SINCE **1973**

PRODUCTS

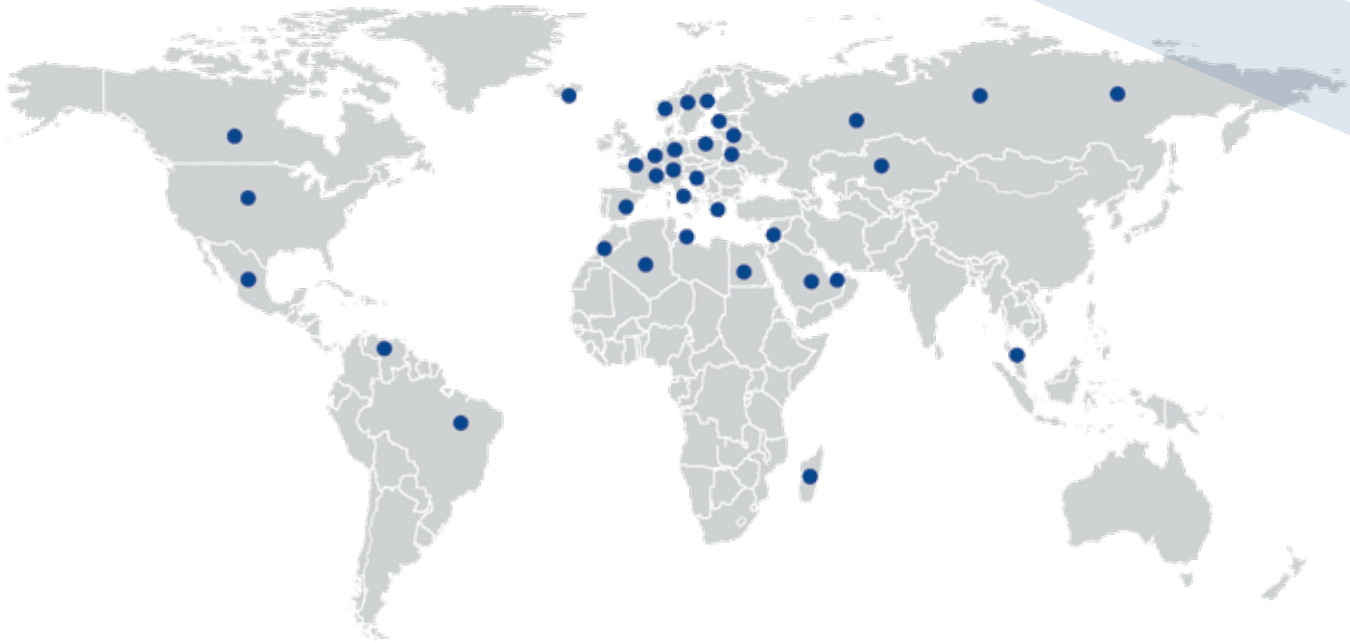
CATALOGUE

Vimercati
PRESS BRAKES AND GUILLOTINE SHEARS

ADDICTED TO **ACCURACY**

ENTIRELY MADE IN ITALY

SOLD WORLDWIDE



Vimercati

PRESS BRAKES AND GUILLOTINE SHEARS

ENTER

VIMERCATI

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CONTINUITY

A strong company since 1973

VALUE

In-house manufacturing process

RELIABILITY

Constant machine performances over time

UNIQUENESS

Machines designed and made around you

ASSISTANCE

Quick service and spare parts always in stock

EVOLUTION

Constant R&D

VIMERCATI
SINCE 1973

ALWAYS AT OUR CUSTOMERS' SIDE

Vimercati was established in 1973: ever since it has been guaranteeing ongoing and prompt supply of machinery and technical assistance to its customers.
It is specialized in the production of press brakes, guillotine shears and sheet metal processing systems.

EXPERIENCE AND CONTINUITY

With its decade-long experience on Italian and international markets, Vimercati offers reliable and top quality products entirely made in its plants.

CUSTOMIZATION AND ASSISTANCE

Its highly specialized staff takes care of the whole production process, from the purchase of raw materials to all the manufacturing phases. This is why Vimercati is able to offer its customers the highest level of product customization and an efficient and qualified after-sales service.

IN STEP WITH THE TIMES

Our constant work on R&D enables us to always be up to date on market changes and new technologies, to keep on improving our products and commercial offer.

OUR

PRODUCTION

DESIGN

The design stage is the key to allow for efficient production and customization in line with the customer's expectations. This is why Vimercati has an in-house technical office entirely dedicated to the design of machinery.

The company's staff takes care of all aspects concerning design and calculation. It is also at customer disposal to develop tailor-made feasibility studies and required machine tooling studies, to meet all the production needs of each customer as best as it can.

OUR PRODUCTIVE DEPARTMENTS

- Structural work
  - Oxy cutting
  - Welding
  - Sandblasting
- Machining
  - Boring
  - Turning
  - Milling
  - Grinding
  - Lapping
- Painting booths
- Electrical and electronic wiring
- Assembly and finish
- Quality check and testing
- R&D

STRUCTURAL WORK
DEPARTMENT

The productive process of all machinery starts in the structural work department.
All matching parts of machine frame components are oxy-cut and then milled before being assembled, to guarantee a strong structure with no stress.

To achieve a homogeneous response to stress, all the uprights are made with the same sheet of metal and cut in the same rolling direction.

Vimercati devotes special attention to the quality of S355J2+N materials, which are all rigorously certified.

SHOULDER CUTTING

PROCESSED SURFACES

PROCESSED SURFACES

MACHINING

All the mechanical components are made in the in-house machine tools department that brings together milling centres, lathes, boring machines, grinding machines, lapping machines and other new-generation equipment used to manufacture top quality pieces with extreme accuracy and precision.

The manufacturing choices have led us to obtain, already during the preparation phase, a machine body with great geometric precision, in order to minimize the removal of material during the following boring phases, thereby avoiding potential overheating and deformation of the structure.

GRINDING

MACHINING CENTRE

LATHE

DEPARTMENT **ASSEMBLY**

Inside the company there are two plants used to paint the machine's structures. There are also two departments used for assembly and testing, and this is where assembly of the machines with all their components takes place: electrical, electronic, hydraulic, measuring and moving parts. Vimercati carefully selects its suppliers among the best leading companies worldwide in the supply of commercial components, by purchasing directly from the parent company. To keep the entire production process under control and guarantee the highest quality, the wiring of the electrical panels is also carried out in-house.

CYLINDERS BUILTIN-HOUSE

In the same plants we also make cylinders obtained from a single block of C45 steel to avoid welds that could affect function. Indeed, as the oil temperature increases during the operation of the machines, it transmits heat to the cylinders. If they were made of several parts welded together, they could undergo ovalizations and affect the operation and performances of the machine.

SHEARS ASSEMBLY

PRESSES ASSEMBLY

PRESSES ASSEMBLY

CYLINDER CONSTRUCTION

AFTER-SALES **SERVICES**

ASSISTANCE

- Spare parts always in stock
- Free support over the phone and online
- After-sales assistance at the customer's premises

TRAINING

- Free basic course at the customer's premises on how to use the machine
- Refresher and training courses at Vimercati's head office

BENDING

PRESSES

HYDRAULIC

PRESS BRAKES

RELIABILITY AND ACCURACY

Vimercati offers a wide range of press brakes, standing from the smallest 30 tonnes x 1250 mm up to the 600 tonnes x 8050 mm, without stroke and opening limits along with a varied series of optional accessories.

The reliability and accuracy developed over many years of experience in terms of design and production, are combined with the new opportunities offered by modern electronics and computing to create strong, high-tech, reliable, accurate and extremely flexible machines.

Along with the vast offer already available, we can design customized and specific solutions based on the production needs of individual customers.

4.0 INDUSTRY

HYDRAULIC
PRESS BRAKES

RANGE

from **30** to **600 tonnes**

from **1250** to **8050 mm** in length

up to **16000 mm** in length for Tandem versions

CUSTOMIZATIONS

- From 4 to 16 axes
- Gap
- Stroke
- Opening
- Intermediate height
- Tool clampings for any kind of tool
- Software
- Colour
- Robotized cell

PRESS BRAKES / VIMERCATI

4.0 INDUSTRY

HYBRID

PRESS BRAKES

INNOVATION, ENERGY SAVINGS

Hybrid press brakes differ from traditional machines as they are fitted with high-performance EOS100LA6B35 motors.

These systems are operated by an inverter that, combined with a high-performance pump, controls the main motor and activates it only when the machine starts running: this means zero consumption during standby.

However, energy savings are also guaranteed during operation thanks to the Pressure Control system that only provides the necessary force for the bending step with a reduction in cycle times.

With the CNC, consumption and operating pressure values can be viewed in real time.

4.0 INDUSTRY

HYBRID

PRESS BRAKES

e.TERNA MODEL

BENEFITS COMPARED TO A TRADITIONAL PRESS BRAKE

Energy consumption:	**-40%**
Automatic standby:	**Start&stop**
During programming and tooling:	**Zero consumption**
Oil duration:	**4 times longer**
Productivity for reduced cycle times:	**+20%**

4.0 INDUSTRY

PRESS BRAKES / VIMERCATI

ERGONOMICS AND SPEED

The smallest press brakes of the range stand out for their speed and precision, and are suitable for the production of small pieces.

These machines are fitted with EOS100LA6B35 inverter motors and a specially designed hydraulic system.

To improve operator comfort and increase productivity, these press brakes can be equipped with optional ergonomic equipment.

BENDING

30 t x 1250 mm

PRESS BRAKES
30 t x 1250 mm

Descent	**250 mm/sec**
Ascent:	**250 mm/sec**
Working speed	**da 0 a 20 mm/sec**

FIGURE 1
4-AXIS SINGLE-BLOCK BACK GAUGE
X-R-Z1-Z2 4-axis single-block back gauge..

