

HIDROGARNE Manufactured in Spain since 1987

Standardised and custom-built hydraulic presses



www.zameinternational.com



HIDROGARNE Manu

Manufactured in Spain

High performance and excellence in hydraulic presses



Hidrogarne has a business career that started with the manufacture of machines solely for the Spanish market, successively we went extending through different European countries and we are currently exporting our hydraulic presses to more than 20 countries around the world.

It guarantees an experience of more than 30 years of innovation, quality and commitment to our customers. The continuous progress during all these years places us as leaders in the manufacture of hydraulic presses.

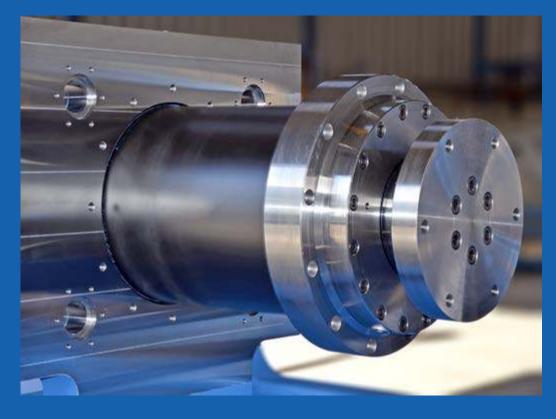
Convinced of the quality of our hydraulic presses, we have extended the manufacturing guarantee to a period of two years.

All our range of hydraulic presses is designed and manufactured entirely at HIDROGARNE facilities.

We are specialized in the manufacture of hydraulic presses with capacities, measurements and technical characteristics adapted to every customer needs. The value of innovation is the internal culture that leads to the development of new projects and ideas so we can optimize productivity for our customers.



Innovation



We integrate the management and development of each and every one of the processes. Our commitment to the continuous improvement of the manufacturing process guarantees the quality of our presses and the full satisfaction of our customers.

Quality

One of our strengths is the ability to respond thanks to having technical resources and specialized staff in all areas of the value chain.





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CD Series

Hydraulic presses with throat depth (C-frame)

We have designed the CD series with four different power ranges, from 50 to 150 tonnes.

Specifically designed to per – form work involving deep-drawing, stamping, die-cutting, forming, etc.

The latest generation CD series hydraulic presses now feature a wide range of uses including the possibility of incorporating these machines in automatic production lines.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



CD-80 model



Punching tool set for diameters of 6 to 100 mm.



C-Frame presses **CD** Series

Structure and tables

es consist of an electro welded structure made solely of S355JR steel. They are stabilized and mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all of this, we always guaranquality standards.

These models feature a mechanized lower C45E steel table with DIN-650 grooves.

Cylinder and hydraulic unit

CD series hydraulic press- The cylinder is double act- The control panel featuing with a chrome plung- res a switch enabling the er and maintenance-free anti wear guides, it's fitted type of work in manual or with a removable and interchangeable hold-down plate to avoid the deterioration of the plunger and mechanized at the end to adapt tools, molds and matrix.

tee our high precision and Anti-turning of the cylinder They incorporate an adwith a millimeter frontal and stroke endings comes block and self-control deas standard which enable us to conveniently regulate safety. the cylinder stroke.

> A two-speed motorized hy-by two-hand push button draulic unit with automat- with level IV security. ic high speed deactivation. It's equipped with a cylinder decompression valveA pressure switch placed at the lateral part comes as standard which allows the regulation of the most appropriate pressure signal for each kind of pressing.

Glycerin gauge with reading in tonnes.

Electric installation and safety

user to select the desired semi-automatic position and a switch to select either the fast speed or slow safety requirements in speed.

Electrical and hydraulic manoeuvres are redundant and self-controlled. ditional safety hydraulic vices for manoeuvre and

Operation is carried out

Safety is guaranteed using two fixed lateral protections and with a front opening of 600 mm.

They allow the installation of a hydraulic cushion or a hydraulic ejector.

It meets and satisfies all the essential health and accordance with the CE standard.

They are supplied with an instructions manual.

| Optional accessories | AD 0 | | 65 54 | 65.00 | 65 100 | CD 150 |
|---|---------------------|------|---------|---------|---------|---------|
| optionataccessories | CD Series | | CD-50 | CD-80 | CD-100 | CD-150 |
| Vertical light 600 mm. | Power | Tn | 50 | 80 | 100 | 150 |
| Vertical light 800 mm. | Motor power | Kw | 4 | 4 | 5,5 | 7,5 |
| Piston stroke 450 mm. | Throat depth | mm | 265 | 290 | 325 | 375 |
| • FISTON STORE 430 MM. | Working speed | mm/s | 6,3 | 3,8 | 4,8 | 3,9 |
| Punching tools set for diameters from 6 mm up to 40 mm with anti-deformation elastic hold-down. | Approaching speed | mm/s | 31 | 19 | 21 | 20 |
| | Return speed | mm/s | 42 | 28 | 32 | 30 |
| 415 mm long folding tools set. PROMECAM clamping system. | Maximum pressure | bar | 320 | 320 | 320 | 320 |
| | Piston stroke | mm | 250 | 250 | 250 | 250 |
| Mechanical regulation of the cylinder (only available of 80 and 100 tons). | Lower table | mm | 450x450 | 500x500 | 550x550 | 650x650 |
| , | Max. vertical light | mm | 400 | 400 | 400 | 400 |
| • Hydraulic ejector. | Working height | mm | 850 | 850 | 900 | 950 |
| Cooling equipment for hydraulic group by an air ail system | Total front | mm | 740 | 780 | 850 | 900 |
| air-oil system. | Total lateral | mm | 1170 | 1330 | 1470 | 1660 |
| Geometry adapted to your needs. | Total height | mm | 2080 | 2090 | 2155 | 2295 |
| | Weight | Kg | 1480 | 1750 | 2500 | 3750 |

CM Series

Hydraulic presses with throat depth (C-frame) and top table

We have designed the CM series hydraulic presses with four different power ranges, from 50 to 150 tonnes.

Specifically designed to per – form work involving deep-drawing, stamping, die-cutting, forming, etc.

The latest generation CM series hydraulic presses now feature a wide range of uses including the possibility of incorporating these machines in automatic production lines.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



CM-100 model

CM-100 E. Indexed splitter plate with two stations.



CM-150 E. Load cells on upper and lower table. Hydraulic cushion.



CM-250 E. Throat depth of 1600 mm. Frontal sliding lower table.





Structure and tables

es consist of an electro welded structure made solely of S355JR steel. They are stabilized and mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all this, we always guarantee our high precision and quality standards.

These models feature mechanized lower and upper C45E steel table with DIN-650 grooves. The placed at the lateral part upper table ensures perfect alignment by means of two cylindrical lateral quides of 50 mm diameter with maintenance-free kind of pressing. anti-friction bimetallic caps.

