

Company profile presentation

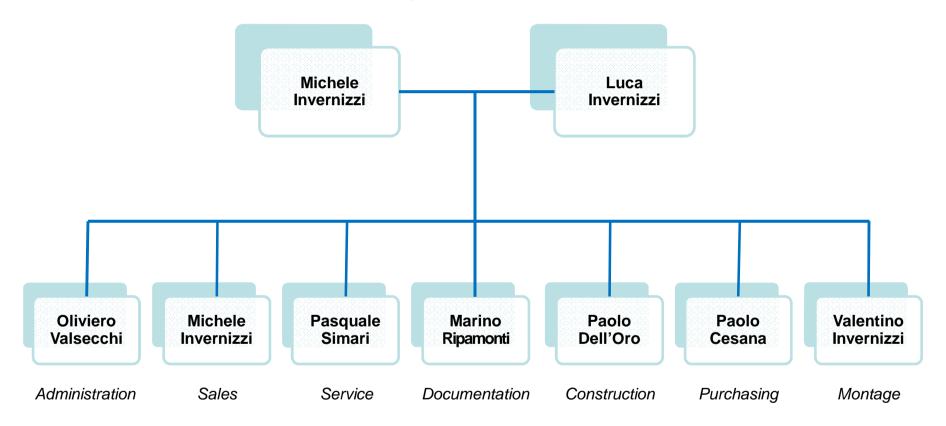


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Organization Chart







SALES DEPARTMENT



SALES AGENTS:		
UUS / NAFTA	\rightarrow	Bruderer USA
□Spain	\rightarrow	Euromaher
Turkey	\rightarrow	Boztaz
Germany	\rightarrow	PSV



History

INVERNIZZI PRESSE was established in **1958** thanks to the initiative of Mario Invernizzi. The company has always distinguished itself for the peculiar character and high quality of the presses manufactured as well as for the technical solutions and stylish designs, modern already at the time and forerunners of trends to come. **Machines tailor-made** to meet requirements of each individual customer.

In 1975 the development of **transfer technology** has definitely took over the production of standard H type presses.

In 1990 started entering into main historical supplier boards (welding, working, surface treatment etc), guarantying a local **strategic outsourcing** control without loosing the original company structure mainly aimed of flexibility and technology development.



1 Mario Invernizzi in the 50's



2 Historical plant in 1959



3 Advertisement on specialized magazines during the 60's

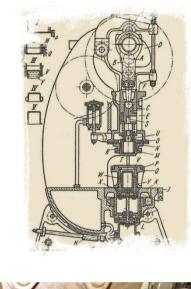


Our Culture

Transfer machines tailor-made to meet requirements of each individual customer.

This distinctive policy of INVERNIZZI PRESSE is currently applicable more than ever and expresses the company's firm desire to **team up** with the customer in solving drawing forming and blanking problems.

INVERNIZZI PRESSE offers itself as partner for **exchanging information** and technical experience: this is not only its strong point, but also the source of its **know-how**. All this is possible thanks to its sense of mission and flexible structure, but above all to the great merit of the company always aiming to work close **cooperation** with the customer into searching for the most advantageous solutions.





One of the first transfer presse produced by Invernizzi presse in the 60's

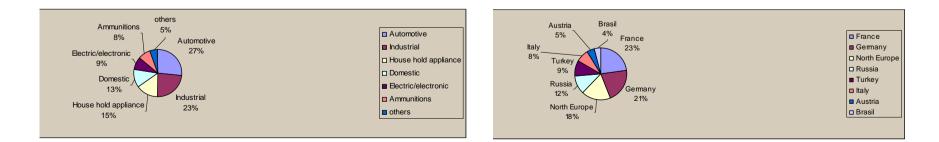


Our production

The current manufacturing programme covers a wide range of transfer presses.