FIGURE 2 - ERGONOMIC ARMRESTS
Ergonomic armrests for greater operator comfort.
Optional control.

FIGURE 3 - IRIS LAZER SAFE PHOTOCELLS
Front Lazer Safe mod. IRIS PLUS photocells, 1mm slowdown from contact with sheet metal with built-in angle reader.

PRESS BRAKES / VIMERCATI

FIGURE 1

FIGURE 2

FIGURE 3

4.0 INDUSTRY

TANDEM

PRESS BRAKES

GUARANTEED LINEARITY

Tandem press brakes can have various setups:

- with two or more press brakes with the same length and the same nominal bending forces
- with two or more press brakes with different lengths and different bending forces

In both cases the presses can work both together in tandem mode, and separately in an independent way, while being protected by special photocell safety systems.

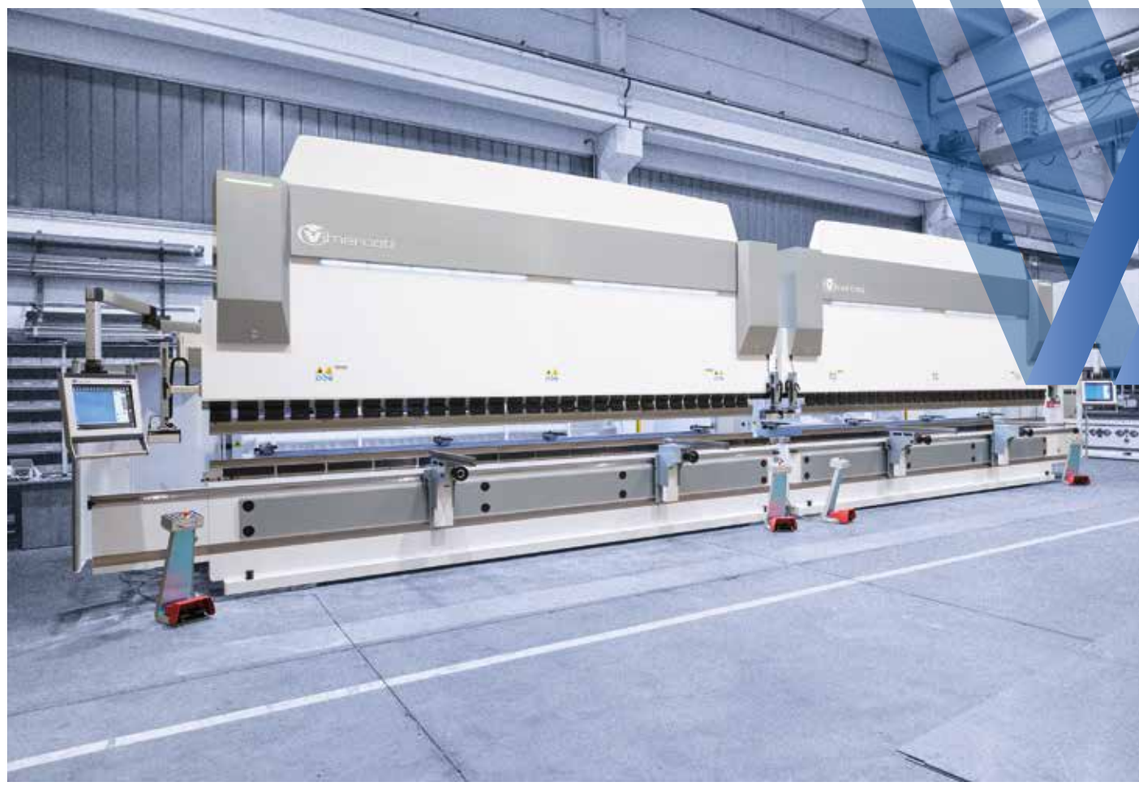
4.0 INDUSTRY

TANDEM
PRESS BRAKES

You can choose from a wide range of optional features for a customized setup, specifically designed according to your production needs.
Our tandem machines are standardly equipped with latest generation photocells that allow you to work in maximum safety and with greater ergonomics, both in stand-alone mode (removing the central photocells) and in tandem mode, without using the photocell barriers, obtaining in this way greater productivity and efficiency.

OPTIONAL FEATURES

- Extra gap
- Extra stroke
- Extra opening
- Intermediate height
- Tool clampings for any kind of tool
- Sheet metal accompanying devices
- Motorized front supports
- Angle reader



4.0 INDUSTRY

ROBOTIZED

SYSTEMS

EFFICIENCY AND PRODUCTIVITY

Robotized systems are solutions customized around individual production needs, allowing for bending operations without the presence of operators by means of a press brake controlled by anthropomorphic robots equipped with:

- Layering and thickness control
- System sensors
- Smart positioning
- Series of additional features, including material loading and unloading
- Automatic tool changeover

4.0 INDUSTRY

ROBOTIZED

SYSTEMS

This type of system can have either the robot fixed in front of the bending, installed on a floor-mounted track or on a portal, so that the press can be used in manual mode as well.

OPTIONAL FEATURES

- Sheet metal pre-loader to reduce the cycle time of a piece
- Automatic loading and unloading solutions to ensure pieces can be fed and evacuated without stopping the system
- Vision system with one or more cameras enabling the robot to pick up the pieces from a container even if they are randomly positioned
- Option of interfacing the system with other machines to carry out pre- or post-bending processes.

4.0 INDUSTRY

TECHNICAL AND OPTIONAL

FEATURES

STRENGTH AND CERTIFIED MATERIALS

Our range of press brakes stands out for the considerable strength of its structure and the top quality certified materials.

All the electrical, electronic, hydraulic, measurement and movement components are purchased directly from leading companies at an international level.

Moreover, thanks to a wide range of available optional features Vimercati offers the chance to customize machines according to the customer's production needs

STRUCTURAL FEATURES

FIGURE 1

Double guides – with proper dimension according to the tonnage of the press, fixed on each upright with guide sliding blocks made with special ground material – guarantee precision, smooth movements and perfect sealing of the beater, which can be subjected to front and transverse stress during the down, work and up phases.

With the inclined beam, perfect transverse seal is ensured by an adjustable spherical system placed in the inner and outer guides of the left upright on the machine.
The double guide, outside and inside, which allowing for the creation of this system, has been conceived and designed by Vimercati.

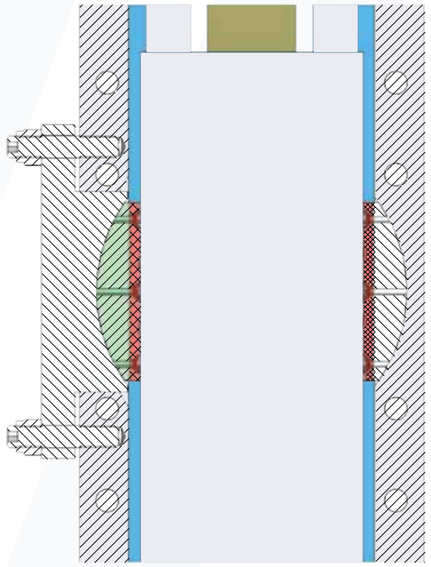


FIGURE 2

Half-beam device with adjustment option for constant linearity and stiffness of the beam.

FIGURE 3

Tubular device with adjustment option for constant linearity and stiffness of the back gauge.

FIGURE 4

Lower table with half-beam structure to increase resistance to the flexions and stiffness both longitudinally and vertically.

FIGURE 1

FIGURES 2-3

FIGURE 4

HCL HYDRAULIC CROWNING

FOR A CONSTANT BENDING ANGLE ACROSS THE ENTIRE LENGTH OF THE MACHINE

FIGURES 5-6

The ACTIVE - HCL crowning system, equipped with one or more sensors, detects in real time the flexion, and instantaneously adjusts the deformations of the bench, allowing a perfect bending linearity. The cylinders of this crowning are located in spherical housings that grant an excellent grip of the mechanical parts, avoiding at the same time any kind of wear and jamming during the working phase.

Special mechanical solutions isolate the supports of the optical lines to check the linearity of the table and allow for perfect functionality of the Active HCL crowning system.

The whole system is fully automatic and controlled from the CNC through dedicated software.

TECHNICAL FEATURES:

- Independent hydraulic system
- Machine parameters software and dedicated correction parameters for HCL axes
- Fast positioning speed
- High accuracy
- Excellent bending linearity
- Option of having the system managed with 1 or 3 axes and consequent independent hydraulic circuits. From 4 meters in length, there are 3 axes as standard for greater accuracy on not-centered bends (tooling with multiple stations)
- Negative and positive correction of the crowning axis
- Option to individually correct axes HCL 1 - HCL 2 - HCL 3.
- Position sensors: Heidenhain optical lines
- Automatic beam bending control. The CNC controls the HCL hydraulic system in real time by maintaining the same values for the table sensors and the beam. This way, the table and beam are always parallel to each other, ensuring bending precision and linearity.

FIGURE 5

FIGURE 6

SAFETY DEVICES

FIGURE 7

The safety protection at the back of the machine is provided by light curtains with hand resolution: when a person or object passes through these curtains, the press instantly stops.
To reset the machine it is essential to leave the area at the back of the press.

FIGURE 7

FIGURES 8-9

LAZER SAFE IRIS safety devices that manage, through a dedicated PLC and under top safe conditions, the speed change (fast approach – bending speed) at contact with the sheet metal.
The LAZER SAFE safety devices are also available in a motorized version with automatic positioning managed by CNC control.
LAZER SAFE IRIS PLUS devices can be installed on press brakes up to maximum two metres in length. In addition to the above features, they are able to measure, check and correct the bending angle in order to obtain, right from the first piece, minimum precision tolerances regardless of any changes in thickness, strength and rolling direction. The system can be used in real-time mode with elastic return measurement for each single bend or in database mode, with elastic return value detected and saved in a customizable database.