Cylinder and hydraulic unit

ing with a chrome plunger and maintenance-free anti wear guides.

A regulation panel with a millimeter frontal front and stroke endings comes slow speed. as standard which enable us to conveniently requlate the cylinder stroke.

A two-speed motorized hydraulic unit with automatic high speed deactivation. It's equipped with a cylinder decompression valve. A pressure switch comes as standard which allows the regulation of the most appropriate pressure signal for each

Glycerin gauge with reading in tonnes.

Electric installation and safety

CM series hydraulic press- The cylinder is double act- The control panel features Safety is guaranteed using a switch enabling the user two lateral protections and to select the desired type of work in manual, semi-autains placed at the front. tomatic or automatic posi-

either the fast speed or

Electrical and hydraulic manoeuvres are redundant the essential health and and self-controlled. They incorporate an additional safety hydraulic block and self-control devices for ma noeuvre and safety. It includes the verification and instructions manual. certification of the correct operation and the safety distance for the safety light curtains.

Operation is carried out by low voltage electric pedals.

with level IV safety light cur

tion and a switch to select They allow the installation of a hydraulic cushion or a hydraulic ejector.

> It meets and satisfies all safety requirements in accordance with the CE standard.

They are supplied with an

| | CM Series | | CM-50 | CM-80 | CM-100 | CM-150 |
|---|---------------------|------|---------|---------|---------|---------|
| Optional accessories | Power | Tn | 50 | 80 | 100 | 150 |
| Vertical light 600 mm. | Motor power | Kw | 4 | 5,5 | 7,5 | 7,5 |
| 5 | Throat deph | mm | 265 | 290 | 325 | 375 |
| Vertical light 800 mm. | Working speed | mm/s | 6,3 | 6 | 6,2 | 3,9 |
| Piston stroke 450 mm. | Approaching speed | mm/s | 32 | 25 | 31 | 20 |
| Mechanical regulation of the cylinder (only | Return speed | mm/s | 42 | 36 | 48 | 31 |
| available of 80 and 100 tons). | Maximum pressure | bar | 320 | 320 | 320 | 320 |
| • PLC SIEMENS mod. SIMATIC S7 1200 with 7" | Piston stroke | mm | 250 | 250 | 250 | 250 |
| touch screen mod. KTP-700. | Lower table | mm | 700x450 | 700x500 | 800x550 | 900x650 |
| • Hydraulic cushion. | Upper table | mm | 550x300 | 600x350 | 650x400 | 700x450 |
| , | Max. vertical light | mm | 400 | 400 | 400 | 400 |
| Hydraulic ejector. | Working height | mm | 850 | 850 | 900 | 950 |
| Cooling equipment for hydraulic group by an | Total front | mm | 1160 | 1210 | 1240 | 1330 |
| air-oil system. | Total lateral | mm | 1290 | 1460 | 1590 | 1750 |
| Geometry adapted to your needs. | Total height | mm | 2085 | 2090 | 2250 | 2395 |
| | Weight | Kg | 1750 | 2350 | 3150 | 4700 |

CF Series

Hydraulic presses with throat depth (C-frame) for medium and high production

We have designed the CF series hydraulic presses with three different power ranges, from 80 to 150 tonnes.

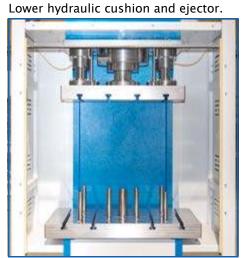
Specifically designed to per – form work involving deep-drawing, stamping, die-cutting, forming, etc. for medium and high volumes.

The latest generation CF series hydraulic presses now feature a wide range of uses including the possibility of incorporating these machines in automatic production lines.

This series works with hydraulic pressure lower than 290 bar to ensure the greater durability of the whole hydraulic system.



CF-80 model



PLC SIEMENS mod. SIMATIC S7 1200 with 7" touch screen mod. KTP-700.



C-Frame presses CF Series

Structure and tables

CF series hydraulic presses consist of an electro welded structure made solely of S355JR steel. They are stabilized and mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all of this, we always guarantee our high precision and quality standards.

These models feature a mechanized lower and upper C45E steel table with DIN-650 groovesThe upper table ensures perfect alignment by means of four cylindrical lateral quides of 50 mm diameanti-friction bimetallic caps.

Cylinder and hydraulic unit

The cylinder is single acting with a chrome plunger and maintenance-free anti wear guides.

returning, 2 double-acting lateral cylinders with chrome plunger and anti-wearing guides have been installed, which allow us a fast approaching and return speed. Incorporates two independent hydraulic safety blocks.

A motorized hydraulic unit ditional safety hydraulic with a pre-filing valve for approaching and returning. Fixed flow rate pump for working at constant speed.

ter with maintenance-free It is equipped with a direc- distance for the safety litional valve, a pressure re- ght curtains. lief valve, a decompressing valve and an air-oil cooling system.

> Glycerin gauge with reading in tonnes.

Electric installation and safety

MATIC S7 1200 and adjus- two lateral protections and touch screen KTP-700 mo- tains placed at the front. del comes as standard. It For guick approaching and allows programming the power, the cylinder stroke and the speeds. With a storage capacity of 300 memories with different working cycles.

> Electrical and hydraulic manoeuvres are redundant and self-controlled. They incorporate an ad- They are supplied with an block and self-control devices for manoeuvre and safety. It includes the verification and certification of the correct operation and the safety

Operation is carried out by low voltage electric pedals

A SIEMENS PLC mod. SI- Safety is guaranteed using table control panel with 7" with level IV safety light cur

> They allow the installation of a hydraulic cushion or a hydraulic ejector.

It meets and satisfies all the essential health and safety requirements in accordance with the CE standard.

instructions manual

| CF Series | | CF-80 | CF-100 | CF-150 |
|---------------------|------|---------|---------|---------|
| Power | Tn | 80 | 100 | 150 |
| Motor power | Kw | 7,5 | 7,5 | 7,5 |
| Throat depth | mm | 340 | 375 | 400 |
| Working speed | mm/s | 9 | 8 | 5,1 |
| Approaching speed | mm/s | 108 | 108 | 69 |
| Return speed | mm/s | 155 | 155 | 101 |
| Maximum pressure | bar | 290 | 290 | 290 |
| Piston stroke | mm | 450 | 450 | 450 |
| Lower table | mm | 800x550 | 850x600 | 900x650 |
| Upper table | mm | 650x400 | 700x450 | 750x500 |
| Max. vertical light | mm | 650 | 650 | 650 |
| Working height | mm | 900 | 900 | 950 |
| Total front | mm | 1210 | 1240 | 1360 |
| Total lateral | mm | 2050 | 2340 | 2135 |
| Total height | mm | 2630 | 2625 | 2910 |
| Weight | Kg | 2850 | 3900 | 4100 |

Optional accessories

- · Vertical light 800 mm.
- · Adaptations to robotics.
- · Hydraulic connections for peripheral systems.
- · Hydraulic cushion.
- Hydraulic ejector.
- · Geometry adapted to your needs.

