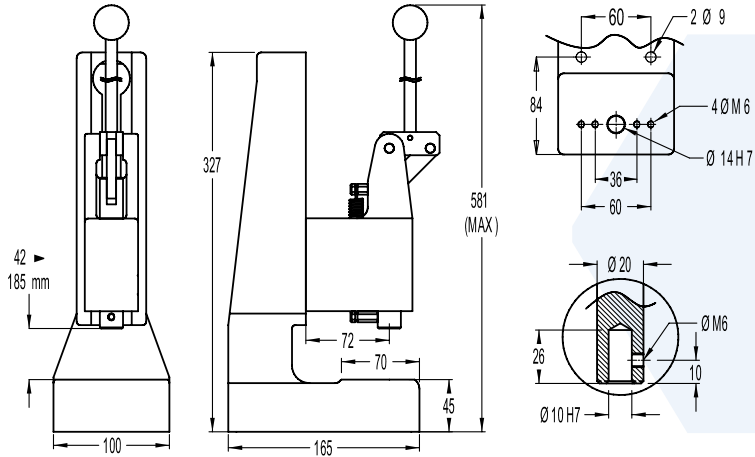


Manual Toggle Presses

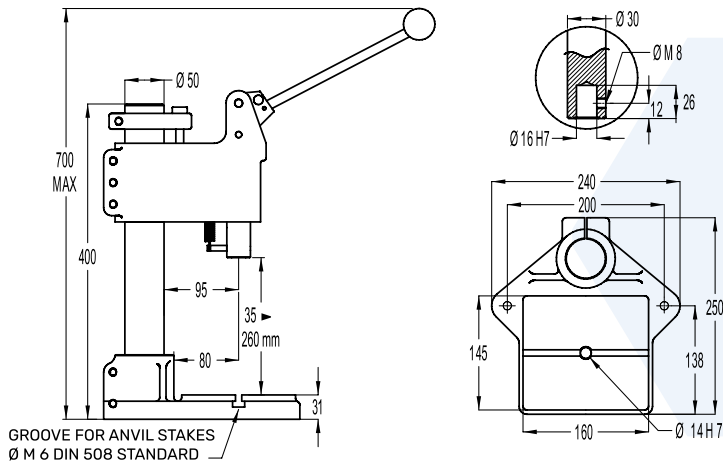
from 500 to 2,000 kg



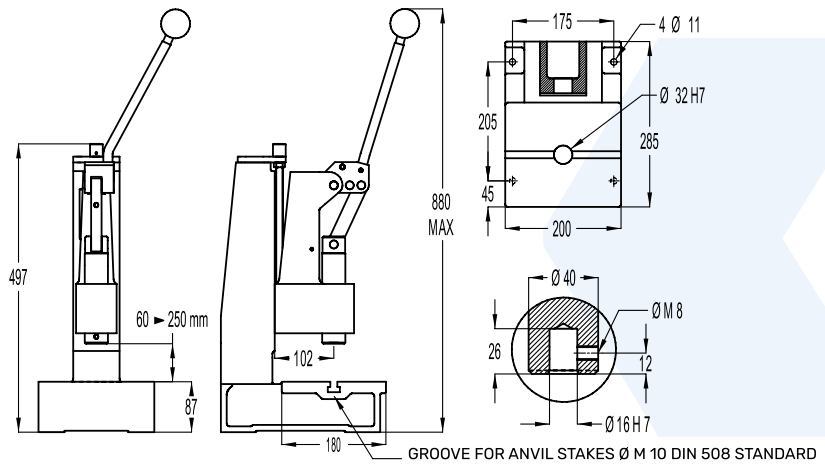
5HR



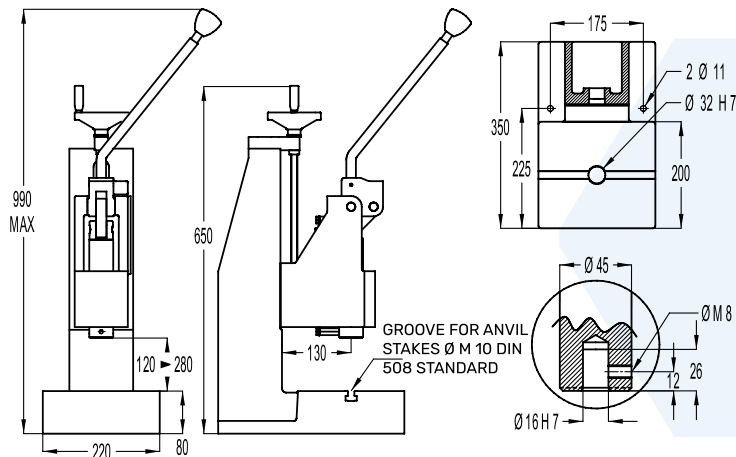
7HR



15HR



20HR

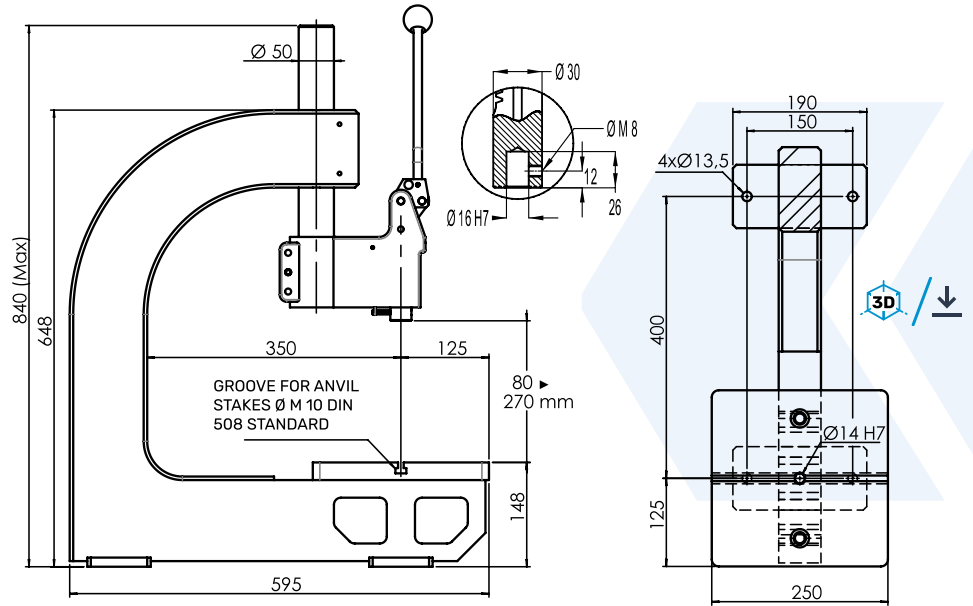


High Force Capacity Manual Toggle Presses

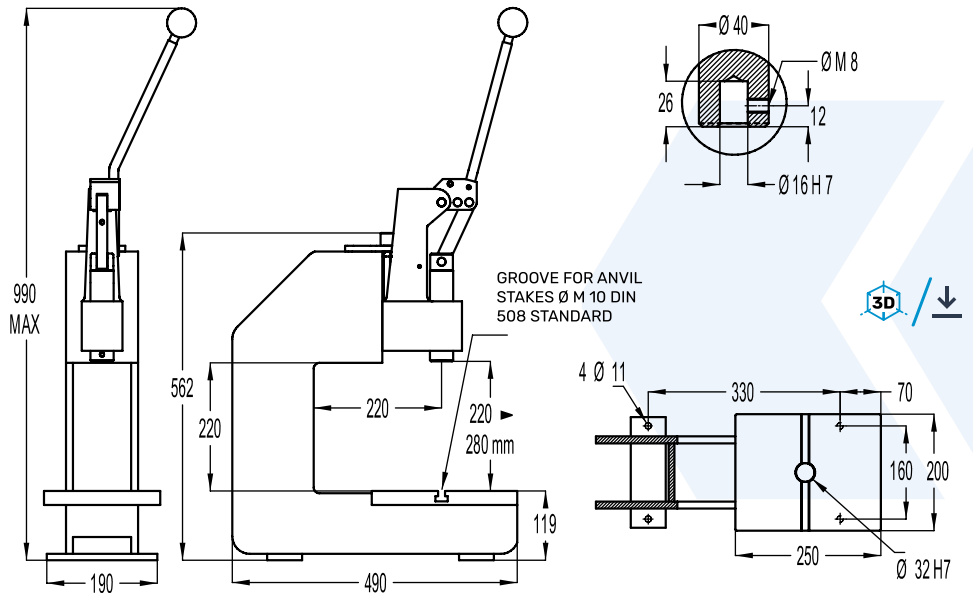
from 700 to 2,000 kg



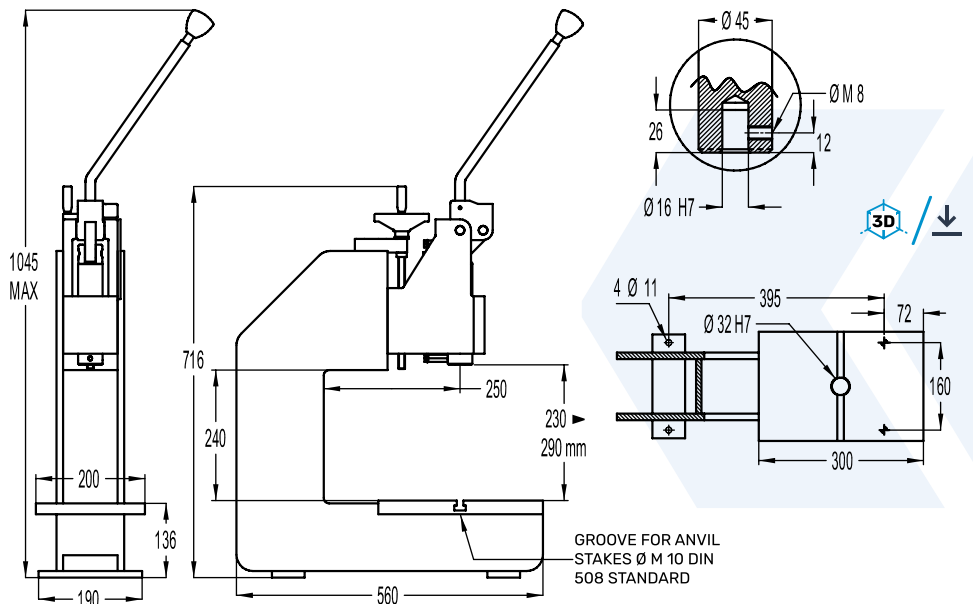
7HR C-MAX



15HRLP

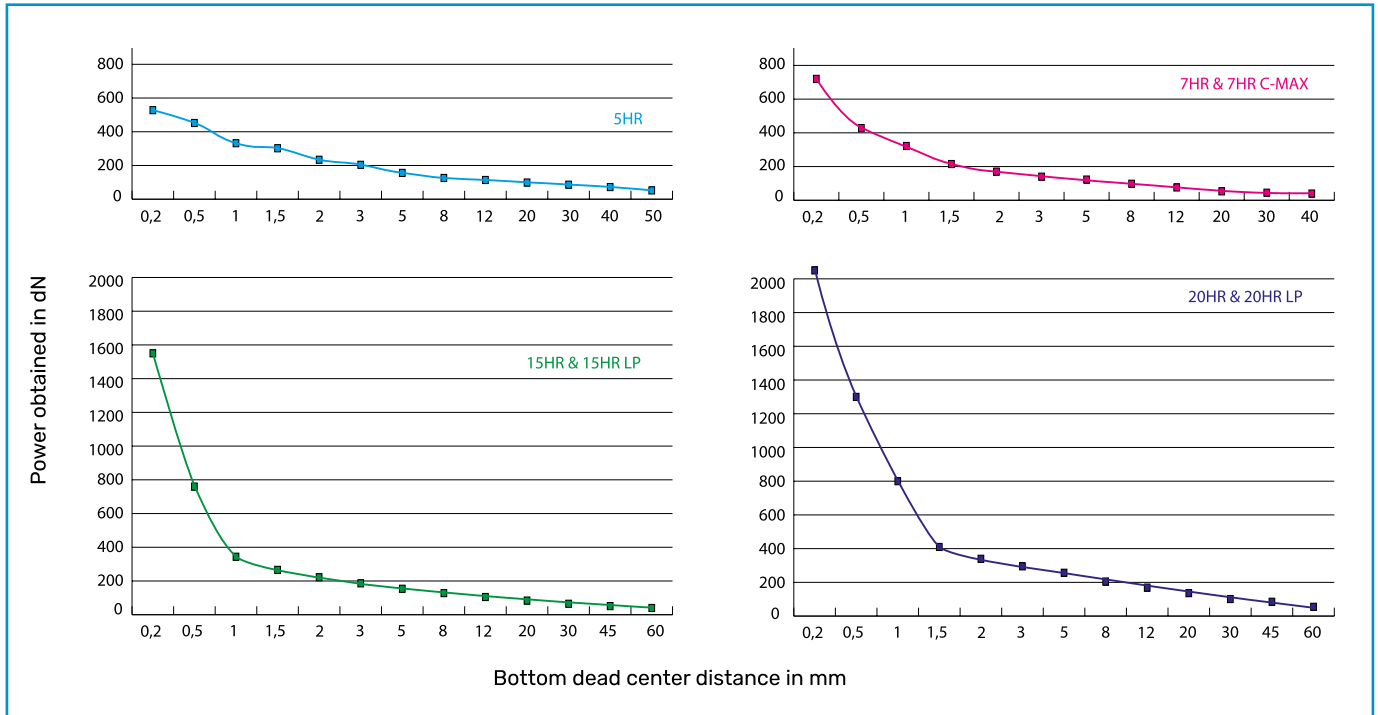


20HRLP



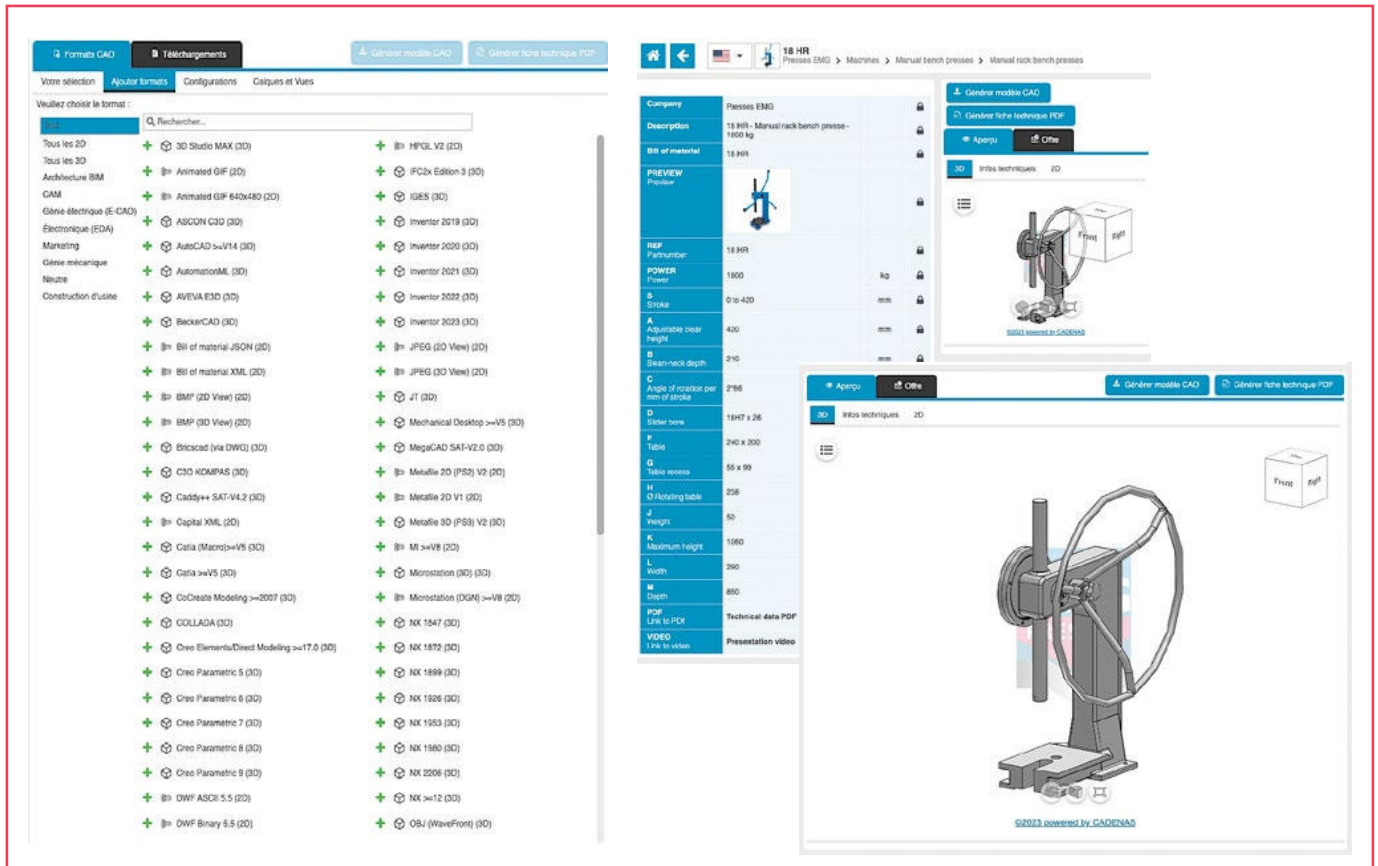
Manual Toggle Presses