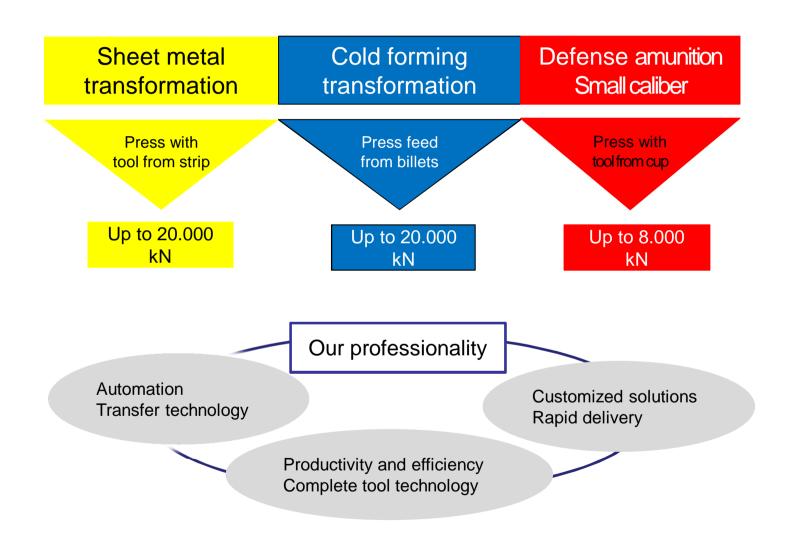
capacity from **250** to **20.000 kN**, featuring open-end down, open-end up drawing and cold forging multiple transfer. Eccentric drive, modified knuckle-joint drive **Link-Lever** mechanism, toggle mechanism are applied to solve different processes issues.

- aerosol domes production line
- transfer presses for the automotive market
- transfer presses for the household appliance industry
- transfer presses for the any kind appliance industry
- high speed transfer presses
- cold forging transfer presses,
- transfer presses and implantations hand-key
- electronic transfers systems 2D and 3D
- mechanical transfer with or without variable pitch





Our competence

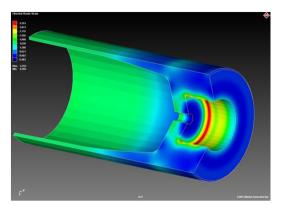


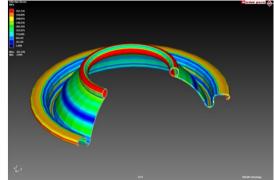


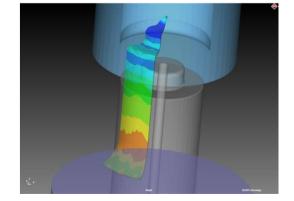
Deformation analysis

One of INVERNIZZI PRESSE core work is the deformation analysis of finished parts or material. Where ever the interest of the partner/customer is focused (near to research, or near to industrial process production), INVERNIZZI PRESSE has the structure and the know how to support the parties involved to supply the most information possible to allow the decision maker to design the main track, or to support the project to be focused in the smallest detail.

This is possible due to a continues attention and research of the best technologies that the market can offer in terms of hardware, software and collaboration with referent figures in research and universities.







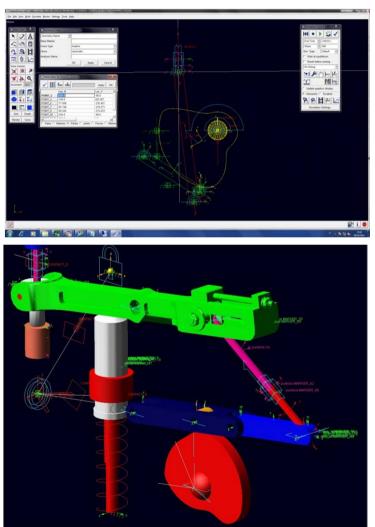




Complex dynamic system study

INVERNIZZI PRESSE invest several energies in the study of the many dynamic complex system equipping the transfer presses. The requirements of each customer needs a deep analysis in term of force, torque acceleration and inertia of each single part mass, composing a group, moving.

The 3D native software allows to obtain fast results and rapid updates during the project and the analysis results of the projects.