M Series

4-cylindrical column hydraulic press

We have designed the M series hydraulic presses with six different power ranges, from 50 to 300 tonnes.

Designed with four cylindrical columns for increased accu racy and capacity, specifically recommended to perform work involving deep-drawing, stamping, die-cutting, forming, etc.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



Model ML-300 E for mold adjustment.





Model MV-600 E for elastoconforming. Model MV-800 E electronic synchronized.



Deep drawing and forming presses **M** Series

Structure and tables

M series hydraulic presses consist of three electro welded frames made solely of S355JR steel. They are stabilized and mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all this, we always guarantee our high precision and quality standards.

These models feature a mechanized lower and upper C45E steel table with DIN-650 grooves. We ensure a minimal friction in the vertical displacement of the upper table by installing alloy bimetallic bushings and a perfect parallelism by four chromed and rectified cylindrical columns.

Adjustments to the position of the upper table and changes in speed are controlled from a threeway side panel.

Cylinder and hydraulic unit

The cylinder is double act- The control panel featuing with a chrome plunger and maintenance-free anti wear guides.

A two-speed motorized hydraulic unit with automatic high-speed deactivation. It's equipped with a cylinder decompression valve. Silent hydraulic pump. A pressure switch placed at the lateral part comes as standard which allows the regulation of the most appropriate pressure signal for each kind of pressing.

Glycerin gauge with reading in tonnes.

Electric installation and safety

res a switch enabling the user to select the desired mi-automatic or automatic tections panels and one position and a switch to se-practicable protection palect either the fast or slow speed.

Electrical and hydraulic

and self-controlled. They incorporate an additional safety hydraulic block and noeuvre and safety. It includes the verification and requirements in accordancertification of the correct ce with the CE standard. operation and the safety

distance for the safety light They are supplied with an curtains. instructions manual.

Operation is carried out by low voltage electric pedals.

Safety is guaranteed using level IV safety light curtains situated at the front of the type of work in manual, se press, two fixed lateral pro nel with a magnetic detector disconnection switch placed at the rear.

manoeuvres are redundant They allow the installation of a hydraulic cushion or a hydraulic ejector.

self-control devices for ma It meets and satisfies all the essential health and safety

Optional accessories

- Proportional valves of pressure and flow.
- PLC SIEMENS mod. SIMATIC S7 1200 with 7" touch screen mod. KTP-700.
- · Frontal sliding lower table.
- · Adaptations to robotics.
- Hydraulic cushion.

- Hydraulic ejector placed at the upper or lower table or both.
- Cooling equipment for hydraulic group by an air-oil system.
- · Fast speed by prefilling valves and side cylinders.
- · Hydraulic connections for peripheral systems.
- · Geometry adapted to your needs.

| M Series | | MV-50 | MV-80 | MV-100 | MV-150 | MV-220 | MV-300 |
|-------------------|------|---------|---------|----------|----------|----------|-----------|
| Power | Tn | 50 | 80 | 100 | 150 | 220 | 300 |
| Motor power | Kw | 4 | 5,5 | 7,5 | 7,5 | 11 | 11 |
| Approaching speed | mm/s | 32 | 25 | 31 | 20 | 17 | 13 |
| Working speed | mm/s | 6,3 | 6 | 6,2 | 3,9 | 3,8 | 2,8 |
| Return speed | mm/s | 42 | 36 | 48 | 31 | 30 | 18 |
| Guides diameter | mm | 60 | 80 | 100 | 120 | 120 | 150 |
| Maximum pressure | bar | 320 | 320 | 320 | 320 | 320 | 320 |
| Piston stroke | mm | 450 | 450 | 450 | 450 | 450 | 450 |
| Useful table | mm | 750x620 | 900x850 | 1050x950 | 1050x950 | 1200x950 | 1300x1000 |
| Between columns | mm | 750x410 | 900x600 | 1050x650 | 1050x590 | 1200x590 | 1300x570 |
| Vertical light | mm | 600 | 600 | 650 | 700 | 750 | 800 |
| Working height | mm | 750 | 800 | 800 | 800 | 900 | 900 |
| Total front | mm | 1470 | 1680 | 1880 | 1940 | 2240 | 2650 |
| Total lateral | mm | 1020 | 1330 | 1430 | 1490 | 1450 | 1500 |
| Total height | mm | 2650 | 2680 | 2780 | 2885 | 3125 | 3250 |
| Weight | Kg | 3200 | 3400 | 4300 | 5580 | 8500 | 10800 |

R Series

Hydraulic presses with solid-arch monoblock

We have designed the R series hydraulic presses with six different power ranges, from 80 to 500 tonnes.

Specifically designed to perform work involving deepdrawing, stamping, die-cutting, forming, etc.

The latest generation R series hydraulic presses now feature a wide range of uses including the possibility of incorporating these machines in automatic production lines.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



Model RM-1000 E. Cold stamping hydraulic press.



Model RM-500 E with CNC and hydraulic ejector.



Interior detail



Deep drawing and forming presses **R** Series

Structure and tables

R series hydraulic presses consist of an electro welded structure made solely of S355JR steel. They are stabilised and mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all this, we always guarantee our high precision and quality standards.

These models feature a me-pressure for each kind of chanized lower and upper C45E steel table with DIN-650 grooves. The upper table ensures perfect alignment by means of four cylindrical lateral guides with maintenace-free an ti-friction bimetallic caps.

Adjustments to the posi tion of the upper table and changes in speed are controlled from a three-way side panel.

Cylinder and hydraulic unit

The cylinder is double ac- The control panel featuting with a chrome plunanti wear guides.

A two-speed motorized hydraulic unit with automatic high-speed deactivation. It's equipped with a cylinder decompression valve. A pressure regulator manoeuvres are redunplaced at the lateral part comes as standard which allows the regulation of the most appropriate pressing.

Glycerin gauge with reading in tonnes.

Electric installation and safety

res a switch enabling the ger and maintenance-free user to select the desired semi-automatic or au tomatic position and a switch to select either the nel with a magnetic detecfast speed or slow speed. tor disconnection switch

> Electrical and hydraulic dant and self-controlled. They incorporate an additional safety hydraulic block and self-control devi-It meets and satisfies all ces for manoeuvre and sa- the essential health and fety. It includes the verification and certification of the correct operation and the safety distance for the safety light curtains.

Operation is carried out by low voltage electric pedals.

Safety is guaranteed using level IV safety light curtains placed at the front of the type of work in a manual, press, two fixed lateral pro tections panels and one practicable protection paplaced at the rear.

> They allow the installation of a hydraulic cushion or a hydraulic ejector.

safety requirements in accordance with the CE standard.

They are supplied with an instructions manual.