LAZER SAFE IRIS PLUS TECHNICAL DATA:

- Maximum slot: 35 mm
- Minimum slot: 6 mm
- Maximum angle: 160 degrees
- Minimum angle: 45 degrees
- Minimum nominal edge: 20 mm

FIGURE 8

FIGURE 9

TOOL LOCKING

FIGURE 10

Manual clamping

FIGURE 11

Quick clamping with lever.

FIGURES 12-13

Pneumatic clamping top and bottom tools.

MAIN TECHNICAL FEATURES OF THE QUICK CLAMPING WITH LEVER AND PNEUMATIC CLAMPING:

- Front tool insertion
- Self-alignment
- Upside down tool assembly with manual frontal clamping
- Option of removing and moving the intermediate elements

FIGURES 14-15
WILA TOP AND BOTTOM TOOL CLAMPING AVAILABLE IN THE MANUAL OR HYDRAULIC VERSIONS

- 50/60 bar operating power
- Front tool insertion
- Self-alignment
- Automatic positioning on stop
- Triple tool support
- Millimetre ruler
- Optional features: LED bar for tool positioning and assisted sliding system

FIGURES 16-17

Special adapters upon customer request.

PRESS BRAKES / VIMERCATI

FIGURES 10-11

FIGURES 12-13

FIGURES 14-15

FIGURES 16-17

OPTIONAL FEATURES

FIGURE 18 - LED BAR

LED bar built into the beam, programmable to view and position the various bending stations fitted on the press brake.

FIGURES 19-20 - HEMMING TOOL

Mobile device built into the pneumatically-operated die-holder table managed by CNC, for very closed and flattened bends. In the closed standby position, it looks like a normal die-holder table. It is made with hardened and ground C45 steel. The maximum thickness that can be flattened is 2 mm.

FIGURE 18

FIGURES 19-20

FIGURE 21 - BENDING ANGLE CONTROL

System to measure, check and correct the bending angle, the Laser Check Data M is set to obtain, right from the first piece, minimum precision tolerances regardless of any changes in thickness, strength and rolling direction of the material.
The measuring sensors are located in metal casings for protection against any possible damage. They are motorized, have a side parking area and entirely managed from the CNC. As soon as the bending sequence starts, the measurement sensors automatically align themselves with the piece to be bend in order to measure the angle, which can also be carried out in several points.

TECHNICAL DATA:

- Maximum slot: 120 mm (optional 200 mm)
- Minimum slot: 8 mm
- Maximum angle: 160 degrees
- Minimum angle: 45 degrees
- Maximum punch height: 120 mm (optional 200 mm)
- Minimum nominal edge: 20 mm

FIGURE 21

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OPTIONAL FEATURES

FIGURE 22 - EXTRA HIGH INTERMEDIATE ELEMENTS

Extra high intermediate elements upon request from the customer; suitable to create closed boxes profiles with very high edges

FIGURE 23 - WIRELESS PEDALBOARD

Wireless Pedalboard: extremely user-friendly for operators, as there are no connecting cables.

FIGURE 24 - INVERTER WITH PLC

Inverter with built-in PLC which, in addition to the variation of the motor revs, is used to set the speed, acceleration and braking times, torque increase and built-in electronic overload protection.

FIGURE 22

FIGURE 23

FIGURE 24

FRONT BENDING ARMS AND SUPPORTS

FIGURE 25 - FRONT BENDING ARMS

Front electromechanical bending arms sliding on the lower table, with side parking area, available in 2 models with a capacity of 150 or 250 kg.

The sliding across the whole frontal part of the press takes place on strong linear guides with a double recirculating ball-bearings carriage, and contrast bearings at the bottom of the frame.

The vertical movement, i.e. positioning according to the height of the die (axes A6, A7), can be either manual and motorized, with CNC control.

FIGURE 26 - MODEL MMV 2 UP TO 250 TONNES

Front support with motorized vertical adjustment managed from the CNC, and sliding on linear guides and double side parking for machines up to 250 tonnes.

FIGURE 27 - MODEL MV1 UP TO 200 TONNES

Front support with manual vertical adjustment, sliding on linear guides and double side parking for machines up to 200 tonnes.

FIGURE 28 - MODEL MV2 UP TO 250 TONNES

Front support with vertical adjustment through handwheel and decimal position indicator. Sliding on linear guides with double side parking. It can be supplied in the pneumatic and motorized version with CNC control, essential for quick positioning from the die level to the flattening level when the press is fitted with the hemming tool for machines up to 250 tonnes.

FIGURA 29 - MODEL MV3 FROM 300 TO 600 TONNES

Front support with vertical adjustment through handwheel and decimal position indicator. Sliding on linear guides and double parking on side. It can be supplied in the pneumatic version and motorized managed by the CNC, essential when the press is equipped with the bending/flattening tool for machines from 300 tons to 600 tons.

FIGURE 25

FIGURE 26

FIGURES 27-28

FIGURE 29

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BACK GAUGES

FIGURE 30 - ANTHROPOMORPHIC BACK GAUGE

X1-X2-Z1-Z2-R1-R2 6-axis anthropomorphic or Cartesian back gauge with double finger for each back gauge.

FIGURE 31 - 6-AXIS BACK GAUGE

X-R-Z1-Z2-X5-X6 6-axis back gauge with extra finger with manual drive or optional automatic drive with positioning controlled from the CNC.

FIGURE 30

FIGURE 32 - 2-AXIS BACK GAUGE

X-R 2-axis back gauge with 4 fingers (as standard), 6 (as an optional feature).
Can be set up to 8 axes.

FIGURE 33 - PNEUMATIC REAR SUPPORT

Retractable rear support with pneumatic control, managed from the CNC to support thin pieces with very deep edges.

FIGURE 31

FIGURES 32-33

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SPECIAL APPLICATIONS

FIGURE 34

Large swan-neck intermediate elements in sectors, joined with ground keys.

FIGURE 35

Automatic system for punch and die changeover and automatic positioning of photocells.

FIGURE 34

FIGURE 35

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FIGURE 36

Special hemming tool designed to create door jambs.

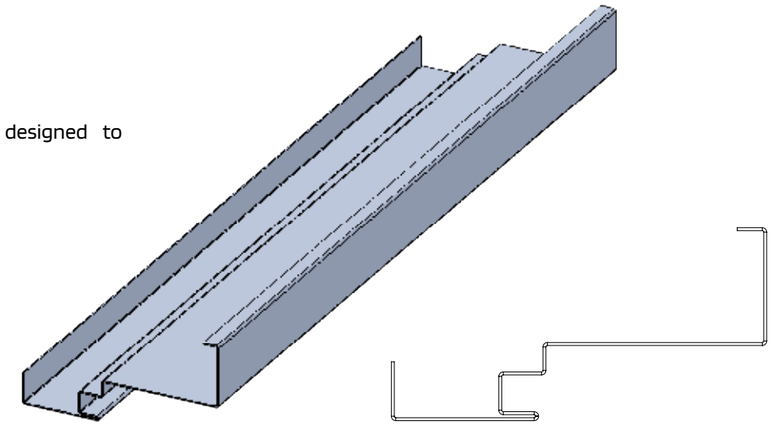

FIGURE 36

SPECIAL APPLICATIONS

FIGURE 37

Automatic system for the changeover of punches and dual-function hemming tool: to flatten and create Z-bend.

FIGURE 38

Front support with pneumatic vertical adjustment, managed from the CNC and sliding on linear guides and double side parking for machines up to 250 tonnes.

FIGURE 37

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FIGURE 39

- Front and rear pneumatic clamping
- Front insertion of the tool
- Self-alignment
- Option of removing and moving the intermediate elements

FIGURE 38

FIGURE 39

NUMERICAL CONTROLS

* a different CNC can be installed upon request from the customer

S 660 W

This managing system guarantees maximum performance for machines with 4 or more axes.

Thanks to the potential of Windows 10, it can be introduced in any company network like a normal desktop PC.

You can view files in a PDF format, but also as .dxf and .dwg files by installing additional programs.

FEATURES

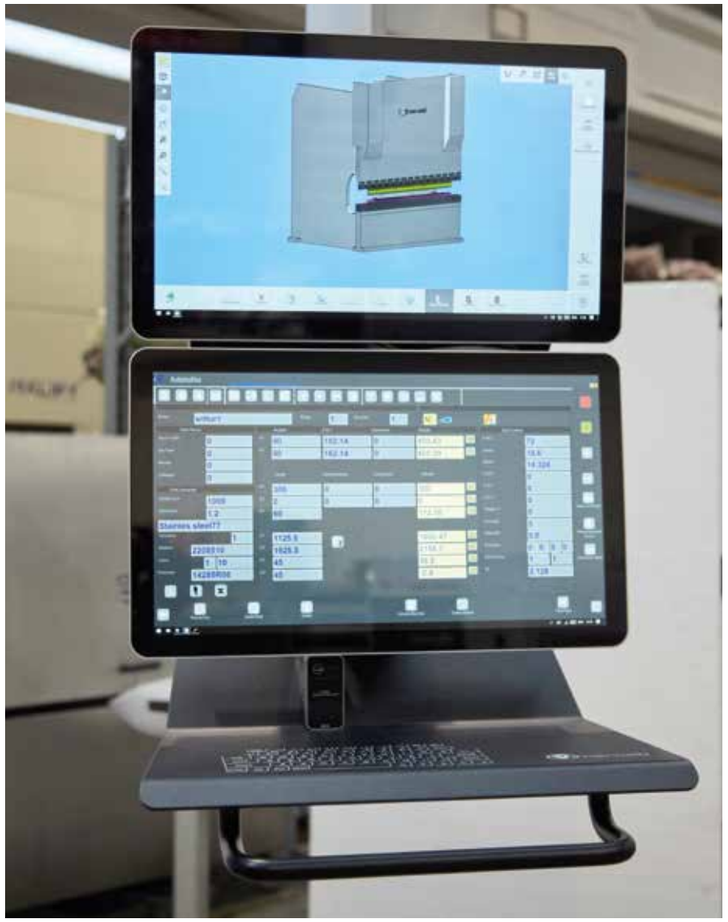
- 19" 2D and 3D multi-touch screen.
- Expandable 64GB hard disk.
- 4 x 2.0 USB ports.
- 1 x 1Gbit Ethernet port for connection to the corporate network.
- 1 DVI output, 1 V1.2 Display Port to connect any additional screens.

