

Hydraulic presses and sheet metal forming systems







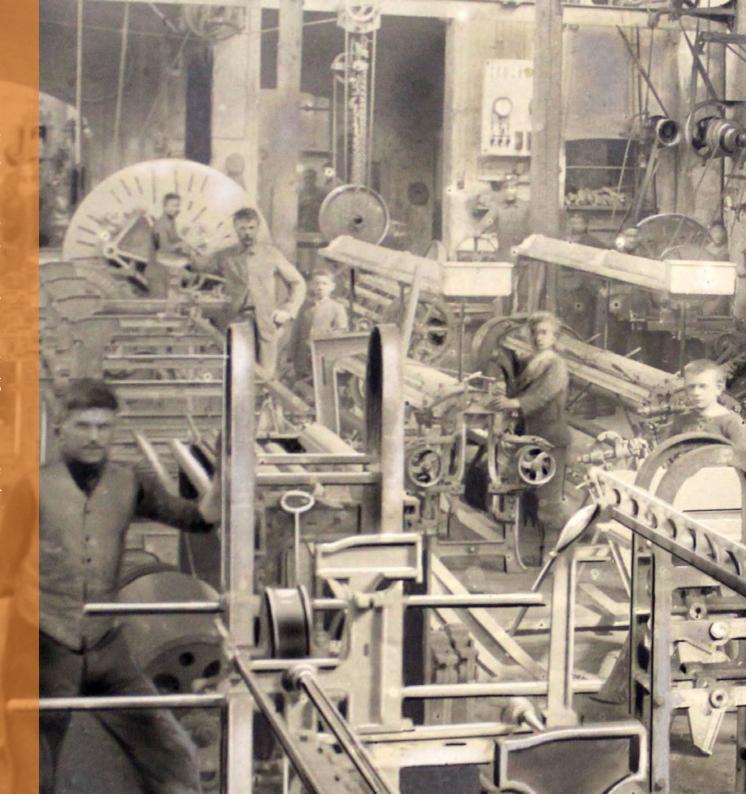
1890 Our Heritage

Founded in 1890 and fully owned by the Galdabini family, the company has its headquarters close to Milan.

The company has always been innovative the initial artisan activity of maintenance and repair of the local textile factory soon evolved into the construction of machines for the mechanical industry.

Nowadays, we design and manufacture automatic and manual straightening machines, hydraulic presses and universal testing machines.

With more than 125 years of experience in the machine tools industry, our machines are found in applications and industries such as automotive, oil and gas, steel mills, aerospace, mechanical and electromechanical industries.



Milestones

1915
Ist Hydraulic press



1960
Hydraulic press
Automatic
Production Line



1976

Energy save hydraulic press patent



1995

Ist Trimming Beading machine



from 2014

Energy save press (unique concept, saving up to 48%)



Looking to the future

Looking to the future

Innovation in METAL FORMING

How do we satisfy your needs and requirements?

We provide the best know-how, experience and service in metalforming applications; we supply state-of-the-art machines, innovative solutions, expert support and world-class service.