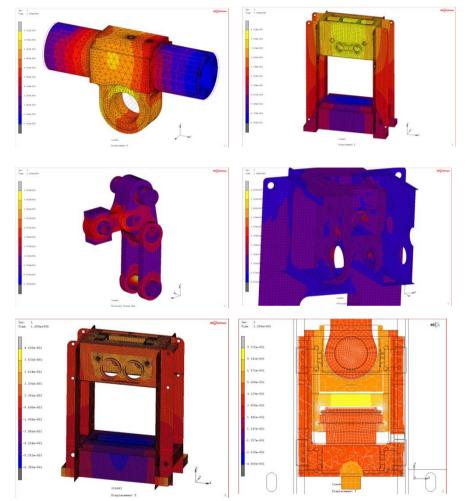




FEM studies

The designed machines are checked through the use of software based on the finite element method (MSC.Patran and MSC.Marc). Subsequent analyses are carried out on the results obtained for the purpose of defining the fatigue behaviour of the machines by following two different procedures which are described below: The fabricated metalwork and welded joints are submitted to fatigue testing by using the CNR-UNI 10011 standard. Normally S-N curves (stress - N° of cycles) are used with safety lying between the two and three standard deviations; this is equivalent to having a safety on the mechanical properties of the parts analyzed between 97.73% and 99.87%.

The components of the mechanism are tested according to F.E.M. regulation 1.001 3RD EDITION "Rules for design of hoisting appliances". Such regulation sets a design standard used above all in testing hoisting appliances for which safety plays a vitally important role.





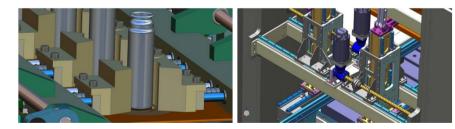
In collaboration with Politecnico di Milano University for stages and industrial results feedback studies and control.



3D projects

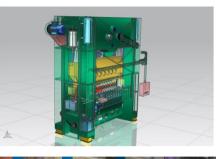
The 3D project was established in INVERNIZZI PRESSE more that 15 years ago. This allowed several advantages in the internal work flow allowing an easy and safe pass of information (math models) from project to development, to FEM analysis to static and dynamic mechanical checks.

A big advantage is even to allow customers to realize easily the shapes of a machine in discussion or the 3d layout of the ordered machine.



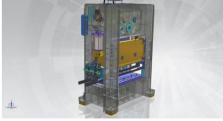
In collaboration with:

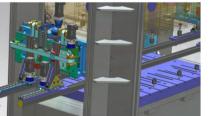
















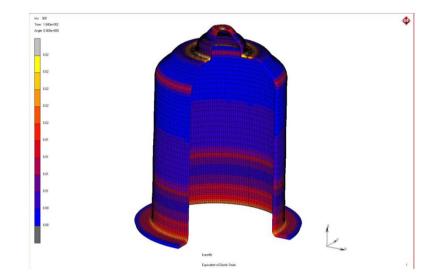
Open end down transfer

The transfer presses manufactured by INVERNIZZI PRESSE are subdivided into three basic models:

SERIES 2PB access to the work zone during maintenance. If high efficiency under drive transfer presses.

SERIES DMT2 the commands are centralized and complete with top drive straight sided transfer presses. Display on the control system diagnostics.

SERIES 4CT – column guided ram allows a complete lubrication oil free tool area from lubrication liquids. This is a specific requirements from certain markets.





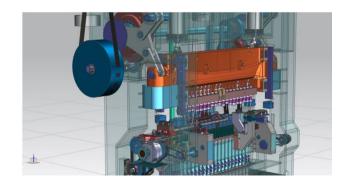


Open end up transfer NKN

Open end up multiple ram cam press. The main characteristic of this series is the possibility to be equipped with Platarg tool sets, with a higher number of stations. NKN series transfer allows a higher drawing ratio and the possibility of auxiliary operation such as trimming, flanging, piercing, rolling, lettering etc. All the maintenance areas are easily reachable from wide opening on the front and the back of the press.

Complete automatic production exchange. All the adjustment of the Hold-Down, the pressure arm and the punch height in the press control are stored and settable automatically from HMI from tool recipe menu.







Open end up transfer PMK

Open end up LINK LEVER transfer press. The LINK LEVER is an four-arms driving gear that allows to reduce the punches speed during drawing operations solving several problems such as:

- Increases the quality of the finished parts
- Increases tool life
- Reduce the material stress
- Increases the productivity.

The single ram is guided with pre charged roller guides that guarantees an extreme high accuracy and a play free movement. The tonnage range is from 600 kN to 2500 kN

Complete automatic production exchange. All the adjustment of the Hold-Down, the pressure arm and the punch height in the press control are stored and settable automatically from HMI from tool recipe menu.