S 675

This system has been designed to get out most of any 3D CAD-CAM and ensures maximum performance for machines with 4 or more axes.

Thanks to the potential of Windows 10, it can be introduced in any company network like a normal desktop PC.

You can view files in a PDF format, but also as .dxf and .dwg files by installing special programs.



FEATURES

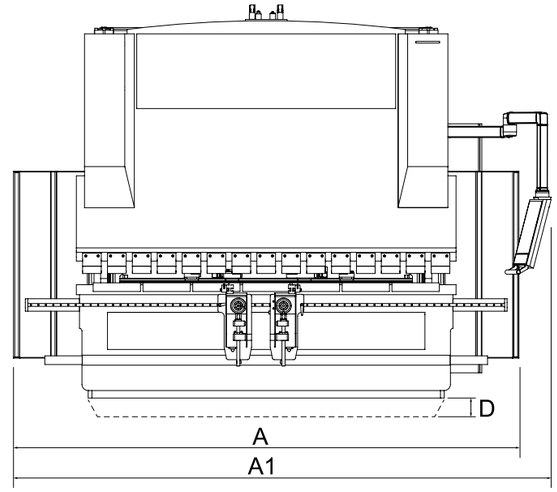
- 21.5" 2D and 3D multi-touch screen.
- Expandable 64GB hard disk.
- 4 x 2.0 USB ports and 4 x 3.0 USB ports.
- 1 x 1Gbit Ethernet port for connection to the corporate network.
- 1 DVI output, 2 x V1.2 Display Ports to connect any additional screens.
- **OPTIONAL FEATURES:**
  Double screen option

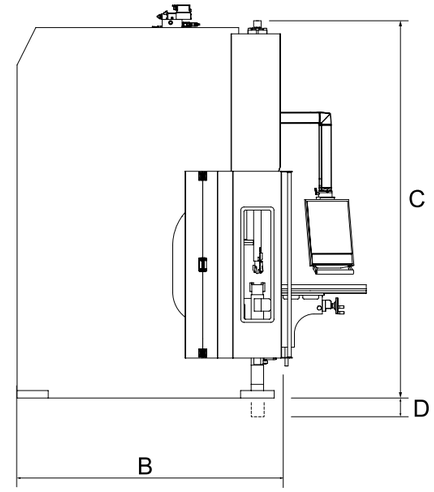
PRESS BRAKES / VIMERCATI

TABLES AND TECHNICAL DATA

> FROM 30T TO 150T

The data contained may vary over time





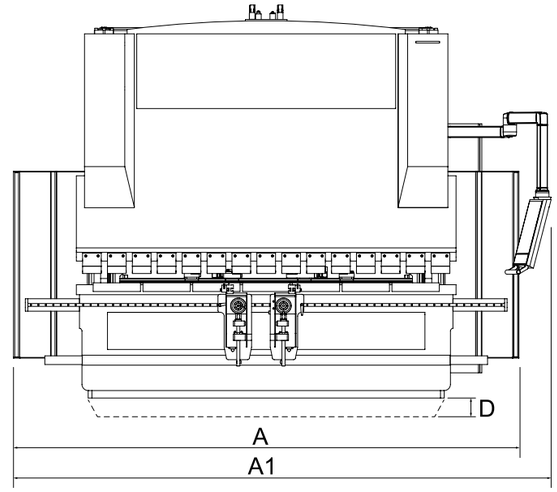
Model	Length PROMECAM	Length WILA	Clearance between the uprights	Height of the working table	Bending Force	"Y" Axis Stroke	"X" Axis Stroke	"R" Axis Stroke	"X-2" Axis Stroke	Speed				
										Down		Work	Up	
										PHSY	E.TERNA		PHSY	E.TERNA
	mm	mm	mm	mm	Kn	mm	mm	mm	mm	mm/s		mm/s	mm/s	
PHSY 301250	1250	1275	940	900	300	180	450	130	± 100	250		10	250	
PHSY 5020	2085	2040	1550	900	500	220	500	180	± 100	190	190	10	180	180
PHSY 5025	2505	2550	2050	900	500	220	500	180	± 100	190	190	10	180	180
PHSY 5030	3050	3060	2550	900	500	220	500	180	± 100	200	200	10	180	180
PHSY 5040	4175	4080	3550	900	500	220	500	180	± 100	200	200	10	180	180
PHSY 7520	2085	2040	1550	900	750	220	500	180	± 100	190	190	10	170	180
PHSY 7525	2505	2550	2050	900	750	220	500	180	± 100	190	190	10	170	180
PHSY 7530	3050	3060	2550	900	750	220	500	180	± 100	190	190	10	170	180
PHSY 7540	4175	4080	3550	900	750	220	500	180	± 100	190	190	10	170	180
PHSY 10020	2085	2040	1550	910	1000	270	500	180	± 100	190	190	10	170	180
PHSY 10025	2505	2550	2050	910	1000	270	500	180	± 100	190	190	10	170	180
PHSY 10030	3050	3060	2550	910	1000	270	500	180	± 100	190	190	10	170	180
PHSY 10040	4175	4080	3550	910	1000	270	500	180	± 100	190	190	10	170	180
PHSY 10050	5050	5100	4550	910	1000	270	500	180	± 100	190	190	10	170	180
PHSY 10060	6260	6120	5550	910	1000	270	500	180	± 100	190	190	10	170	180
PHSY 12520	2085	2040	1550	910	1250	270	500	180	± 100	190	190	10	170	180
PHSY 12525	2505	2550	2050	910	1250	270	500	180	± 100	190	190	10	170	180
PHSY 12530	3050	3060	2550	910	1250	270	500	180	± 100	190	190	10	170	180
PHSY 12540	4175	4080	3550	910	1250	270	500	180	± 100	190	190	10	170	180
PHSY 12550	5050	5100	4550	910	1250	270	500	180	± 100	190	190	10	160	170
PHSY 12560	6260	6120	5550	910	1250	270	500	180	± 100	190	190	10	160	170
PHSY 15030	3050	3060	2550	910	1500	270	500	180	± 100	180	200	10	170	180
PHSY 15040	4175	4080	3550	910	1500	270	500	180	± 100	180	200	10	170	180
PHSY 15050	5050	5100	4550	910	1500	270	500	180	± 100	190	200	10	160	170
PHSY 15060	6260	6120	5550	910	1500	270	500	180	± 100	190	200	10	160	170

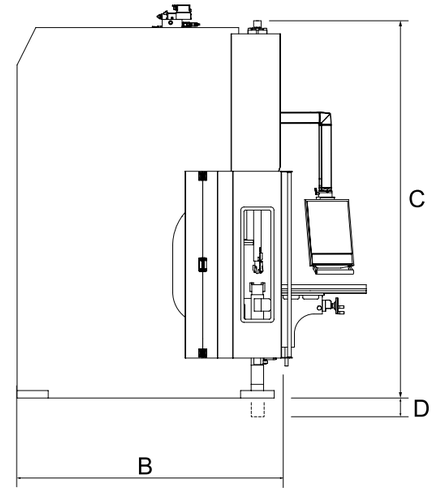
Distance Table / Toolholder	Gap	Main Motor	Oil tank capacity	Operating Pressure	Approx. Weight	Length. "A"	Length. "A1"	Wid. "B"	Wid. "B1"	Height "C"	Height "D"	Height "D1"
mm	mm	kW	L	Bar	Kg	mm	mm	mm	mm	mm	mm	mm
365	150	4	140	250	3250	2200	2950	1150	1300	2350	-	-
410	300	4	180	200	5600	3100	4000	1500	1650	2800	-	-
410	300	4	180	200	5850	3600	4500	1500	1650	2800	-	-
410	300	4	180	200	6400	4100	5000	1500	1650	2850	-	-
410	300	4	180	200	8000	5100	6000	1550	1700	2950	-	-
410	300	5,5	195	250	7200	3100	4000	1550	1700	2890	-	-
410	300	5,5	195	250	7900	3600	4500	1550	1700	2890	-	-
410	300	5,5	195	250	8900	4100	5000	1550	1700	3000	-	-
410	300	5,5	195	250	10300	5100	6000	1600	1750	3200	-	-
460	500	7,5	220	250	8250	3100	4000	2000	2150	2950	-	-
460	500	7,5	220	250	9400	3600	4500	2000	2150	2950	-	-
460	500	7,5	220	250	10600	4100	5000	2000	2150	3050	-	-
460	500	7,5	220	250	12600	5100	6000	2050	2200	3200	-	-
460	500	7,5	220	250	15500	6100	7000	2100	2250	3300	-	-
460	500	7,5	220	250	19500	7100	8000	2100	2250	3400	-	-
460	500	11	230	250	9500	3100	4000	2050	2200	3000	-	-
460	500	11	230	250	10600	3600	4500	2050	2200	3000	-	-
460	500	11	230	250	12800	4100	5000	2050	2200	3100	-	-
460	500	11	230	250	15500	5100	6000	2100	2250	3300	-	-
460	500	11	230	250	19000	6100	7000	2100	2250	3400	-	-
460	500	11	230	250	22500	7100	8000	2100	2250	3600	-	-
460	500	15	275	240	14000	4100	5000	2100	2250	3200	-	-
460	500	15	275	240	16800	5100	6000	2100	2250	3350	-	-
460	500	15	275	240	20700	6100	7000	2200	2350	3450	-	-
460	500	15	275	240	25200	7100	8000	2200	2350	3650	-	-