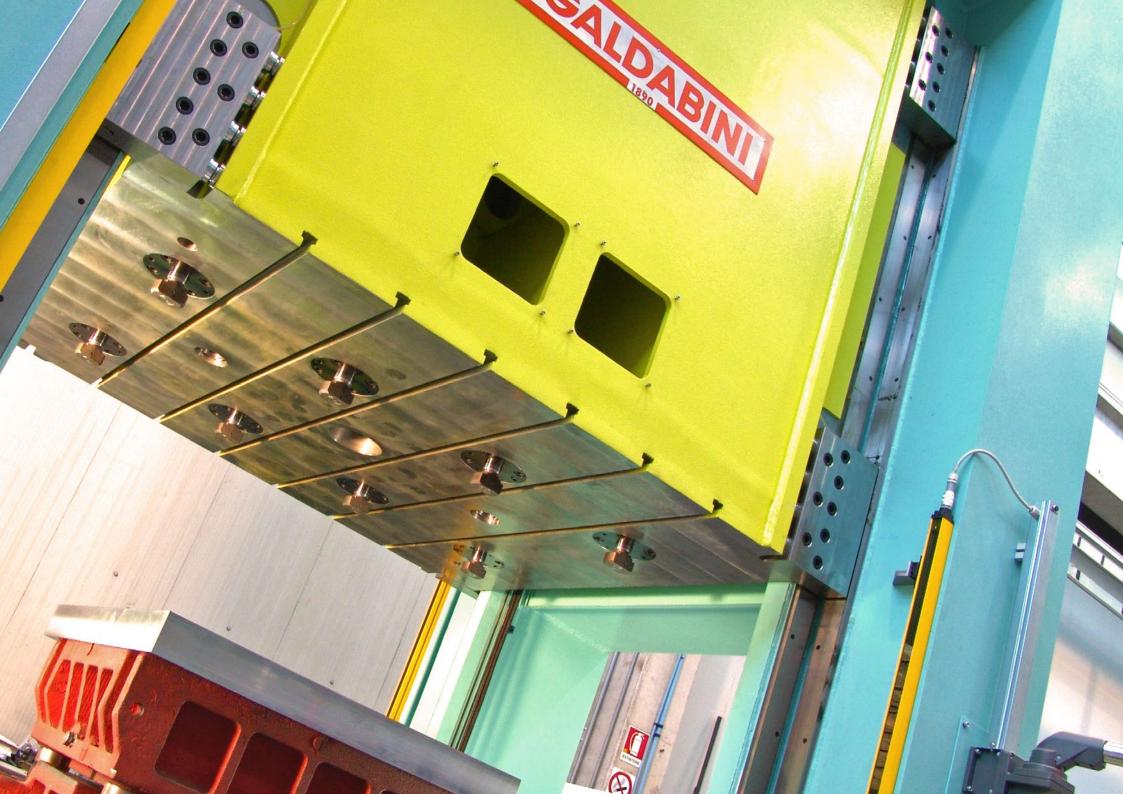
What do you expect from us?

We are a "worldwide family company", well aware of our responsibility towards customers, partners and employees. It has been over a century since we manufactured our first machine. Nowadays we go further than just manufacturing machines; we INNOVATE in METAL FORMING.

We continue to grow and invest, which makes us strong enough to tackle the challenges of the future of machine tools. Today, as in the past, our goal is to satisfy customers' needs and requirements, and make them feel that our service and support are always on hand.

We invest more than 7% OF OUR TURNOVER IN R&D and believe that innovative design and pioneering solutions make the difference in a market overflowing with low standard machinery and technologies.





Hydraulic presses - Technical features

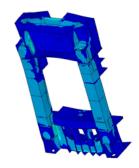
A perfect integration between hydraulics and mechanics

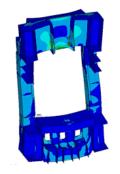
Hydraulics

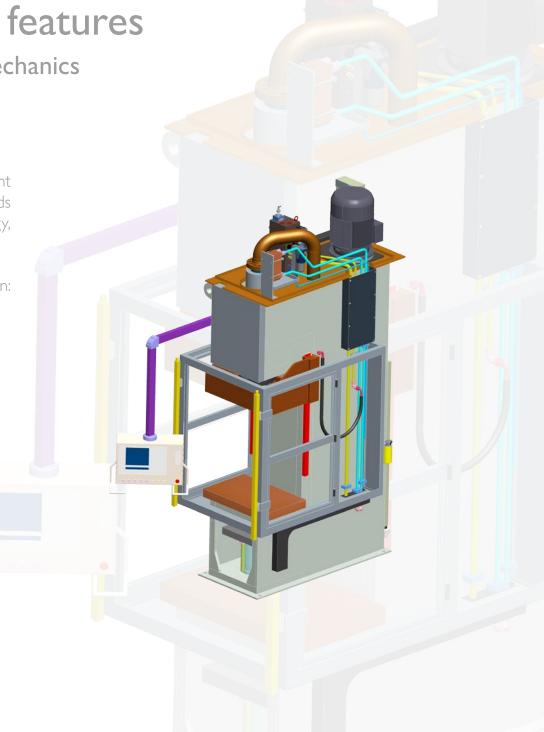
Long experience in the hydraulic circuit design has resulted in the development of the most sophisticated solutions for movement control. The working speeds achieved are the highest in the sector; thanks to the ENERGY SAVE technology, it is possible to obtain very high production rates with cost savings.

