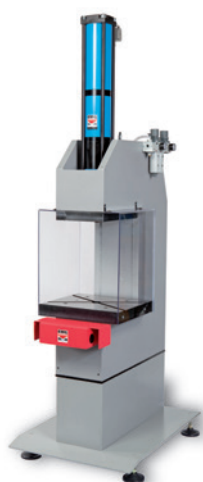
Examples	7 tons range frame
Power *	<b>from 6 910 to 7 820 kg</b>
Total stroke *	from 50 to 400 mm
Travel *	from 6 to 40 mm
Clear height	400 mm
Swan-neck depth	185 mm
Fixing of tool on cylinder	M30 x 2 x 25 mm
Total length of the cylinder *	from 650 to 1 790 mm
Table	400 x 350 mm
Weight *	500 kg
* as per the choice of the cylinder	



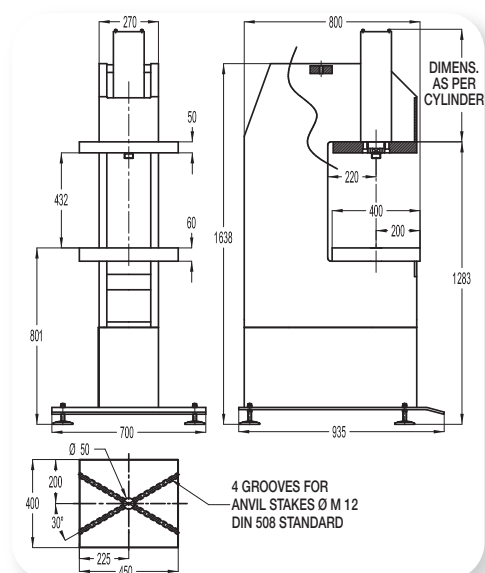
**7 tons**



Examples	13 tons range frame
Power *	<b>from 13 380 to 14 000 kg</b>
Total stroke *	from 50 to 300 mm
Travel *	from 6 to 40 mm
Clear height	430 mm
Swan-neck depth	220 mm
Fixing of tool on cylinder	M30 x 2 x 25 mm
Total length of the cylinder *	from 695 to 1 660 mm
Table	450 x 400 mm
Weight *	750 kg
* as per the choice of the cylinder	



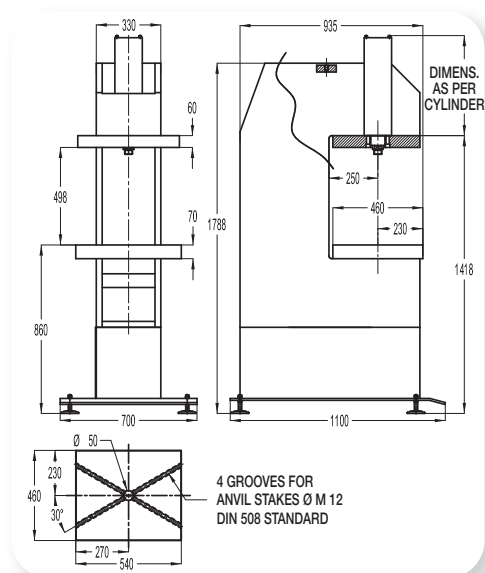
**13 tons**



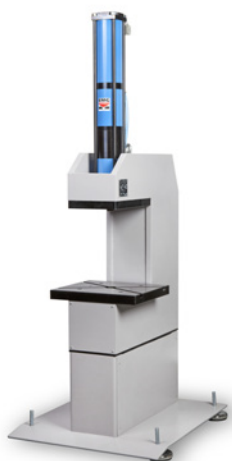
Examples	30 tons range frame
Power *	<b>from 28 300 kg to 30 650 kg</b>
Total stroke *	from 50 to 400 mm
Travel *	from 6 to 40 mm
Clear height	500 mm
Swan-neck depth	250 mm
Fixing of tool on cylinder	M39 x 2 x 35 mm
Total length of the cylinder *	from 800 to 2 010 mm
Table	540 x 460 mm
Weight *	1 200 kg
* as per the choice of the cylinder	