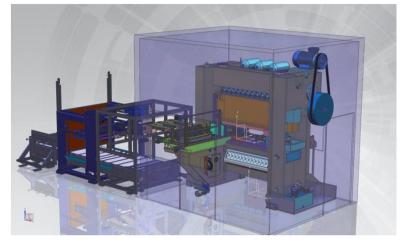


Key turned equipment

Transfer technology finds big advantages is several aspects of production like material scrap reduction, production efficiency, tool efficiency, maintenance etc.

Early project decision such as feeding position, transfer type, press main concept etc., could drastically change the production output referring to a same investment value.

INVERNIZZI PRESSE is able to support the customer starting from the very first considerations and decisions to supply complete production lines.



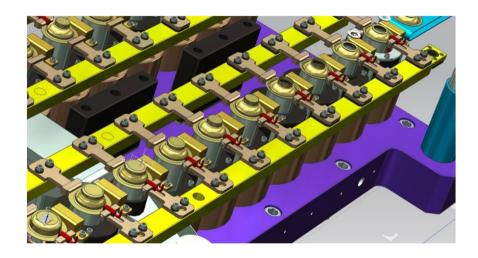


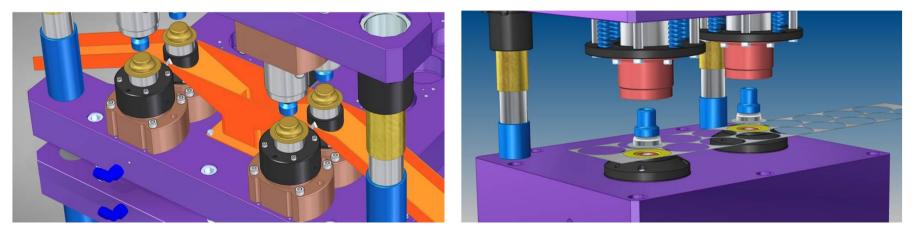


Transfer for aerosol domes

Aerosol domes marker require high efficiency and high production volume. The production rate is related to several factors such as tool and machine concept and feeding methods.

INVERNIZZI PRESSE can supply key turned equipment with a production rate up to 400 ppm feed from disk, cup, strip and scroll with or without primary.







Massive cold forming multistage presses KFT2

Multistage press with modified Knuckle-joint drive with nominal power from 8.000 kN, 12.000 kN, 16.000 kN, 20.000 kN and different number of working stations 4 - 5 - 6 stages.

Our series **KFT2** is characterized by a highefficient and low-maintenance, than with the new and user-friendly control system makes the connection with the auxiliary equipment easier

Advantages for cold forming are: Low costs of tool material Low implications of forming speed Low forming speed Non costs for material heating (annealing) No material tolerance problems due to material restrict Improve finish parts surface quality Improve mechanical finished parts characteristics High production rate Longer tool life Wide range of applications Scrap reduction compared with cutting machines No secondary operation on parts required