Power exerted by the press with a force of 20 Kg at the center of the spherical knob and perpendicular to the lever of the press.



CAD/CAM

The 3D files of our manual and pneumatic presses are available online to easily integrate our machines into your tooling, layout and workstation ergonomics studies.



Options

COUNTER

5 digit counter with reset function.



BDC MICROMETRIC ADJUSTMENT

Bottom dead center adjustment system, graduated after every 0.02mm.



QUALITY CONTROL BY FORCE AND/OR DISPLACEMENT SENSORS

EMG offers management solutions regarding force and/or displacement thanks to its force and displacement sensor solutions which can be adapted as per the requirement for a 100% control.



See pages 20-21

ANVIL STAKES

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



COLLET

Collet chuck with ER25 collet for $\varnothing 1.5$ to $\varnothing 16$ mm shank (\varnothing to be selected).

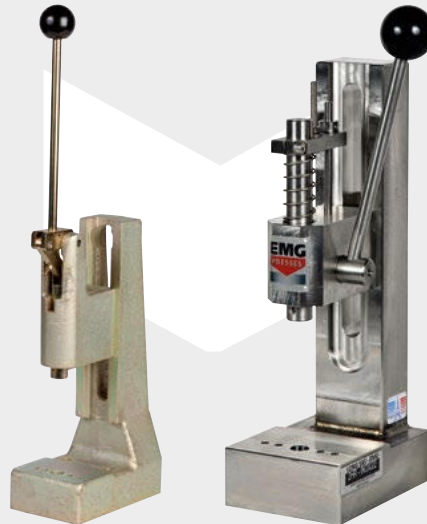


NON RETURN SYSTEM

Non return system: does not release the lever until the end of travel (ensures complete and repeatable execution of the operation).



PRESS VERSION ZINC/NICKEL PLATING AND INOX SEE PAGE 9



Additional options ///

- On request: special bores, press head only.
- Special RAL paint.
- On 7HR: Locking of the press head on the column for rotation.
- Special services on request (press modifications, small tooling and fitting).

See pages 52 to 55

Force Monitoring

for Manual and Pneumatic Presses

EMG offers all types of force/ displacement monitoring thanks to force and displacement sensor solutions adapted to each need, for 100% parts control. It is the quality guaranteed by the monitoring of industrial processes:

- > **Permanent quality control** The quality assurance goes through a permanent process check.
The EMG presses, equipped with the force and / or displacement sensor allowing production of compliant parts from the beginning of the production process.
- > **Product process control** The detection of anomalies is immediate if the requested parameters are not reached, the monitoring unit delivers an «OK» or «NOK» message by means of an optical display, a sound signal, or by locking the press in position.
- > **Total traceability** This signal allows the operator to immediately isolate the defected part.
- > **Monitoring the production** The information is stored in the control unit and can be exported to a PC for analysis, statistics or archiving.