**30 tons**



## > Versions of the control for hydropneumatic presses



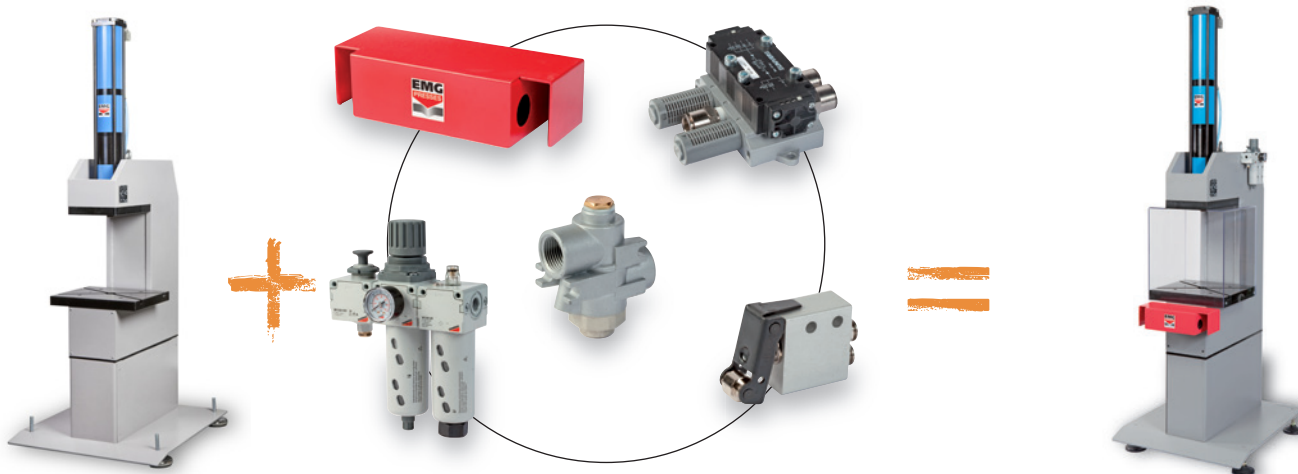
### • Version 1: intended for integration by the customer

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 and pneumatic fittings.
- Regulation and lubrication filter (lockable).

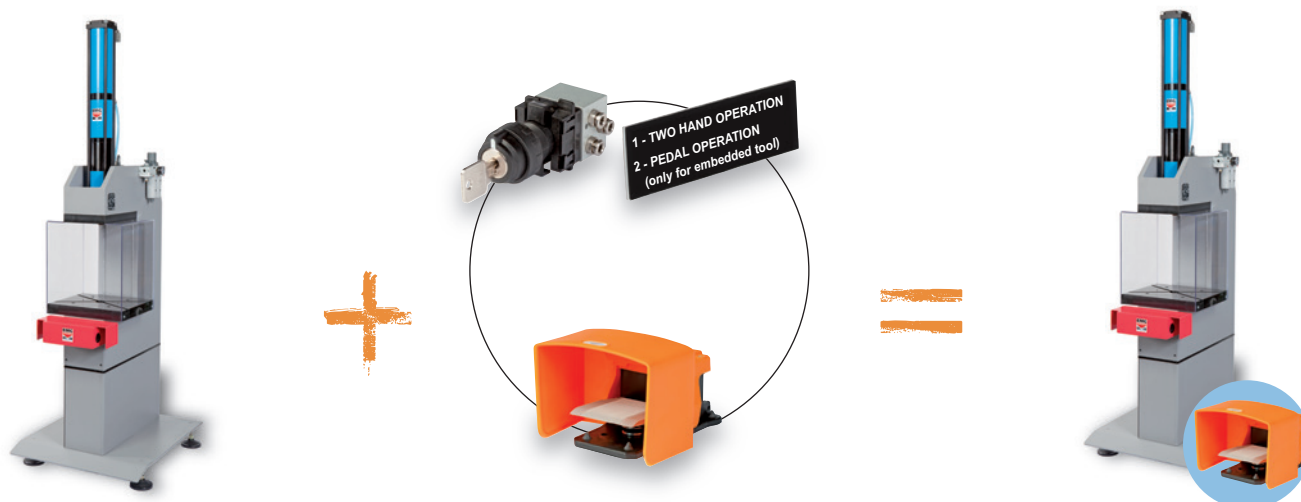


### • Version 3: running condition with two hand or pedal controls

Version 2 + :