Optional accessories

- · Mechanical regulation of the cylinder (only available of 80 and 100 tons).
- PLC SIEMENS mod. SIMATIC S7 1200 with 7" touch screen mod. KTP-700.
- · Fast approaching speed by
- prefilling valves and side cylinders.
- Hydraulic cushion.
- Hydraulic ejector placed at the upper or lower table or both
- · Cooling equipment for hydraulic group by an air-oil system.
- · Geometry adapted to your needs.

| R Series | | RM80 | RM-100 | RM150 | RM-220 | RM300 | RM-500 |
|-------------------|------|---------|---------|---------|---------|---------|----------|
| Power | Tn | 80 | 100 | 150 | 220 | 300 | 500 |
| Motor power | Kw | 5,5 | 7,5 | 7,5 | 11 | 11 | 15 |
| Approaching speed | mm/s | 25 | 30 | 20 | 17 | 13 | 10 |
| Working speed | mm/s | 6 | 6,2 | 3,9 | 3,8 | 2,8 | 2,4 |
| Return speed | mm/s | 36 | 48 | 30 | 30 | 19 | 17 |
| Guides diameter | mm | 50 | 50 | 50 | 60 | 60 | 80 |
| Max. pressure | bar | 320 | 320 | 320 | 320 | 320 | 320 |
| Piston stroke | mm | 250 | 250 | 250 | 300 | 300 | 500 |
| Lower table size | mm | 700x500 | 700x500 | 750x550 | 800x600 | 850x650 | 1000x850 |
| Top table size | mm | 600x450 | 600x450 | 650x500 | 700x550 | 750x600 | 1000x800 |
| Front light | mm | 800 | 800 | 850 | 900 | 950 | 1150 |
| Vertical light | mm | 400 | 400 | 400 | 500 | 500 | 700 |
| Working height | mm | 900 | 900 | 950 | 1000 | 1000 | 1000 |
| Total front | mm | 1500 | 1525 | 1750 | 1875 | 2025 | 2585 |
| Total width | mm | 1025 | 1075 | 1110 | 1095 | 1225 | 1470 |
| Total height | mm | 2500 | 2575 | 2720 | 3045 | 3130 | 3610 |
| Weight | Kg | 2080 | 2340 | 3250 | 4680 | 6490 | 12150 |

T Series

Hydraulic presses with sliding bridge and headstock lateral displacement

We have designed the T series hydraulic presses with three different power ranges, from 150 to 300 tonnes.

They are especially designed for the straightening of electro welded structures and flame cut sheets. Their design facilitates the loading and unloading of large volume parts, sheets or structures. It allows acces to the different pressing points without the need to move the part thanks to the lateral dis – placement of the cylinder and the longitudinal displacement of the bridge.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



Cambering and straightening presses **T** Series

Structure and tables

T series hydraulic presses consist of an electro welded structure made solely of S355JR steel. They are stabilized and mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all this, we always guaranquality standards.

The longitudinal displacement of the bridge is motorized, it is controlled by a frequ ency inverter and driven by a cogged belt.

and in the models of 220 and 300 Tn, it is controlled by means of a frequency inverter.

Cylinder and hydraulic unit

ing with a chrome plunger and maintenance-free anti wear guides. It's fitted of work in a manual or with a removable and interchangeable hold-down plate to avoid the deterioration of the plunger and mechanized at the end to adapt tools.

Anti-turning of the cylinder with a millimeter comes as standard which enable us to conveniently regulate the cylinder stroke.

A two-speed motorized hydraulic unit with automatic high-speed deactivation. The lateral displacement of It's equipped with a cylinthe headstock is motorized, der decompression valve. A pressure regulator placed at the lateral part comes as standard which allows the regulation of the most appropriate pressure for each kind of pressing.

> Glycerin gauge with reading in tonnes.

Electric installation and safety

to select the desired type

Operation is carried out by means of a low voltage pendant control station, it incorporates a double push button to go up or down at a slow speed and tee our high precision and frontal and stroke endings a double push button to go up or down at fast speed. It includes emergency stop and a maneuver confirmation button.

The cylinder is double act- The control panel features Safety is guaranteed using a switch enabling the user a line-operated safety installed on the perimeter.

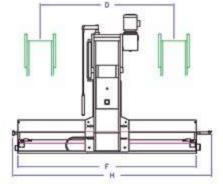
> semi- automatic position. It meets and satisfies all the essential health and safety requirements in accordance with the CE standard.

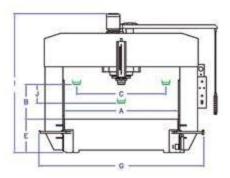
> > They are supplied with an instructions manual.

Optional accessories

- Milling lower table of $3,000 \times 1,550$ for TL-150.
- Milling lower table of 3,500×2,040 for TL-220.
- Milling lower table of $4,000 \times 2,540$ for TL-300.
- 8 ejector cylinders installed on the lower table, power 2 tonnes each one for TL-150.
- · 12 ejector cylinders installed on the press table, power 2 tonnes each one for TL-220/300.
- · 250 mm cylinder extender.
- · Geometry adapted to your needs.

| T Series | | TL-150 | TL-220 | TL-300 |
|------------------------|------|-----------|-----------|-----------|
| Power | Tn | 150 | 220 | 300 |
| Motor power | Kw | 4 | 5,5 | 7,5 |
| Approaching speed | mm/s | 9,9 | 9 | 9,9 |
| Working speed | mm/s | 2 | 2,2 | 2 |
| Return speed | mm/s | 15,4 | 16,2 | 14,7 |
| Max press | bar | 320 | 320 | 320 |
| Piston stroke – J | mm | 450 | 450 | 450 |
| Lower table size | mm | 1600x3000 | 2100x3500 | 2600x4000 |
| Headstock movement - C | mm | 1050 | 1510 | 1960 |
| Bridge movement – D | mm | 2150 | 2440 | 2940 |
| Frontal light - A | mm | 1615 | 2120 | 2620 |
| Lateral light – B | mm | 700 | 700 | 700 |
| Working height – E | mm | 600 | 700 | 750 |
| Total front - G | mm | 2500 | 3200 | 3660 |
| Total lateral - H | mm | 3250 | 3780 | 4280 |
| Total height – I | mm | 2550 | 2990 | 3120 |
| Weight | Kg | 7000 | 10000 | 14000 |





HV Series

Cambering and straightening presses

We have designed the HV series The horizontal design of the hydraulic presses with three different power ranges, from 150 to 300 tonnes.

Specifically designed to perform works involving the straightening and bending of feature a wide range of uses profiles, bars and beams.

machine permits an easy handling of large beams and profiles.

The latest generation of HV series hydraulic presses now including the possibility of attaching a variety of tools to these machines.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



Model HV-300 with optional accessory of basic feeding rails of 3000 mm adjustable in height.

Top view.



Electric box and regulated panel with stroke endings.