TABLES AND TECHNICAL DATA

> FROM 200T TO 600T

The data contained may vary over time





Model	Length PROMECAM	Length WILA	Clearance between the uprights	Work surface height	Operating Force	"Y" Axis Stroke	"X" Axis Stroke	"R" Axis Stroke	"X-rel" Axis Stroke	Speed				
										Down		Work	Up	
										PHSY	E.TERNA		PHSY	E.TERNA
	mm	mm	mm	mm	Kn	mm	mm	mm	mm	mm/s		mm/s	mm/s	
PHSY 20030	3050	3060	2550	910	2000	270	1000	200	± 100	180	200	10	170	180
PHSY 20040	4175	4080	3550	910	2000	270	1000	200	± 100	180	200	10	170	180
PHSY 20050	5050	5100	4550	910	2000	270	1000	200	± 100	180	200	10	170	180
PHSY 20060	6260	6120	5550	910	2000	270	1000	200	± 100	180	200	10	170	180
PHSY 25030	3050	3060	2550	910	2500	270	1000	200	± 100	180	200	10	160	170
PHSY 25040	4175	4080	3550	910	2500	270	1000	200	± 100	180	200	10	160	170
PHSY 25050	5050	5100	4550	910	2500	270	1000	200	± 100	180	200	10	160	170
PHSY 25060	6260	6120	5550	910	2500	270	1000	200	± 100	180	200	10	160	170
PHSY 30030	3050	3060	2550	910	3000	320	1000	200	± 100	135	180	8	160	170
PHSY 30040	4175	4080	3550	910	3000	320	1000	200	± 100	135	180	8	160	170
PHSY 30050	5050	5100	4550	910	3000	320	1000	200	± 100	135	180	8	160	170
PHSY 30060	6260	6120	5550	910	3000	320	1000	200	± 100	135	180	8	160	170
PHSY 40030	3050	3060	2550	910	4000	370	1000	200	± 100	110	130	8	120	130
PHSY 40040	4175	4080	3550	910	4000	370	1000	200	± 100	110	140	8	120	130
PHSY 40050	5050	5100	4550	910	4000	370	1000	200	± 100	110	140	8	120	130
PHSY 40060	6260	6120	5550	910	4000	370	1000	200	± 100	110	140	8	120	130
PHSY 50040	4175	4080	3550	910	5000	420	1000	220	± 100	100	110	8	100	110
PHSY 50050	5050	5100	4550	910	5000	420	1000	220	± 100	100	110	8	100	110
PHSY 50060	6260	6120	5550	910	5000	420	1000	220	± 100	100	110	8	100	110
PHSY 60040	4175	4080	3550	910	6000	520	1000	220	± 100	90	110	7	90	110
PHSY 60050	5050	5100	4550	910	6000	520	1000	220	± 100	90	110	7	90	110
PHSY 60060	6260	6120	5550	910	6000	520	1000	220	± 100	90	110	7	90	110

Distance Table/ Toolholder	Gap	Main Motor	Oil tank capacity	Operating Pressure	Approx. Weight	Length. "A"	Length. "A1"	Wid. "B"	Wid. "B1"	Height "C"	Height "D"	Height "D1"
mm	mm	kW	L	Bar	Kg	mm	mm	mm	mm	mm	mm	mm
460	500	18,5	310	240	18000	4100	5000	2150	2300	3350	-	-
460	500	18,5	310	240	20800	5100	6000	2150	2300	3550	-	-
460	500	18,5	310	240	26000	6100	7000	2200	2350	3700	-	-
460	500	18,5	310	240	30000	7100	8000	2200	2350	3850	-	-
460	500	22	370	250	20600	4100	5000	2250	2400	3400	-	-
460	500	22	370	250	24500	5100	6000	2250	2400	3550	-	-
460	500	22	370	250	28500	6100	7000	2200	2400	3700	1000	250
460	500	22	370	250	33500	7100	8000	2200	2400	3900	1200	250
560	500	30	510	220	27000	4100	5000	2450	2600	3550	-	-
560	500	30	510	220	30500	5100	6000	2450	2600	3750	-	-
560	500	30	510	220	35500	6100	7000	2400	2600	3900	1450	300
560	500	30	510	220	42000	7100	8000	2400	2600	4150	1650	300
600	500	37	560	220	32500	4100	5000	2650	2800	3650		
600	500	37	560	220	36500	5100	6000	2600	2800	3850	1300	300
600	500	37	560	220	42000	6100	7000	2600	2800	4000	1550	300
600	500	37	560	220	48000	7100	8000	2600	2800	4150	1750	300
650	500	45	580	250	43000	5100	6000	2750	2950	3900	1400	350
650	500	45	580	250	49000	6100	7000	2750	2950	4150	1650	350
650	500	45	580	250	56500	7100	8000	2750	2950	4350	1850	350
750	500	55	600	240	52000	5100	6000	2900	3100	4150	1600	350
750	500	55	600	240	59000	6100	7000	2900	3100	4300	1800	350
750	500	55	600	240	68000	7100	8000	2900	3100	4500	2000	350

GUILLOTINE

SHEARS

SHEARS

WITH GAP

RANGE

from **2000** to **6000 mm**
in length

cutting thicknesses
from **4** to **30 mm**

CUSTOMIZATIONS

- Pneumatic sheet metal support
- Hydraulic sheet metal support
- Sheet metal evacuator
- CNC
- Software

Option of cutting sheets longer than the machine, up to the depth of the gap.

SHEARS

WITHOUT GAP

RANGE

from **2000** to **4000 mm**
in length

cutting thicknesses
from **6** to **15 mm**

CUSTOMIZATIONS

- Pneumatic sheet metal support
- Hydraulic sheet metal support
- Sheet metal evacuator
- CNC
- Software

Very compact frame with closed uprights deflections free.

4.0 INDUSTRY

TECHNICAL AND OPTIONAL

FEATURES

STRENGTH, PRECISION, SPEED

Our range of guillotine shears stands out for the considerable strength of the structure and the certified materials.

All the electrical, electronic, hydraulic, measurement and movement components are purchased directly by Vimercati from leading companies at an international level.

With our wide series of available optional features, we can customize machines according to the specific production needs of every company.

STRUCTURAL FEATURES

FIGURE 1

Guillotine beam connected to hydraulic cylinders, designed with a spherical oil bath system, with ground wedges for perfect coupling.

FIGURES 2-3
SYSTEM TO ADJUST THE INTERSPACE BETWEEN THE BENCH AND THE GUILLOTINE

The bench, guided at the two ends by two rectified gibs, is moved by three screws in highly resistant material, two lateral and a central one, each one keyed into a reducer, operated by a geared motor.

As the cutting quality depends on the linearity and the correct distance between the upper and lower blade in relation to the thickness, the system is adjusted with extreme precision to ensure maximum performance.

FIGURE 4

Side square with engraved stainless steel millimetre ruler, retractable stop, eccentric squaring adjustment, hardened sheet metal support side.
The length of the frontal supports and the side square can be supplied with different lengths upon request.

FIGURE 1

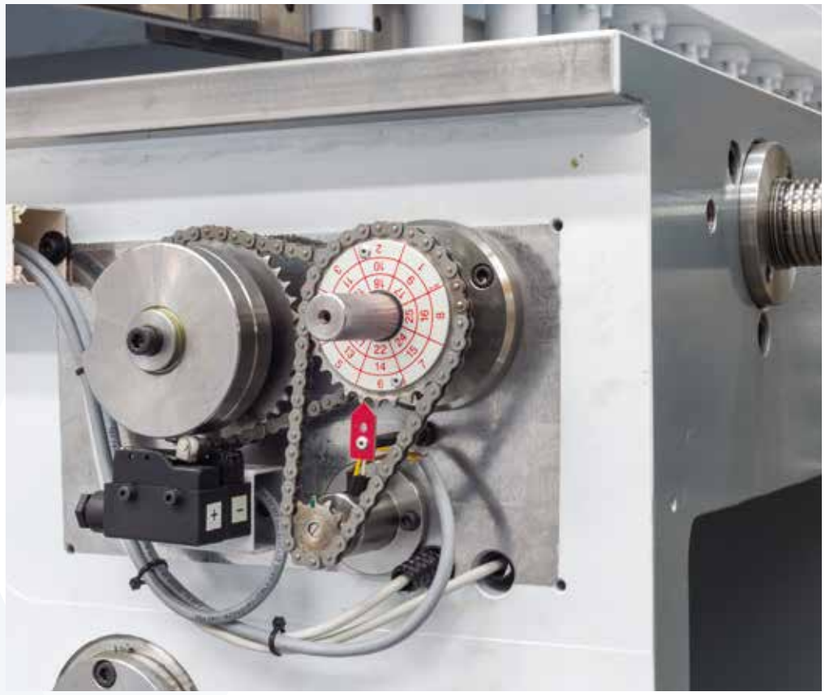


FIGURE 2

FIGURE 3

FIGURE 4

SAFETY DEVICES

FIGURE 5

Photocell barriers for front protection used for cutting big thicknesses.