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

*\*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.*

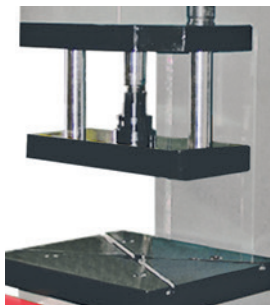


## > Options

### • Anti-rotation by 2 columns

System of anti-rotation by 2 columns. Attention to the loss of clear height:

- 7 T frame:  
clear height = 265 mm
- 13 T frame:  
clear height = 295 mm
- 30 T frame:  
clear height = 340 mm



### • Additional regulator

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



### • 3% regulator

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



### • 1% regulator

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



### • Counter

5 digit counter with reset function.



### • Exhaust filter

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



### • Exhaust restrictor

Press speed regulation by exhaust restrictor.



### • 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.
- 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).





## *A mark of excellence in productivity*

EMG has earned its reputation of excellence thanks to its integrated design and production methods and a solid technological prowess. This is backed up by an efficient distribution network, in compliance with the expectations of manufacturers.

Benefitting from a strategy dedicated to quality and active search of performances, EMG equipments ensure competitiveness, reliability and durability which are the core values for productivity of companies in numerous domains:

- Watchmaking, jewellery,
- Mechanical optics,
- Electrical equipments,
- Automotive industry,
- Electrical goods, toys,
- Locksmithing...

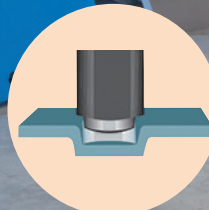
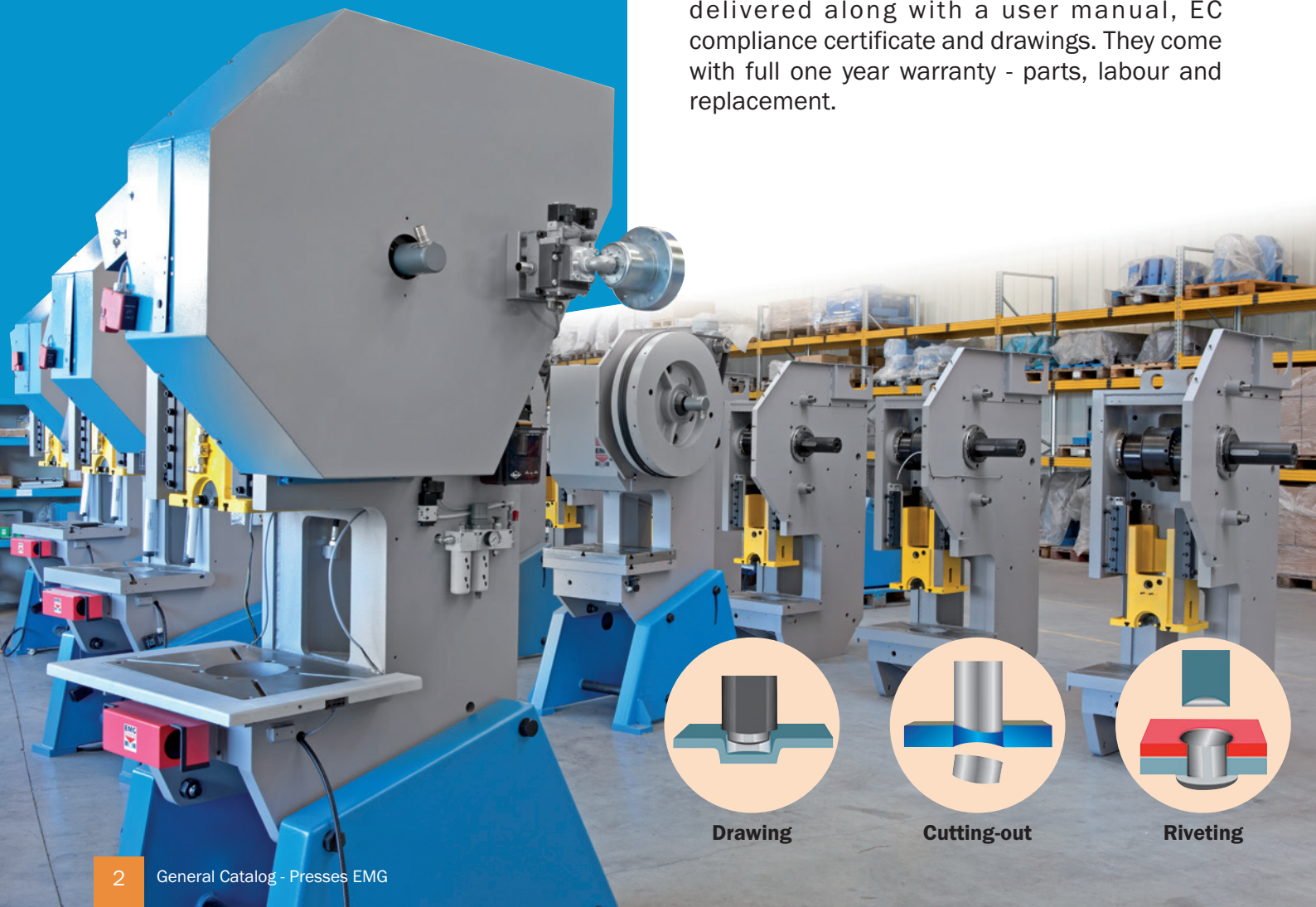