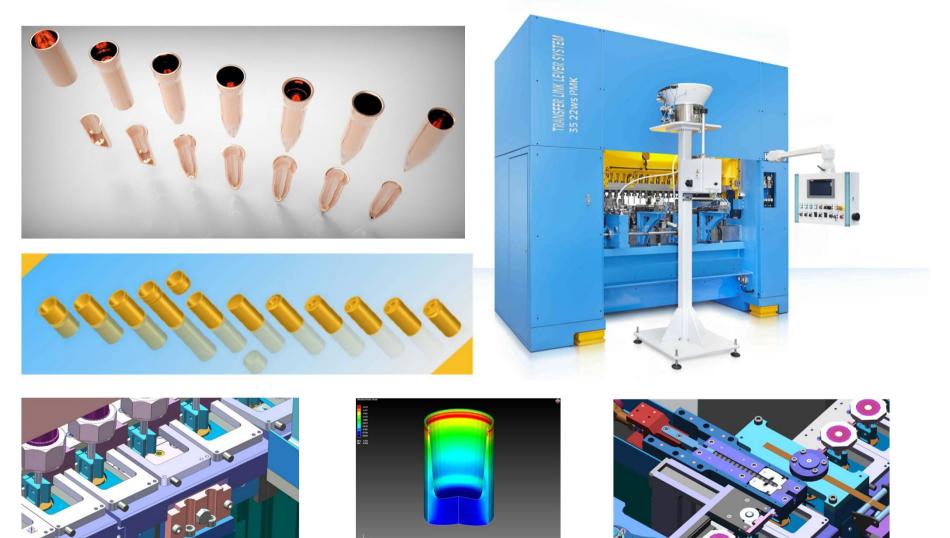




	Cold forming transformation		Automation
	Screwsproductionpresses from M30 to M64		Transfer technology Productivity Tool technology
	Hexagonal head screws with reduced tapering	Multi-stage forming process 5000–10000–12000 kN	Interest is worth
Windmil energy Structural steel work	Special screws with shaft up to 400 mm	Press stroke 850 mm	
Tool manufacture		400 mm	ENQUIRY



Transfer for ammunition







DMV3 T5



T100 PMK 2275 VIDEO (click HERE)



T90 DMT3 – Aerosol Dome VIDEO (click <u>HERE</u>)



nizzi press

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NKN 617

VIDEO (click HERE)

Company Presentation Video (click <u>HERE</u>)

> Aerosol Dome Production Line GNLMT-2 45 10 + 1WS VIDEO (click HERE)

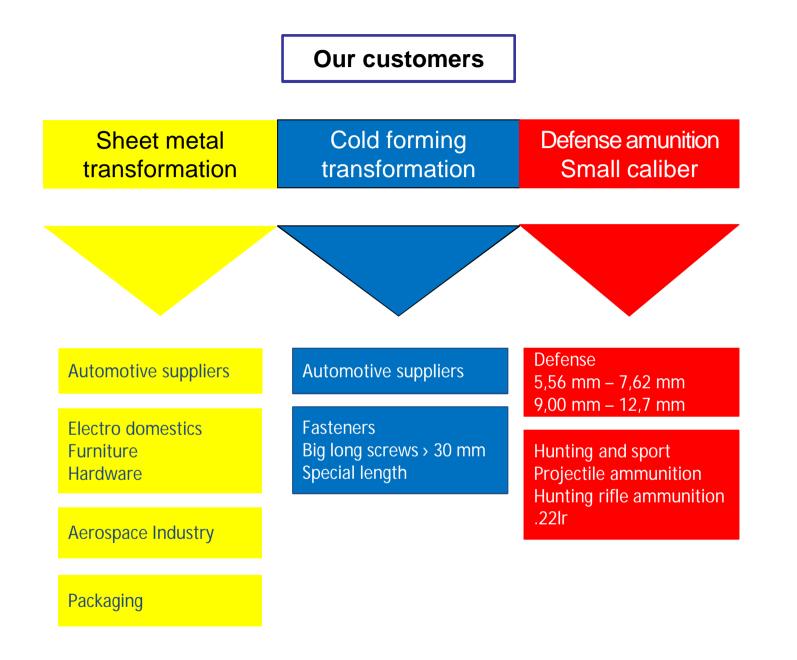


VIDEO (click HERE)



Cold Forging GNMLT-2 15000 KN KFM-2 VIDEO (click HERE)







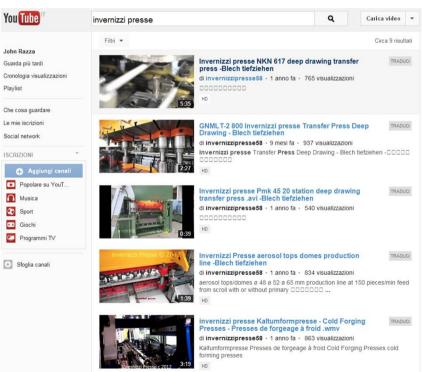
Some references:





In the web







Fairs

INVERNIZZI PREESSE focuses on main events to allow our brand and our quality to reach more valuable and skilled potential contacts possible. One vehicle for this target are theme exhibitions all over the world. Where is possible our philosophy is to show working presses on the booth, to allow potential customer to feel and touch the high quality reached in term of technology, solutions and design.







Future

INVERNIZZI PRESSE is always ready to support new customers and new realities using all the experience and all the Know-how collected until now. All this can be supported by valuable partnerships with technical and skilled collaborators that can guarantee a high quality information exchange and solutions for customers.

In the future INVERNIZZI PRESSE foresees a much deeper customer support by supplying solutions to all the problem rising during industrial processes in term of deformations study and analysis, high skill support in term of material and complete FEM study and development.