FIGURE 6

The safety on the rear part is provided by light curtains with hand resolution. When anyone or any object passes through these curtains, the shears instantly stop.
To reset the machine it is essential to leave the operating area of the shear.

FIGURE 7

Shaped hand protection with vertical adjustment compliant with EC safety regulations, and sliding balls on the bench to ease the handling of very large and thick metal sheets.

GUILLOTINE SHEARS / VIMERCATI

FIGURE 5

FIGURE 6

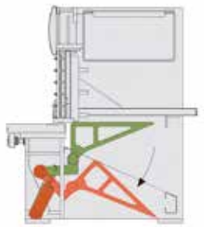
FIGURE 7

SHEET METAL SUPPORT

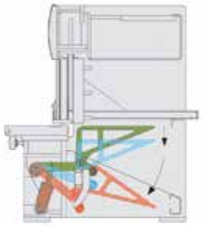
DRAWINGS 8-9-10
MODELS OF SHEET METAL SUPPORT:

- **DRAWING 8**
  Pneumatically-operated retractable support for metal sheets up to 6 mm thickness
- **DRAWING 9**
  Hydraulically-controlled sheet metal support synchronized with the cutting speed
- **DRAWING 10**
  Double sheet metal support with retractable armrests and supporting table with pneumatically-controlled synchronized movement

DRAWING 8



DRAWING 9



DRAWING 10

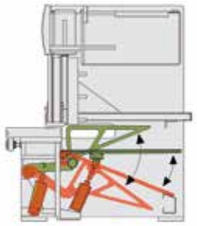


FIGURE 11

Evacuator with sheet support synchronised with cutting, inserted in the table

FIGURE 12

Hydraulic retractable back gauge for cutting metal sheets larger than the maximum stroke of the back gauge.

OPTIONAL FEATURES

PHOTOS 13-14

Anti-twist system for linear and flat cutting of thin pieces to obtain a rectangle with a depth of 1.5 times the thickness of the plate.

PHOTO 15

Frontal gauge CNC managed at 4-axis (X1-X2-Z1-Z2) with hydraulic locking clips and central supports with automatic drive.
Allows the automatic creation of straps of various dimension as indicated in the program.

PHOTO 13

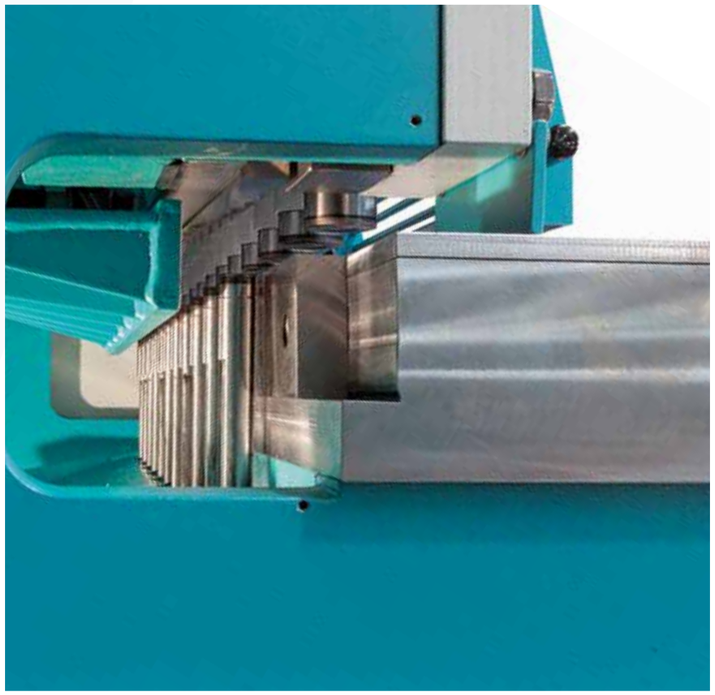


PHOTO 14

PHOTO 15

GUILLOTINE SHEARS / VIMERCATI

NUMERICAL CONTROLS

PRG 910A (standard)

Possibility of single positioning and activation of the retractable function.

PRG 911 (optional)

Option of running several programs (up to 99) that can be saved and activation of the retractable function.

FEATURES

- One-axis programmable front positioner
- 6-spaces high brightness LED display + negative sign.
- Waterproof and scratch-proof polycarbonate tactile sticky keyboard.

CNC S 630 and CNC CYBTOUCH 8

FEATURES

- Intuitive numerical controls with user-friendly interface.
- Touchscreen.
- Simple and guided programming.
- Up to 200 programs and 24 bending sequences per program.

PRG 910A (STANDARD) - PRG 911 (OPTIONAL)

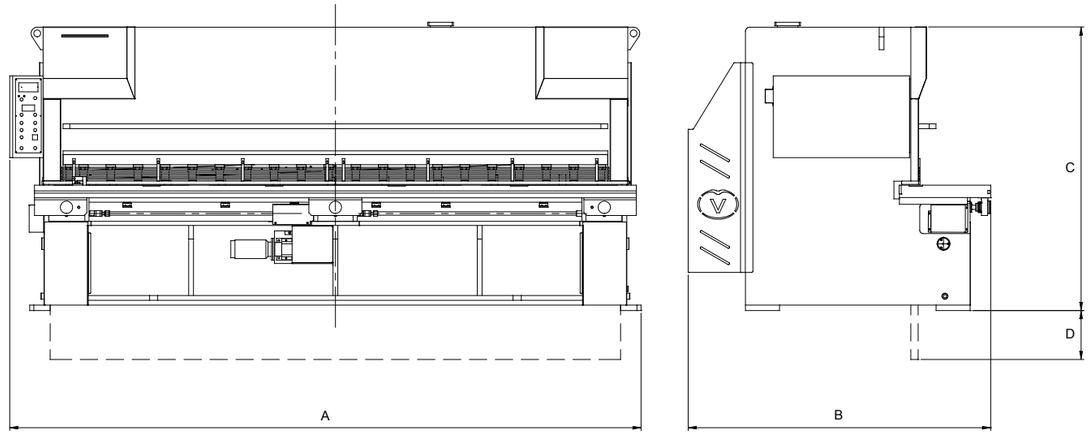
CNC S 630

CNC CYBTOUCH 8

TABLES
AND TECHNICAL DATA

> SHEARS WITHOUT GAP

The data contained may vary over time



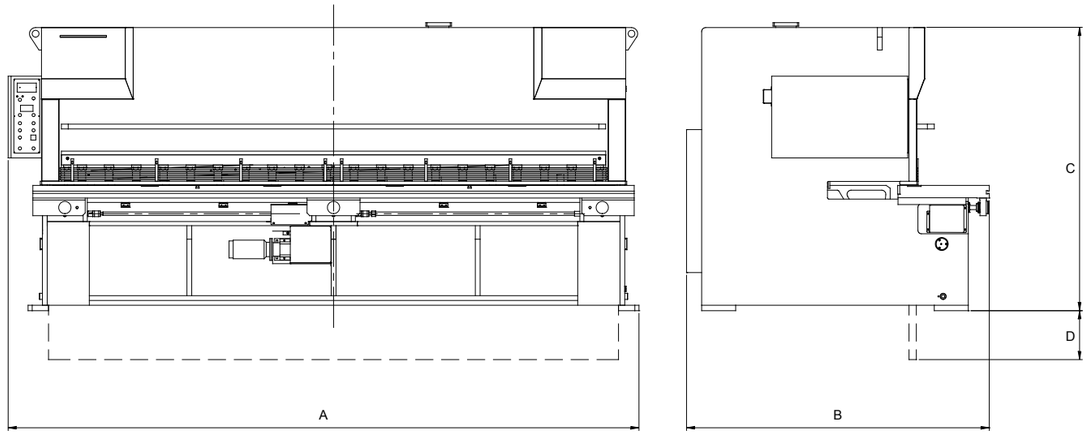
Model	MAX thickness	Cutting Length	Clearance between the uprights	Gap	Height of the working table	Cutting Angle		"X" Axis Stroke (Back gauge)	Speed		
						Min	Max		Down	Up	"X" Axis
	mm	mm	mm	mm	mm	/	/	mm	mm/s	mm/s	mm/s
CSI-3050-6	6	3050	3200	40	900	30'	2° 30'	1000	90	130	70
CSI-3050-10	10	3050	3200	40	900	30'	2° 30'	1000	90	130	70
CSI-3050-15	15	3050	3200	40	900	30'	2° 30'	1000	75	110	70
CSI-4050-4	4	4050	4200	40	900	30'	2° 30'	1000	90	130	70
CSI-4050-6	6	4050	4200	40	900	30'	2° 30'	1000	90	130	70
CSI-4050-10	10	4050	4200	40	900	30'	2° 30'	1000	75	110	70

Powers			Operating Pressure	Approx. Weight	Length . "A"	Wid."B"	Height"C"	Height"D"
Main Motor	"X" Axis Motor	Blade Interspace Motor						
kW	kW	kW	Bar	Kg	mm	mm	mm	mm
7,5	0,37	0,37	220	7100	3650	2250	1960	-
18	0,37	0,37	220	9800	3700	2250	2100	-
22	0,37	0,37	220	15500	3700	2250	2250	-
7,5	0,37	0,37	220	9600	4650	2250	1960	-
18	0,37	0,37	220	12500	4700	2250	2100	-
22	0,37	0,37	220	19000	4800	2250	2250	-