Particular attention to detail is paramount to plant engineering in order to obtain:

- Minimised and easily accessible piping
- Soft movement and complete absence of shocks and vibrations
- Decreasing curve for cushion
- Limited noise level
- Reduced installation dimensions



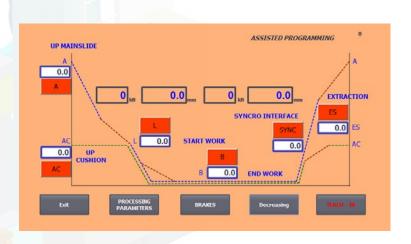






By means of the interaction between FEM calculation and the use of parametric CAD, in order to meet the highest expectations of performance and ergonomics, each machine is customised according to each client's specific requirements. The elastic yielding control system, with the use of strain gauges, ensures that the critical points of the structure are stressed within the limits of the project and high structure rigidity is maintained in both C and four column versions.

The accurate guiding system of the main slide, with 8 or 16 sliding blocks and clearance adjustment, ensures a high rigidity and repeatability of the movements which are essential factors to obtain working precision and drawing quality. As a result of the full accessibility to the working area, Galdabini hydraulic presses are particularly suitable for installation in line and can be used in multiple sectors and applications ensuring excellent performance and maximum reliability.



C - frame presses

Small parts

The hydraulic C-frame presses are able to achieve the highest levels of productivity, quality and accuracy in the processing of products of different shape and sizes. Up to 700 kN, these presses are the ideal solution for the drawing of small size parts s in aluminum, stainless steel and special alloys. The machine is constructed with a monolithic, completely welded and normalized "C" frame, with both the tank and electrical cabinet integrated in the structure.

Due to the extremely compact design and the mechanical and software set-up suitable for "in line" integration, these machines are widely used for multiple drawing step processes. All control functions regarding forces, strokes and ramps are available for main slide, blankholder and ejector.

Main features:

- High rigidity and reduced dimensions
- High precision guiding system with antifriction prismatic guides
- High ratio between performance and installed power











Small parts



Applications

Small parts

The C-frame press series is particularly suitable for both the drawing of small size components and high hourly production rates. They are used for the production of:

- Fire extinguisher bodies
- Filter cartridges
- Cookware
- Motorcycle exhaust systems
- Wheel supports for industrial carriages
- Lighting









4 column presses

Medium-heavy parts

The EV series is available with nominal force, starting from 1.200 kN up to 20.000 kN and offers a wide range of customization possibilities, thanks to the many basic versions and options available.

The machines are composed of a 4 column structure, monolithic, completely welded and normalized with a total accessibility on the 4 sides, which allows working table exploitation at 100%, thus guaranteeing a very high structural rigidity.

The main slide movement precision is assured by a guiding system composed of 8 or 16 sliding blocks with clearance adjustment. The suitable dimensioning of the main slide allows the execution of working(s) with misaligned loads and the use of multi-station dies.

The modular concept of the project is based on the application of different drawing and metal forming methods (traditional, from the bottom, elastoforming, coining, blanking, etc.) and different layout configurations, from the stand-alone machines to the complex lines with feeding loaders, automatic transfer systems, robots and complementary machines.

The implemented control software, the quick die change option and the ease of maintenance, complete the characteristics of this family of machines.















Medium-heavy parts



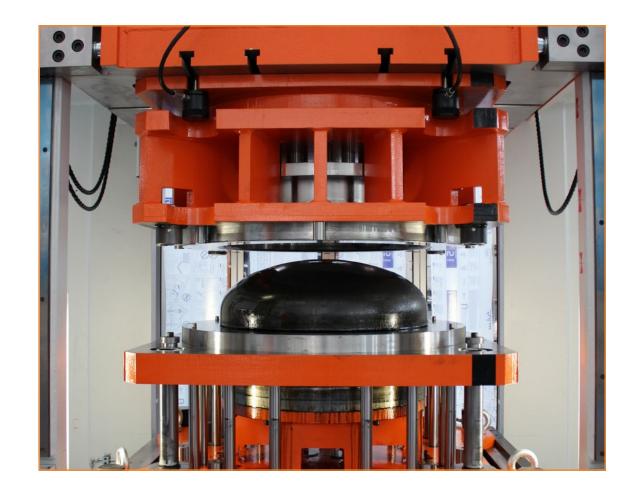
Applications

Medium-heavy parts

The 4 column presses, EV series, are able to perform a wide range of operations for different sectors and industries, from the production of stainless steel cookware to the manufacturing of aeronautical heavy duty components. Specific solutions have been developed for:

- Electrical appliances
- Automotive and medical components
- Pressure tanks
- Boilers and water heaters
- Air diffusers







Trimming beading machines

Complementary operations

As a completion of the stamping process, the family of trimming-beading machines PROJECT perform finishing operations on drawn parts, e.g. pots, trays, fire-extinguisher bodies and pressure containers.