Cambering and straightening presses **HV Series**

Structure and tables

HV series hydraulic presses consist of an electro-welded "C" structure made solely of S355IR ste- lateral guides with mainel. They are stabilized and tenance-free anti-friction mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all both sides. of this, we always guarantee our high precision and quality standards.

These models feature a mechanized pushing main table and a supporting back table, both made of high strength steel, with DIN-650 grooves. Includes, as standard, supporting blocks made of C45E steel.

The main table ensures perfect alignment by means of four cylindrical bimetallic caps.

Includes, as standard two height-adjustable accom- us to conveniently regulate panying roller, each one at the cylinder stroke.

Cylinder and hydraulic unit

ting with a chrome plunger and maintenance-free user to select the desired anti wear guides.

A regulating panel with stroke endings comes as standard which enables

A two-speed motorized hvdraulic unit with automatic high speed deactivation. It's equipped with a cylinder decompression valve. Includes as standard, a lateral pressure regulator which allows the adjustment of the most appropriate pressure for each type of work.

Glycerin gauge with reading in tonnes.

Electric installation and safety

The cylinder is double ac- The control panel features a switch enabling the type of work in a manual or semi-automatic posi tion and a switch to select the high speed or the low speed.

> Operation is carried out by low voltage electric pedals.

> It meets and satisfies all the essential health and safety requirements in accordance with the CE standard.

They are supplied with an instructions manual.

Optional accessories

- Basic supply rails with a length of 3.000 mm to 12.000 mm with height adjustment.
- · Motorized supply rails with a length of 3.000 mm to 12.000 mm.
- · Hydraulic elevation and inclination of the supply rails.
- · 415mm long folding tools set. PROMECAM clamping system.
- PLC SIEMENS mod. SIMATIC S7 1200 with 7" touch screen mod. KTP-700.
- · Cooling equipment for the hydraulic unit.
- · Geometry adapted to your needs.

| HV Series | | HV-150 | HV-220 | HV-300 |
|---------------------------|------|------------|-------------|-------------|
| Power | Tn | 150 | 220 | 300 |
| Motor power | Kw | 4 | 5,5 | 7,5 |
| Approaching speed | mm/s | 9,9 | 9 | 9,9 |
| Working speed | mm/s | 2 | 2,2 | 2 |
| Return speed | mm/s | 15,4 | 16,2 | 14,7 |
| Diameter of guides | mm | 50 | 60 | 60 |
| Maximum pressure | bar | 320 | 320 | 320 |
| Piston stroke | mm | 450 | 450 | 450 |
| Supporting table | mm | 2000x500 | 2500x600 | 2500x750 |
| Main table | mm | 500x500 | 600x600 | 750x750 |
| Max. light between tables | mm | 700 | 800 | 900 |
| Supporting blocks | mm | 100x100x50 | 0120x120x60 | 0150x150x75 |
| Working height | mm | 900 | 950 | 950 |
| Total front | mm | 2520 | 3800 | 3200 |
| Total lateral | mm | 2000 | 2500 | 2500 |
| Total height | mm | 1570 | 1700 | 1840 |
| Weight | Kg | 6700 | 11150 | 13300 |

Special presses

Custom built manufacturing

HIDROGARNE TL-400/6000 E

TL-400/6000-E is especially designed for the straightening of electro welded structures and oxycut sheets of big thick.

Technical features

- Force: 400 Tn
- Motor power: 11 Kw
- Piston stroke: 450 mm
- Maximum pressure: 319 bar
- Approaching speed: 10 mm/s
- Working speed: 3 mm/s
- · Return speed: 18 mm/s
- · Frontal light: 2.560 mm
- Table measures: 6000×2500 mm
- Maximum vertical light: 700 mm
- Headstockstock displacement: 1.900 mm
- Frame displacement: 4.900 mm
- · Working height: 800 mm
- Total length: 6.000 mm
- Total width: 3.650 mm
- Total height: 3.250 mm
- Weight: 28.500 Kg

HIDROGARNE FDV-330 E

FDV-330 E is especially efficient in forming and die-cutting works. This model incorporates a communication interface for robotics.

- Power: 330 Tn
- Number of cylinders: 3
- · Vertical lights between tables: 730 mm
- Pistons stroke: 450 mm
- Table dimensions: 3.100×1.400 mm
- Between columns: 3.170×1.300 mm
- Guides diameter: 80 mm
- · Approaching speed: 75 mm/s
- Working speed: 5,75 mm/s
- · Return speed: 75 mm/s
- · Working height: 900 mm
- Hydraulic group
- Motor power: 22 Kw
- Maximum pressure: 290 bar
- Total front: 4.220 mm
- Total lateral: 2.105 mm
- Total height: 3.225 mm
- Weight: 23.500 Kg



Custom-built manufacturing presses

HIDROGARNE MV-250 E

MV-250 E is designed with four cylindrical columns to achieve greater precision and capacity, and especially manufactured to perform deep drawing work.

Technical features

- Power: 250 Tn
- Motor power: 20 Hp
- Pressure maximum: 260 bar
- · Maximum vertical light: 1.000 mm
- Minimum vertical light: 500 mm
- Cylinder stroke: 500 mm
- Distance between columns: 2.500×700 mm
- Working table size: 2.500×1.150 mm
- · Column diameter: 150 mm
- Approaching speed: 80 mm/s
- Working speed: 7 mm/s
- Return speed: 105 mm/s
- Distribution of area hydraulic cushion: $950 \times 750 \text{ mm}$
- Working height: 1.100 mm
- Total height: 3.650 mm
- Height: 15.000 Kg

HIDROGARNE MV-1000 E

MV-1000 E model designed with four columns and especially manufactured to vulcanizing works. This model incorporates two heated plates which can reach 250 °C of temperature. Bottom table with front hydraulic extractior with capacity to move loads until 25 Tn. This model incorporates an ejector of 150 Tn. to-ur mold pieces.

- Power: 1.000 Tn
- Speed: 2
- Motor power: 30 Kw
- Maximum working pressure: 300 bar
- Approaching speed: 90 mm/s
- Working speed: 3 mm/s
- Return speed: 110mm/s
- Piston stroke: 1.500 mm
- Frontal light: 1.750 mm
- Lateral light: 800 mm
- Vertical light: 2.500 mm
- Useful dimensions of the tables: 1.500 $\times 1.500$ mm
- Diameter of the guides: 250 mm
- Weight: 60.000 Kg





Special presses

Custom built manufacturing

HIDROGARNE CM-250 E

CM-250 E with throat depth of 1600 mm, especially designed to die-cutting and closing of valves. This model incorporates a NC KPT-400 with proportional valves to control with total precision the approximation stroke, work, return and pressure.