TABLE OF CHARACTERISTICS

EMG Solutions	Solution 1	Solution 2	Solution 3
Features			
Force management	☺	☺	☺
Distance management		☺	☺
Mini - maxi mode	☺	☺	☺
Pass or no pass mode			☺
Smiley OK / NOK or bar graph	☺	☺	☺
Buzzer	☺	☺	☺
Display of evaluation curves			☺
Effort versus time			☺
Window passage			☺
Enveloping curves			☺
Instantaneous values	☺	☺	☺
Nb of measurement / second	4000	4000	4000
Number of storable programs	1	6	96
Screen			
Display	5" touchscreen		
Resolution (pixels)	800*480	800*480	800*480
Plug and play function (TEDS)	☺	☺	☺
Force input Strain gauge	☺	☺	☺
Force input +/-10VDC		☺	☺
Potentiometric displacement input or +/-10VDC		☺	☺
TTL displacement input (Heidenhain pinout)		☺	☺
Keyboard emulation USB output	☺	☺	☺
USB input (key, QR scanner)		☺	☺
Ethernet output			☺
Clock with battery		☺	☺
Sequence Mode			☺
Inputs/outputs on external module	optional	optional	optional



Force Monitoring

for Manual and Pneumatic Presses

• Three standard solutions exist in the range.

• Specific solutions can be proposed according to customer needs.

Solution 1

Force + thresholds

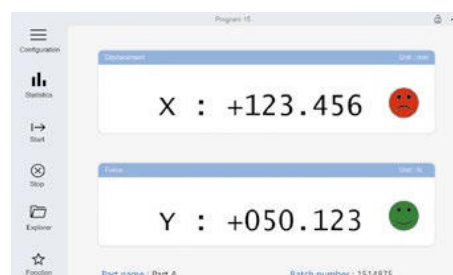
Solution 1 makes it possible to evaluate the force instantaneously or by pre-setting a minimum and maximum force. A green or red smiley or a bargraph, coupled with a buzzer, will indicate the smooth running of the press cycle. Peak values are also available.



Solution 2

Force + displacement + thresholds

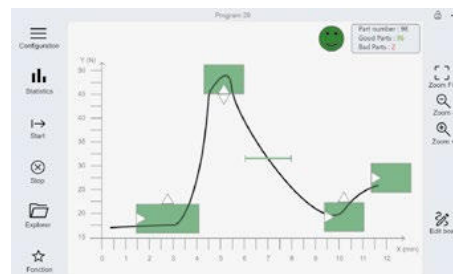
Solution 2 makes it possible to evaluate the force and the displacement instantaneously or by pre-setting a force and a minimum and maximum stroke. A green or red smiley or a bargraph, coupled with a buzzer, will indicate the smooth running of the press cycle. Peak values are also available.



Solution 3

Force + displacement + curves

Solution 3 makes it possible to evaluate the force and the displacement by setting either thresholds, windows or enveloping curves. The evaluation curve will instantly appear on the screen. A green or red smiley, coupled with a buzzer, will indicate that the press cycle is running smoothly.



Force sensor	
(PN) Nominal power	2 kN -> 60 kN
Plug and play	☺
Overload (in % of PN)	150%
Breakage (in % of PN)	300%
Accuracy (in % of PN)	0,25% < 5kN / 0,5% > 5kN
Sensor height (mm)	free height loss ± 60mm
Protection class	IP67
Tool attachment	Ø16H7 x 26mm
Displacement sensor	
Type	potentiometric (other on request)
Plug and play	☺
Stroke	100 -> 500mm
Accuracy (in % of stroke)	0.075%
Repeatability	0.01mm
Lifetime	10 ⁹ movements
Protection class	IP65