TABLES AND TECHNICAL DATA

> SHEARS WITH GAP

The data contained may vary over time



Model	MAX thickness	Cutting Length	Clearance between the uprights	Gap	Work surface height	Cutting Angle		"X" Axis Stroke (Back gauge)	Speed		
						Min	Max		Down	Up	"X" Axis
	mm	mm	mm	mm	mm	/	/	mm	mm/s	mm/s	mm/s
CH-2050-6	6	2050	2200	500	900	30'	2°	1000	90	130	70
CH-2050-8	8	2050	2200	500	900	30'	2° 30'	1000	90	130	70
CH-2050-10	10	2050	2200	500	900	30'	2° 30'	1000	90	130	70
CH-2050-12	12	2050	2200	500	900	30'	2° 30'	1000	75	110	70
CH-2050-15	15	2050	2200	500	900	30'	2° 30'	1000	70	105	70
CH-2050-20	20	2050	2200	500	900	30'	2° 30'	1000	65	90	70
CH-2050-23	23	2050	2200	500	900	30'	2° 30'	1000	65	90	70
CH-2550-5	5	2550	2700	500	900	30'	2°	1000	90	130	70
CH-2550-8	8	2550	2700	500	900	30'	2° 30'	1000	90	130	70
CH-2550-10	10	2550	2700	500	900	30'	2° 30'	1000	90	130	70
CH-2550-12	12	2550	2700	500	900	30'	2° 30'	1000	75	110	70
CH-2550-15	15	2550	2700	500	900	30'	2° 30'	1000	70	105	70
CH-2550-18	18	2550	2700	500	900	30'	2° 30'	1000	65	90	70
CH-2550-22	22	2550	2700	500	900	30'	2° 30'	1000	65	90	70
CH-3050-5	5	3050	3200	500	900	30'	2°	1000	90	130	70
CH-3050-6	6	3050	3200	500	900	30'	2° 30'	1000	90	130	70
CH-3050-8	8	3050	3200	500	900	30'	2° 30'	1000	80	130	70
CH-3050-10	10	3050	3200	500	900	30'	2° 30'	1000	75	110	70
CH-3050-12	12	3050	3200	500	900	30'	2° 30'	1000	70	105	70
CH-3050-14	14	3050	3200	500	900	30'	2° 30'	1000	70	105	70
CH-3050-16	16	3050	3200	500	900	30'	2° 30'	1000	65	105	70
CH-3050-20	20	3050	3200	500	900	30'	2° 30'	1000	65	100	70
CH-4050-4	4	4050	4200	500	900	30'	2°	1000	90	130	70
CH-4050-6	6	4050	4200	500	900	30'	2°	1000	75	110	70
CH-4050-8	8	4050	4200	500	900	30'	2°	1000	75	110	70
CH-4050-10	10	4050	4200	500	900	30'	2°	1000	70	105	70
CH-4050-12	12	4050	4200	500	900	30'	2°	1000	70	105	70
CH-4050-14	14	4050	4200	500	900	30'	2°	1000	65	100	70
CH-6050-4	4	6050	6200	500	900	30'	1° 30'	1000	80	110	70
CH-6050-6	6	6050	6200	500	900	30'	1° 30'	1000	75	110	70
CH-6050-8	8	6050	6200	500	900	30'	1° 30'	1000	65	90	70
CH-6050-10	10	6050	6200	500	900	30'	1° 30'	1000	65	90	70
CH-6050-12	12	6050	6200	500	900	30'	1° 30'	1000	65	90	70

Powers			Operating Pressure	Approx. Weight	Length. "A"	Wid."B"	Height"C"	Height"D"
Main Motor	"X" Axis Motor	Blade Interspace Motor						
kW	kW	kW	Bar	Kg	mm	mm	mm	mm
7,5	0,37	0,37	220	5800	2650	1900	1900	-
11	0,37	0,37	220	7700	2700	2000	2100	-
15	0,37	0,37	220	9000	2700	2200	2100	-
18,5	0,37	0,37	220	10800	2700	2200	2200	-
18,5	0,37	0,37	220	14500	2750	2300	2300	-
22	0,37	0,37	220	18000	2750	2400	2450	-
30	0,37	0,37	220	20500	2750	2600	2550	-
7,5	0,37	0,37	220	6700	3150	1900	1900	-
11	0,37	0,37	220	8600	3200	2000	2100	-
18,5	0,37	0,37	220	9800	3200	2200	2100	-
18,5	0,37	0,37	220	12000	3200	2200	2200	-
22	0,37	0,37	220	16000	3250	2300	2300	-
22	0,37	0,37	220	18800	3250	2400	2450	-
30	0,37	0,37	220	21500	3250	2600	2550	-
7,5	0,37	0,37	220	7500	3650	1900	1900	-
7,5	0,37	0,37	220	8800	3700	2000	2150	-
11	0,37	0,37	220	10000	3700	2200	2150	-
15	0,37	0,37	220	12000	3700	2200	2250	-
18,5	0,37	0,37	220	14000	3750	2300	2350	-
18,5	0,37	0,37	220	16200	3750	2300	2450	-
22	0,37	0,37	220	18000	3800	2400	2500	-
30	0,37	0,37	220	22300	3800	2600	2650	-
7,5	0,37	0,37	220	12200	4650	2050	2150	-
11	0,37	0,37	220	14300	4700	2200	2200	-
15	0,37	0,37	220	17000	4700	2300	2300	-
22	0,37	0,37	220	20500	4800	2400	2400	-
22	0,37	0,37	220	23000	4800	2450	2500	-
22	0,37	0,37	220	26000	4850	2600	2650	300
15	0,37	0,37	220	23000	6700	2300	2400	-
18,5	0,37	0,37	220	27000	6700	2450	2500	-
18,5	0,37	0,37	220	33000	6800	2600	2650	300
22	0,37	0,37	220	38500	6800	2800	2800	400
30	0,37	0,37	220	41500	6850	2900	3100	600

GUILLOTINE SHEARS / VIMERCATI

TIN SHEET METAL

PRESS BRAKES

TIN SHEET METAL

PRESS BRAKES

Tin Sheet metal presses are built with technology entirely derived from synchronized press brakes with integrated electronics, but arranged for the specific needs of the tin sheet metal sector.

Made with technology entirely derived from our synchronized press brakes with integrated electronics, but matching the specific needs of the tin sheet metal sector, they are manufactured with a very sturdy structure with a 750 or 1000 gap, hemming tool built into the bottom table with the option of a die changeover, crowning, 2-axis back gauge with 500-mm wide rear platform

RANGE

from **100** to **200 tonnes**

from **6500** to **10050 mm** in length

TIN SHEET METAL PRESS BRAKES / VIMERCATI

4.0 INDUSTRY

RELIABILITY AND ACCURACY

FIGURE 1

500-mm Wide rear Table with three support points, first front stop, second stop at 50 mm, third stop at 500 mm. Two-axis back gauge: X 1000 stroke R 250 stroke.

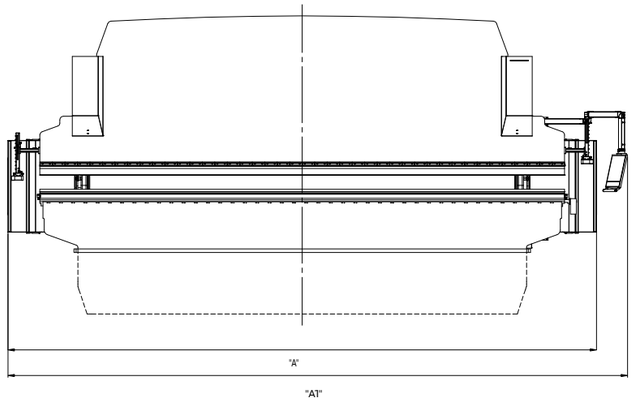
Pneumatically-controlled hemming tool built into the table, managed from the CNC, with die changeover option.

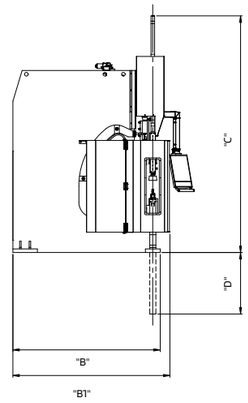
OPTIONAL FEATURES

- Frontal light
- Stainless steel plates on the beater with anti-scratch function
- 1000 mm gap
- Colour

FIGURE 1

TABLES AND TECHNICAL DATA > TIN SHEET METAL PRESSES





Model	Useful Bending Length	Clearance between the uprights	Gap	Height of the working table	Operating Force	"Y" Axis Stroke	"X" Axis Stroke (Optional)	"R" Axis Stroke (Optional)	Speed		
									Down	Work	Up
	mm	mm	mm	mm	kN	mm	mm	mm	mm/s	mm/s	mm/s
PHSL 100/65	6550	5050	750	960	1000	270	1000	250	130	10	100
PHSL 100/85	8550	7050	750	960	1000	270	1000	250	130	10	100
PHSL 125/65	6550	5050	750	960	1250	270	1000	250	130	10	100
PHSL 125/85	8550	7050	750	960	1250	270	1000	250	130	10	100
PHSL 125/100	10050	8550	750	960	1250	270	1000	250	130	10	90
PHSL 150/65	6550	5050	750	960	1500	270	1000	250	120	10	100
PHSL 150/85	8550	7050	750	960	1500	270	1000	250	120	10	100
PHSL 150/100	10050	8550	750	960	1500	270	1000	250	100	10	90
PHSL 200/85	8550	7050	750	960	2000	270	1000	250	100	10	90
PHSL 200/100	10050	8550	750	960	2000	270	1000	250	90	10	90

Model	Main Motor	Oil tank capacity	Operating Pressure	Approx. Weight	Length. "A"	Length. "A1"	Width. "B"	Width. "B1"	Height "C"	Height "D" (Optional)
	kW	L	Bar	Kg	mm	mm	mm	mm	mm	mm
PHSL 100/65	11	220	250	20500	7590	8270	2270	2395	3520	800
PHSL 100/85	11	220	250	23500	9590	10270	2270	2395	3720	1000
PHSL 125/65	15	230	250	22000	7590	8270	2235	2395	3420	1000
PHSL 125/85	15	230	250	26500	9590	10270	2235	2395	3620	1200
PHSL 125/100	15	230	250	32000	11590	12270	2235	2395	3820	1300
PHSL 150/65	18,5	275	240	26000	7590	8270	2280	2440	3675	1200
PHSL 150/85	18,5	275	240	31500	9590	10270	2280	2440	3875	1300
PHSL 150/100	18,5	275	240	38000	11590	12270	2280	2440	4075	1400
PHSL 200/85	22	310	240	61500	9590	10270	2300	2460	3270	1400
PHSL 200/100	22	310	240	70000	11590	12270	2300	2460	3670	1600

The data contained may vary over time

TIN SHEET METAL

CALENDERS

TIN SHEET METAL

CALENDERS

Tin sheet metal calenders are built with technology entirely derived from synchronized press brakes with integrated electronics, but arranged for the specific needs of the tin sheet metal sector.