Technical features

- Power: 250 TN
- Main motor power: 15 Kw
- Piston stroke: 1200 mm
- Maximum pressure: 260 bar
- Approaching speed: 80 mm/s
- Working speed: 4 mm/s
- Return speed: 80 mm/s
- Maximum vertical light: 1.500 mm
- Throat depth: 1.600 mm
- Working height: 1.000 mm
- Upper table: 1.200×1.200 mm
- Lower table: 2.000×2.400 mm
- Weight: 55.000 Kg

HIDROGARNE MV-800 E

MV-800 E model, specially designed and ma nufactured for the adjustment and testing of moulds and dies. Hydraulic press with four cylindrical columns and synchronized elec – tronic system to warranty the parallelism in irregular pressing work. Structure designed to concentrate the efforts to maximum power in 1/3 of the working surface.

- Power: 800 Tn.
- Opening power: 80 Tn.
- Motorized speeds: 1
- Motor power: 55 kw + 55 kw (75+75 CV).
- Auxiliary motors power: 5,3 kw
- Working pressure: 250 bar
- Pre-filling quick speed: 110 mm/s.
- Working speed: 6 mm/s.
- Return speed: 180 mm/s.
- Cylinder stroke: 1.000 mm.
- · Height between plates: 1.500 mm.
- Useful dimensions of plates: 3.100×2.000 mm.
- Lower table displacement: 2.000 mm.
- Distance between columns: 3.100×1.300 mm.
- Total dimensions: 3.800×4.500 mm.
- Total height: 6.400 mm.
- Weight: 134.600 Kg





Custom-built manufacturing presses

HIDROGARNE RM-1000 E

RM-1000 E specially designed to do stamping and cold forming works. This model incorporates a NC Siemens KP-400 with PLC SIEMENS S-7 to regulate the upper table stroke and changes of speed.

Technical features

- Power: 1000 Tn.
- Motor power: 36 Kw
- Approaching speed: 60 mm/s
- Working speed: 4mm/s
- Return speed: 90 mm/s
- Cylinder stroke: 500 mm/s
- Upper table: 1.450×900 mm
- Lower table: 1.450×960 mm
- Vertical light: 700 mm
- Working height: 990 mm
- Total front: 3.000 mm
- Total lateral: 1.500 mm
- Toatal height: 3.650 mm
- Weight: 21.650 Kg

HIDROGARNE MV-600 E

MV-600 E is specially designed and manufae tured to perform works involving elasto-conformed in aeronautical sector.

- Power: 600 Tn
- Speeds: 2
- Motor power: 22 Kw
- Maximum working pressure: 250 bar
- Approaching speed: 15 mm/s
- Working speed: 3 mm/s
- Return speed: 25 mm/s
- Cylinder stroke: 500 mm
- Frontal light: 800 mm
- Lateral light: 600 mm
- Vertical light: 800 mm
- Working height: 1.000 mm
- Upper table dimensions: 1.350×1.150 mm
- Guides diameter: 200 mm
- Lower table dimensions: 1.350×1.150 mm
- Weight: 20.000 Kg





S Series

Motorized hydraulic presses of double stanchion.

We have designed the S series workshop presses with four different power ranges, from 80 to 200 tonnes.

Specifically designed to perform work involving extraction, threading, straightening, etc.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



SD-100 model





415 mm long folding tools set (optional)

Set of 7 pushers with adapter and plate (optional)



Workshop presses **S** Series

Structure and tables

S series hydraulic presses Two different models are consist of an electro welded structure of 4 stanchions with open sides.

These models feature a mobile table which enables the equipment to be positioned at different heights. The equipment is secured by means of two center pins located beneath the table. The raising and lowering system is operated by means of chains activated by the press cylinder.

It includes two support flat blocks.

available:

SD models: This model features a fixed headstock. a removable and interchan

SL models: This model is equipped with a headstock lateral displacement and provided with a manual locking system. Moved by wheels.

Cylinder and hydraulic unit

The cylinder is double acting with chrome plunger and maintenance-free antiguard and emergency wear guides, it's fitted with stop device. geable hold-down plate to It meets and satisfies all avoid its deterioration.

One-speed motorized hydraulic unit.

Glycerin gauge with reading in tonnes.

Operation is carried out by means of a lever-operated hydraulic distributor.

Electric installation and safety

Electric installation equipped with an engine

the essential health and safety requirements in accordance with the CE standard.

They are supplied with an instructions manual.

| | S Series | | SD-80 | SD-100 | SD-150 | SD-200 | SL-100 | SL-150 | SL-200 |
|---|---------------------|------|-------|--------|--------|--------|--------|--------|--------|
| Optional accessories | Power | t | 80 | 100 | 150 | 200 | 100 | 150 | 200 |
| Manual elevation table equipped | Motor power | kw | 3 | 3 | 4 | 5,5 | 3 | 4 | 5,5 |
| with manual spiral crown reducer. | Piston stroke | mm | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| Hydraulic unit with two speed. | Maximum pressure | bar | 320 | 320 | 320 | 350 | 320 | 320 | 350 |
| Front pressure regulator. | Working speed | mm/s | 3,8 | 3,1 | 3.1 | 3.1 | 3,1 | 3,1 | 3,1 |
| • 415 mm long folding tools set. | Return speed | mm/s | 4,7 | 4,1 | 4 | 4,8 | 4,1 | 4 | 4,8 |
| Promecam clamping system. | Headstockstock | mm | - | - | - | - | 1050 | 1000 | 1000 |
| Additional manual pump with | Frontal light | mm | 1050 | 1050 | 1050 | 1050 | 1500 | 1500 | 1500 |
| one speed, it allows two kind of | Lateral light | mm | 210 | 230 | 290 | 290 | 280 | 340 | 340 |
| operation manual and motorized. | Max. vertical light | mm | 1020 | 1020 | 860 | 815 | 960 | 955 | 915 |
| Anti-turning for the cylinder. | Table light | mm | 255 | 285 | 355 | 355 | 345 | 405 | 405 |
| Set of 7 pushers with adapter and | Total front | mm | 1530 | 1595 | 1660 | 1660 | 2090 | 2150 | 2150 |
| plate (Ø 10-12-15-17-20-25-30 mm) | Total lateral | mm | 980 | 980 | 1180 | 1180 | 1180 | 1180 | 1180 |
| Set of "V" blocks. | Total height | mm | 2275 | 2315 | 2405 | 2470 | 2660 | 2805 | 2855 |
| | Weight | kg | 690 | 930 | 1500 | 1875 | 1830 | 2350 | 2620 |

D Series

Hydraulic presses of double stanchion with fixed headstock

We have designed the D series workshop presses with five different power ranges, from 80 to 300 tonnes.

Specifically designed to perform work involving fretwork, deep-drawing, punching, bending, straightening, etc.

The latest generation D series hydraulic presses now feature a wide range of uses including the incorporation of equipment for bending and punching and the possibility of installing moulds and dies.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



DM-100 model







Punching tools set



Mechanical regulation of the cylinder.



tion elastic hold-down.