Due to the simultaneous control of multiple working units, it is possible to carry out operations of wall trimming, beading, curling and flanging on round and polygonal parts. The operator panel controls all the working cycles and allows the storage of the different working programs.

Main features:

- High working speed and accuracy
- Flexibility of use
- Long life and no adjustments
- Quick retooling, with set-up for all the hydraulic and electrical connections on the table
- Easy integration in automatic lines with manipulators or external transfers
- Ease of use with help messages to guide operator's control or automatic cycle





Complementary operations













"Turn-key" Automatic Lines

Presses, automation and dies

Galdabini has always been a pioneer in the automation technology applied to industrial installations. A dedicated team in our R&D department is at the customer's disposal to find and study the best manufacturing solutions:

- Engineering of the production process
- Simulation of process time
- Integration in automation lines and complementary machines
- High productivity for the most varied industrial sectors

Complete lines with decoilers, monobar and double bar transfers, single and progressive dies, are all components that can be integrated in the design of our proposals.





Applications

High production volumes

The combination of presses, trimming-beading machines, dies and automation, enables the achievement of high performances in terms of production rates, cycle times and efficiency. Various types of sectors and industries can be accommodated, i.e.

- Electrical appliances
- Fire extinguishers
- Cookware (stainless steel, aluminium, multi-layer)
- Sinks
- Filters











FORMAX Software

Ease of use and technology

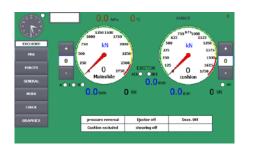
The simplicity of the software and the user friendly interface allow an easy programming logic for the operator. The Galdabini hydraulic press control system is based on PLC and operator panel with touch screen display.

FORMAX, entirely designed and developed by the internal team of programmers, allows the use of all the functions for a quick set up of the working cycle. It is possible to display and modify in real time all the press working parameters, with the help of graphics and pages dedicated to programming and maintenance.

Due to the modularity of the software, sections devoted to the automation or to particular operations can be implemented, by providing the user with complete control of the process.

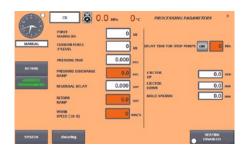
The HMI (Human Machine Interface) control system operates in a Windows environment, with dialogue messages for quick programming and an immediate check of the entered parameter accuracy.









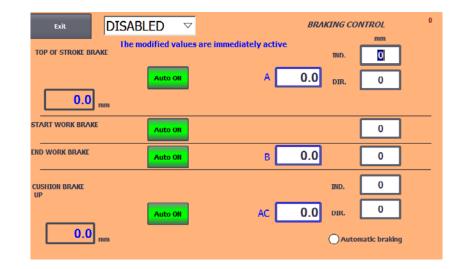


FORMAX software allows navigation through the program menus and the machine configuration in a very fast and intuitive way.

Resulting from the extensive use of graphics, it is possible to have constant control of the processing working batches, in terms of material quality and employed forces; it is also possible to export the acquired values via network and via USB port.

The following systems are also available:

- SOFTCUT blow absorbing program during blanking operation without the use of anti-vibration buffers
- BSL guick teach—in and optimisation of main slide and cushion brakes
- Stop and automatic switch-off of the motors in the Energy Save version
- RPC rod position display and control according to the loaded die



Energy Save Technology

Energy Save

Energy saving

The acquired expertise in hydraulic circuits and the vast capacity of innovation of the company, has allowed us today to completely redesign drives, resulting in a new generation of hydraulic presses with ENERGY SAVE technology.