## *“Some important points” from standard to custom-made*

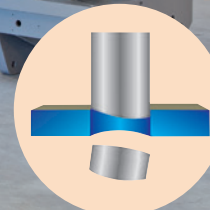
The various operations are executed carefully thanks to the power reserve of each model and a precision of a very rigorous assembly.

The entire EMG range offers a wide range of options and adaptations to satisfy the requirements of each application: LONG thus undertakes to design and equip special machines required by the specific activities of each and every profession.

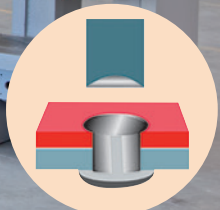
ISO-9001 certified since 2000, EMG presses are delivered along with a user manual, EC compliance certificate and drawings. They come with full one year warranty - parts, labour and replacement.



Drawing



Cutting-out



Riveting

## Developing breakthrough technology for the last 60 years

Manufacturer with a well-recognized expertise, EMG has developed, for the last 3 generations, a wide range of products and services appreciated by the manufacturers all around the world.

Used successfully since 1966 in numerous industry sectors, EMG presses have been the most reliable partner of manufacturers, offering equipments synonymous to precision and durability.



## Integrated production and skills

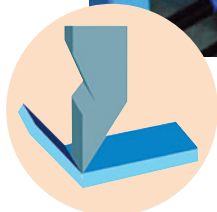
The production workshops facilitate integrated production from A to Z ensured by a multi-disciplinary team proficient in all the production steps, from designing to complex mechanical operations and assembly with precision, going through various machining operations: milling, turning, surface or cylindrical grinding. EMG also integrates thermal or surface treatment, mechanised-welding with machining, or paint.



## EMG test space for your samples

EMG proposes for its customers, at its headquarters, a showroom and a test laboratory related to the production workshops, allowing using and handling all our models.

It is this department where all the tests on presses are carried out from the samples submitted by our customers and potential customers.



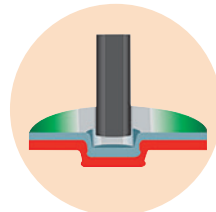
Folding



Pressing



Marking



Assembling





## > EMG presence in France and around the world

Presence across 5 continents with a strong and reliable chain of distributors, manufacturers or retailers selected by EMG which are locally recognized for their experience and quality-oriented service.



In France, our techno-commercial  
are also machine-tool experts,  
regularly trained on newer versions of  
the equipments and accessories.

Within its distribution and sales  
network, all our representatives are  
specialists, thus ensuring the best  
possible suggestions and the quality  
offered by EMG manufacturer





**EMG** is set up in Haute-Savoie, a department on the border with Switzerland and Italy, and benefits from double advantage of an exceptional environment among lakes and mountains and a privileged commercial activity at the heart of Rhône-Alpes, second best French region and one of the most significant in European union.

Each EMG customer and partner throughout the world benefits, thanks to the equipments and services proposed by the brand, from a standard and a technical know-how inherited from a long industrial tradition and a permanent culture of research and development.