Folding tools set of 415 mm.



Folding tools set of 1020 mm.

Details of optional Stroke endings. accessories

Workshop presses **D** Series

Structure and tables

D series hydraulic presses The raising and lowering consist of an electro welded structure made solely of S355JR steel. They are mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all this, we always guarantee our high precision and quality standards.

These models feature a mobile table which enables the equipment to be positioned at different heights. The equipment is

secured by means of two

center pins located in the

corporates four screws on

center of the table, it in-

each side to get a more

want to install tools.

solid fixation in case you

system operates by chains ing with a chrome plungdriven by means of a hoist er and maintenance-free equipped with a gear re ducer, it incorporates late- with a removable and inral wheels for guidingThe gear system is located in the rear outer part in order ration of the plunger and to leave the entire inner part of the table free.

It includes two flat blocks. Anti-turning of the cylin-

Two models are available:

DM models: The table is raised using a manually operated gear system.

DV models: The table is raised using a motor and a gear reducer.

Cylinder and hydraulic unit

anti wear quides, it's fitted of work in a manual or terchangeable hold-down plate to avoid the deteriomechanized at the end to adapt tools.

der with a millimeter frontal and stroke endings comes as standard which enable us to conveniently regulate the cylinder stroke.

A two-speed motorized hydraulic unit with automatic high speed deactivation. It's equipped with a cylinder decompression valve.

Glycerin gauge with reading in tonnes.

Electric installation and safety

The cylinder is double act- The control panel features a switch enabling the user to select the desired type semi-automatic position and a switch to select either the fast speed or slow speed.

> Operation is carried out by low voltage electric pedals.

It meets and satisfies all the essential health and safety requirements in accordance with the CE standard.

They are supplied with an instruction manual.

Optional accessories

·Front pressure regulator.

- Punching tools set for diameters from 6 mm up to 40 mm with anti-deformation elastic hold-down.
- Punching tools set for diameters from 6 mm up to 100 mm with anti-deformation elastic hold-down.
- Punching tools set for diameters from 6 mm up to 160 mm.
- · 415 mm long folding tools set. PROMECAM clamping system.
- 1020 mm long folding tools set, it includes 2 lateral guides to ensure the folding parallelism. PROMECAM clamping system.
- Mechanized lower table with DIN-650 grooves.
- Mechanized upper table with 2 or 4 guides and DIN-650 grooves.
- Mechanical regulation of the cylinder (only available of 80 and 100 tons).
- Operation by two hands push button with level IV security module.

| D Series | | DM-80 | DM-100 | DM-150 | DV-220 | DV-30 |
|---------------------|------|-------|--------|--------|--------|-------|
| Power | Tn | 80 | 100 | 150 | 220 | 300 |
| Motor power | Kw | 4 | 4 | 4 | 5,5 | 7,5 |
| Table motor power | Kw | | | | 0,75 | 0,75 |
| Working speed | mm/s | 3,8 | 3,1 | 2 | 2,2 | 2 |
| Approaching speed | mm/s | 9,8 | 9,2 | 9,9 | 9 | 9,9 |
| Return speed | mm/s | 14,2 | 14,4 | 15,4 | 16,2 | 14,7 |
| Maximum pressure | bar | 320 | 320 | 320 | 320 | 320 |
| Piston stroke | mm | 250 | 250 | 250 | 300 | 300 |
| Frontal light | mm | 1050 | 1050 | 1050 | 1500 | 1500 |
| Lateral light | mm | 280 | 290 | 340 | 390 | 450 |
| Max. vertical light | mm | 910 | 920 | 920 | 1020 | 1030 |
| Table light | mm | 325 | 345 | 405 | 475 | 535 |
| Total front | mm | 1530 | 1600 | 1670 | 2140 | 2180 |
| Total lateral | mm | 980 | 980 | 1180 | 1500 | 1500 |
| Total height | mm | 2395 | 2465 | 2705 | 3165 | 3300 |
| Weight | Kg | 920 | 1170 | 1875 | 3360 | 3890 |

L Series

Hydraulic presses of double stanchion with headstock lateral displacement

We have designed the L series workshop presses with four different power ranges, from 100 to 300 tonnes.

Specifically designed to perform work involving fretwork, deep-drawing, punching, bending, straightening, etc.

The latest generation L series hydraulic presses now feature a wide range of uses including the incorporation of equipment for bending and punching and the possibility of installing moulds and dies.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



LM-100 model



40 mm with anti-deforma- 160 mm.





Mechanical regulation of the cylinder.



tion elastic hold-down.



Folding tools set of 415 mm.



Folding tools set of 1020 mm.

Details of optional Stroke endings. accessories

Workshop presses **L** Series

Structure and tables

L series hydraulic presses consist of an electro welded structure made solely of S355JR steel. They are mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all this, we always guarantee our high precision and quality standards.

These models feature a mobile table which enables the equipment to be positioned at different heights. The equipment is secured by means of two center pins located in the center of the table, it in corporates four screws on each side to get a more solid fixation in case you want to install tools. The raising and lowering sys tem operates by chains driven by means of a hoist equipped with a gear redu cer, it incorporates lateral wheels for guiding.

Cylinder and hydraulic unit

The gear system is located They have headstock latin the rear outer part in or- eral displacement providder to leave the entire innered with a manual locking part of the table free. system.

Two different models are available:

LM models: The table is raised by means of a manually operated by a gear reducer and the headstock is moved by means of wheels on mechanized rails.

LV models: The table is raised by means of a motor and gear reducer. The headstock is moved by means of a steering wheel and a rack transmission system.

It includes two flat blocks. The cylinder is double act- and a switch to select ing with a chrome plunger and maintenance-free anti wear guides, it's fitted with a removable and interchangeable hold-down plate to avoid the deterioration of the plunger and mechanized at the end to adapt tools.

> Anti-turning of the cylinder accordance with the CE with a millimeter frontal and stroke endings comes as standard which enable

> us to conveniently regulate instruction manual. the cylinder stroke.

A two-speed motorized hydraulic unit with automatic high speed deactivation. It's equipped with a cylinder decompression valve.

Glycerin gauge with reading in tonnes.

Electric installation and safety

The control panel features a switch enabling the user to select the desired type of work in a manual or semi-automatic position either the fast speed or slow speed.

Operation is carried out by low voltage electric pedals.

It meets and satisfies all the essential health and safety requirements in standard.