The machines have been redesigned in all their functional and control aspects, from components to software, with the following advantages:

- Maximum efficiency due to the combined technology of servomotors, drives, variable displacement axial-piston pumps and proportional valves
- Optimal control of the hydraulic power throughout the working cycle of the machine by means of Galdabini special circuits
- Real-time control of strokes, speeds and pressures with centesimal accuracy
- FORMAX software with aided programming, teach-in of working parameters, self-diagnostic, tele-service and real time display of the main operating data



As a result of the combination of components and design, the new ENERGY SAVE technology allows a significant energy saving in all of the working phases of the machine, the reduction of noise and the increase in the operating speed, i.e. of the productivity.

- 50% POWER CONSUMPTION

The main goal of reducing the costs of production means a faster return to investments, with an increase in efficiency of the systems and cycles. Saving energy is saving money while protecting the environment. Higher quality at lower prices for a greater competitiveness.

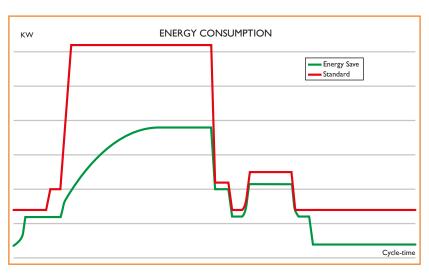
+ 30% SPEED

A higher machine speed involves an increase of productivity, low operating costs and extended flexibility, which are basic requirements for conditions in a modern company looking for efficiency. Speed, accuracy and repeatability have always been the main features of the Galdabini hydraulic presses.

- 5 dB NOISE EMISSION

The new generation of hydraulic presses ENERGY SAVE fully satisfies two essential requirements: low noise and the eco-compatibility of the machines, with start & stop mode (stop of servomotors in stand-by phase) and production speed continuous control.





Our Values

Quality, Training and Customer Care

Galdabini's philosophy is to work with dedication and commitment, putting the customer first.

QUALITY IN METAL FORMING

Galdabini hydraulic presses guarantee consistency in quality and reliability in production every day of the year.

TRAINING

We organize training sessions and workshops for employees, customers and international partners.





CUSTOMER CARE

Our qualified staff supports customers on-site during installation, training and maintenance on a world-wide scale, through specialized multi-lingual personnel, for a better understanding of customers' requirements and to find the most suitable solutions.

Galdabini staff can communicate in many languages including: English, French, German, Portuguese, Spanish and Chinese. We provide local service in more than 95 countries.

Our machines include After-Sale Service online and via remote connection. In addition, a wide range of spare parts is stocked in our warehouse, enabling us to provide rapid delivery to customers.

CERTIFICATION

All our products are CE marked and the company is certified ISO 9001.

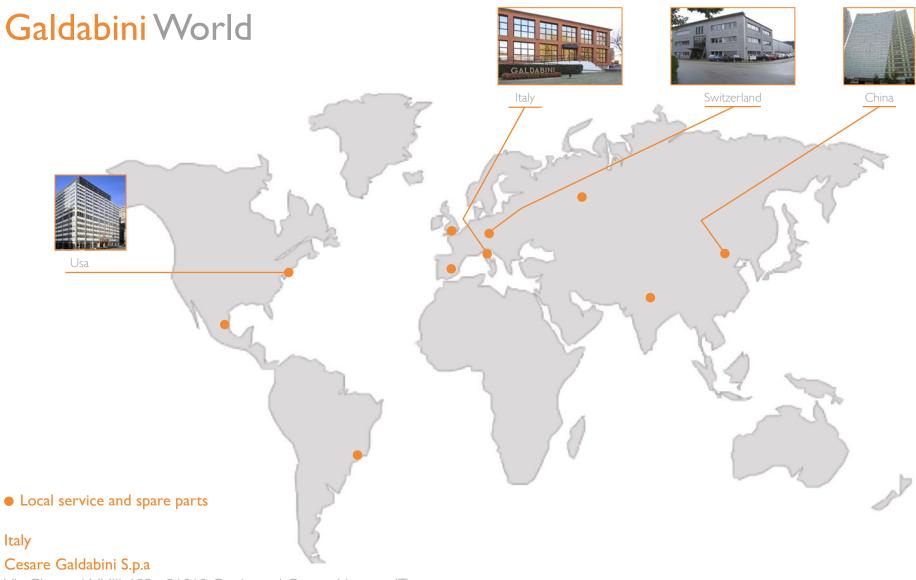


Certifications









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