They are supplied with an

Optional accessories

- · Front pressure regulator.
- Punching tools set for diameters from 6 mm up to 40 mm with anti-deformation elastic hold-down.
- Punching tools set for diameters from 6 mm up to 100 mm with anti-deformation elastic hold-down.
- · Punching tools set for diameters from 6 mm up to 160 mm.
- 415 mm long folding tools set. PROMECAM clamping system.
- 1020 mm long folding tools set, it includes 2 lateral guides to ensure the folding parallelism. PROMECAM clamping system.
- Mechanized lower table with DIN-650 grooves.
- Mechanized upper table with 2 or 4 guides and DIN-650 grooves.
- · Mechanical regulation of the cylinder (only available of 80 and 100 tons).
- · Operation by two hands push button with level IV security module.

| | | _ | _ | | |
|-----------------------------|------|--------|--------|--------|--------|
| L Series | | LM-100 | LM-150 | LV-220 | LV-300 |
| Power | Tn | 100 | 150 | 220 | 300 |
| Motor power | Kw | 4 | 4 | 5,5 | 7,5 |
| Table motor power | Kw | | | 0,75 | 0,75 |
| Working speed | mm/s | 3,1 | 2 | 2,2 | 2 |
| Approaching speed | mm/s | 9,2 | 9,9 | 9 | 9,9 |
| Return speed | mm/s | 14,4 | 15,4 | 16,2 | 14,7 |
| Maximum pressure | bar | 320 | 320 | 320 | 320 |
| Piston stroke | mm | 250 | 250 | 300 | 300 |
| Headstockstock displacement | mm | 1050 | 1000 | 950 | 900 |
| Frontal light | mm | 1500 | 1500 | 1500 | 1500 |
| Lateral light | mm | 280 | 340 | 400 | 450 |
| Max. vertical light | mm | 920 | 920 | 1020 | 1020 |
| Table light | mm | 345 | 405 | 485 | 535 |
| Total front | mm | 2050 | 2120 | 2140 | 2180 |
| Total lateral | mm | 1180 | 1180 | 1500 | 1500 |
| Total height | mm | 2660 | 2805 | 3185 | 3330 |
| Weight | Kg | 1880 | 2450 | 3360 | 3890 |

F Series

Hydraulic presses of double stanchion with fixed table

We have designed the F series workshop presses with five different power ranges, from 80 to 300 tonnes.

Specifically designed to perform work involving fretwork, deep-drawing, punching, bending, straightening, etc.

The latest generation F series hydraulic presses now feature a wide range of uses including the incorporation of equipment for bending and punching and the possibility of installing hydraulic cushion or hydraulic ejector.

This series works with hydraulic pressure lower than 320 bar to ensure the greater durability of the whole hydraulic system.



FLV-220 model



pendent headstocks.











FDM-80/3 E equipped with three inde- FDV-220/2 E with two simultaneous workLM-100 with headstock lateral displacestations. ment to work with different dies.





Details of optional accessories

Workshop presses **F Series**

| Structure and tables | | Cylinder and hydraulic unit | Electric installation and safety |
|---|---|---|--|
| F series hydraulic presses consist of an electro wel- ded structure made solely of S355JR steel. They are mechanized at the end of the structural welding process to ensure perfect parallelism and precision. Calculated and designed by finite software. With all this, we always guarantee our high precision and quality standards. These models feature a fixed table to ensure grea- ter robustness. It includes two flat blocks. | available: FDM models: equipped with a fixed headstock and several headstocks may be installed on the same machine. FLM models: equipped with a headstock of late- ral displacement by whe- els, featuring a manual locking system. FLV models: equipped with a headstock of la- teral displacement by | The cylinder is double act- ing with a chrome plung- er and maintenance-free anti wear guides, it's fitted with a removable and in- terchangeable hold-down plate to avoid the deterio- ration of the plunger and mechanized at the end to adapt tools. Anti-turning of the cylinder with a millimeter frontal and stroke endings comes as standard which enable us to conveniently regulate the cylinder stroke. A two-speed motorized hy- draulic unit with automat- ic high speed deactivation. It's equipped with a cylin- der decompression valve. | a switch enabling the user to select the desired type of work in a manual or semi-automatic position and a switch to select ei- ther the fast speed or slow speed. Operation is carried out by low voltage electric pedals. It meets and satisfies all the essential health and safety requirements in accordance with the CE |
| | | ing in tonnes. | |

| Front pressure regulator. Punching tools set for diameters from 6 mm up to 40 mm with anti-deformation elastic hold-down. Punching tools set for diameters from 6 mm up to Punching tools set for diameters from 6 mm up to | ers from 6 mm up to n with anti-deformation hold-down. m long folding tools DMECAM clamping nm long folding tools ncludes 2 lateral | clamping system. Mechanized lower table with DIN-650 grooves. Mechanized upper table with 2 or 4 guides and DIN-650 grooves. | Additional headstocks. Mechanical regulation of the cylinder (only available of 80 and 100 tons). Operation by two hands push button with level IV security module. Geometry adapted to your needs. |
|--|---|---|--|
|--|---|---|--|

| F Series | | FDM-80 | FDM-100 | FDM-150 |) FDM-220 | FDM-300 | FLM-100 | FLM-150 | FLV-220 | FLV-300 |
|------------------------|------|--------|---------|---------|-----------|---------|---------|---------|---------|---------|
| Power | Tn | 80 | 100 | 150 | 220 | 300 | 100 | 150 | 220 | 300 |
| Motor power | Kw | 4 | 4 | 4 | 5,5 | 7,5 | 4 | 4 | 5,5 | 7,5 |
| Working speed | mm/s | 3,8 | 3,1 | 2 | 2,2 | 2 | 3,1 | 2 | 2,2 | 2 |
| Approaching speed | mm/s | 9,8 | 9,2 | 9,9 | 9 | 9,9 | 9,2 | 9,9 | 9 | 9,9 |
| Return speed | mm/s | 14,2 | 14,4 | 15,4 | 16,2 | 14,7 | 14,4 | 15,4 | 16,2 | 14,7 |
| Maximum pressure | bar | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 | 320 |
| Piston stroke | mm | 250 | 250 | 250 | 300 | 300 | 250 | 250 | 300 | 300 |
| Headstock displacement | mm | | | | | | 1050 | 1000 | 950 | 900 |
| Frontal light | mm | 1050 | 1050 | 1050 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| Lateral light | mm | 180 | 190 | 240 | 270 | 330 | 180 | 240 | 280 | 330 |
| Max. vertical light | mm | 500 | 500 | 500 | 600 | 600 | 500 | 500 | 600 | 600 |
| Table light | mm | 320 | 340 | 400 | 470 | 530 | 340 | 400 | 480 | 530 |
| Working height | mm | 800 | 800 | 800 | 900 | 900 | 800 | 800 | 900 | 900 |
| Total front | mm | 1530 | 1600 | 1670 | 2140 | 2180 | 2050 | 2120 | 2140 | 2180 |
| Total lateral | mm | 750 | 800 | 800 | 1000 | 1000 | 800 | 800 | 1000 | 1000 |
| Total height | mm | 2240 | 2280 | 2405 | 2835 | 2925 | 2375 | 2470 | 2835 | 2925 |
| Weight | Kg | 1120 | 1750 | 2050 | 3680 | 4350 | 2170 | 2680 | 3720 | 4390 |



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