The calender is made with a very sturdy structure, with two or three uprights with a 750 or 1000 mm gap. The calender press is fitted with three motorized rollers driven by a geared motor for the 6500 mm press, and a pair of geared motors for 8500 mm and 10050 mm presses, All models have an INVERTER to prevent the rollers from slipping, which would affect the accuracy of the profile being created. The bottom table has a manual crowning system that is fast, accurate and functional.

RANGE

75 - 90 - 105 tonnes

from **6500** to **10050 mm**
in length

TIN SHEET METAL CALENDERS / VIMERCATI

RELIABILITY AND ACCURACY

FIGURE 1

Hardened and ground motorized rollers of various diameters (40 – 45 – 50 – 60) upon request from the customer. Continuous upper roller, like the two lower ones, along the entire length to avoid unsightly fingerprints due to the non-continuity of the rollers owing to the closed radius supports.

FIGURE 2

Rear table with pneumatic up-down control. A two-axis (X-R) back gauge with the same features as the one installed on the synchronized press brake can also be installed (upon request).

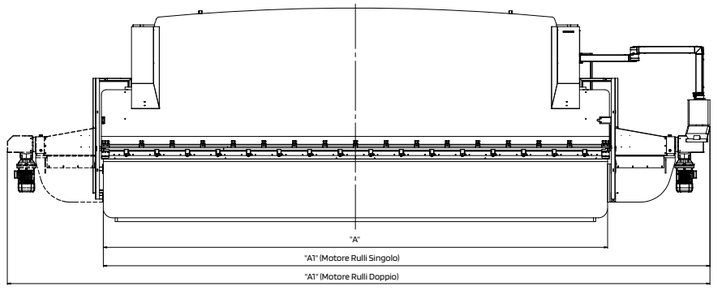
OPTIONAL FEATURES

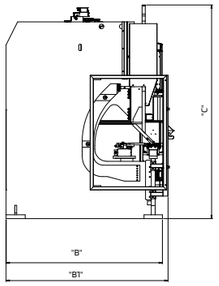
- Frontal light
- Stainless steel plates on the beater with anti-scratch function
- 1000 mm gap
- Colour

FIGURE 1

FIGURE 2

TABLES AND TECHNICAL DATA > TIN SHEET METAL CALENDERS





Model	Working length	Number of uprights	Clearance between the uprights	Gap	Height of the working table	Operating Force	Max. calende-rable) Thickness R=42 kg/cm²	"Y" Axis Stroke	"X" Axis Stroke (Optional)	"R" Axis Stroke (Optional)	Speed		
											Down	Work	Up
	mm		mm	mm	mm	KN	mm	mm	mm	mm	mm/s	mm/s	mm/s
PHCS 75/65	6550	2	5550	750	950	750	0,5+1,5	180	1000	250	90	8	90
PHCS 75/85	8550	2	7050	750	950	750	0,5+1,2	180	1000	250	80	8	90
PHCS 90/65	6550	2	5550	750	950	900	0,5+2	180	1000	250	80	8	80
PHCS 90/85	8550	2	7050	750	950	900	0,5+1,5	180	1000	250	80	8	80
PHC 90/100	10050	3	4500 + 4500	750	950	900	0,5+1,2	180	1000	250	70	7	80
PHC 105/100	10050	3	4500 + 4500	750	950	105	0,5+1,5	180	1000	250	70	7	80

Model	Hydraulic System Motor	Oil tank capacity	Operating Pressure	Roller Motor	Roller Diameter	Approx. Weight	Length "A"	Wid. "B"	Height "C"
	kW	L	BAR	kW	mm	Kg	mm	mm	mm
PHSC 75/65	7,5	200	240	4	da 40 a 60	15000	8150	2050	2850
PHSC 75/85	7,5	200	240	2 x 4	da 40 a 60	185	11400	2050	3050
PHSC 90/65	7,5	220	240	5,5	da 40 a 60	19000	8150	2100	3000
PHSC 90/85	7,5	220	240	2 x 4	da 40 a 60	22000	11400	2100	3150
PHC 90/100	7,5	220	240	2 x 4	da 40 a 60	23000	12500	2150	2900
PHC 105/100	11	240	240	2 x 5,5	da 40 a 60	25000	12500	2150	3100

The data contained may vary over time

HOW TO CHOOSE A VIMERCATI BENDING PRESS

WHICH THICKNESSES DO YOU WANT TO BEND AND WHICH MATERIAL?

Use the bending table below to understand how many tonnes per meter you will need to bend your pieces and to establish the correct tonnage of your new Vimercati bending.

After defining the thickness (s) of the sheet metal that you usually bend, it is important to consider the width of the die (V) you use. This choice will affect the tonnage required for the bending stage. The usual choice is a die with V equal to 8 times the thickness value and for sheets thicker than 3 mm we recommend 10 times the thickness of the sheet.

After defining the width V of the die, the third internal edge (B min) in millimetres is indicated in the third row, i.e. the internal measurement that allows for bending without the risk that the sheet might fall inside the die, resulting in a variation of the bending line. Pay attention, as the indicated value must be equal to or less than the value in the drawing of the piece or you will have to tighten the die, which mean an increase of the required force.

In the fourth and fifth row you find the minimum edge for 60° and 30° angles. These require a longer edge to avoid falling inside the V of the die.

The sixth, seventh and eighth rows show the inner radius (Ri) in mm of the bended sheet generated by the die. For example, the 8 mm die generates an inner radius of 1 mm on iron sheets. When bending aluminium or stainless steel, the different springback generates, with the same die, different inner radiuses. In this case, you will have to use the values indicated in row 6 for aluminium and row 8 for stainless steel.

In rows 9, 10 and 11 you find the necessary force (F) in KN/m to bend sheets with thickness S, in the slot V and of the specific material (note: if you want to use tonnes divide the value in the table by 10). This value is the required force per metre that the machine must be able to express. By multiplying the value by the length of the piece to be bended, you will find the necessary tonnage to be transmitted to Vimercati.

EXAMPLE:
To bend 1 metre of stainless steel, 3 mm thick, in the 25 mm slot, you need about 416 KN (41 Tonnes).
To bend 2 metres, you need 416x2 = 832 KN (83 Tonnes).

s	mm	0,6		0,8		1		1,2		1,5		2		2,5		3	
V	mm	5	6	6	8	8	10	10	12	12	16	16	20	20	25	25	32
B min (mm)	90°	3,5	4,0	4,0	5,5	5,5	6,5	6,5	8,0	8,0	10,5	10,5	13,0	13,0	16,5	16,5	21,0
	60°	3,9	4,4	4,4	6,1	6,1	7,2	7,2	8,8	8,8	11,6	11,6	14,3	14,3	18,2	18,2	23,1
	30°	5,6	6,4	6,4	8,8	8,8	10,4	10,4	12,8	12,8	16,8	16,8	20,8	20,8	26,4	26,4	33,6
Ir (mm)	Aluminium	0,5	0,6	0,6	0,8	0,8	1,0	1,0	1,2	1,2	1,6	1,6	2,0	2,0	2,5	2,5	3,2
	Iron	0,6	0,8	0,8	1,0	1,0	1,3	1,3	1,5	1,5	2,0	2,0	2,5	2,5	3,1	3,1	4,0
	Stainless steel	0,9	1,1	1,1	1,4	1,4	1,8	1,8	2,1	2,1	2,8	2,8	3,5	3,5	4,4	4,4	5,6
F (KN/m)	R=200 N/mm2 - Al	24	20	35	26	41	33	48	40	62	46	83	66	103	83	119	93
	R=450 N/mm2 - Fe	53	45	79	59	93	74	107	89	139	104	186	149	232	186	267	209
	R=700 N/mm2 - Stainless steel	83	69	123	92	144	116	166	139	217	162	289	231	361	289	416	325

F = Bending Force **V =** Slot Opening **Ir =** Minimum Edge
s = Thickness **B =** Minimum Edge **R =** Material Strength

HOW LONG ARE THE PIECES?

The answer to this question will allow us to understand the required press width.

WHICH TOOLS AND WHAT SHAPE DO THE PIECES HAVE?

If you want to use high tools or it is difficult to extract bended pieces, such as boxes, it is important to choose a machine with the correct clearance, stroke and intermediate devices.
The stroke indicates how far the machine can move along the Y axis. The clearance is the distance between the upper crossbar and the table. The intermediate devices are the tools used to fix the upper tools to the upper crossbar.

STRUGGLING TO MOVE BULKY PIECES DURING BENDING?

Vimercati offers you machines with front supports and guides that can help you move the pieces during the bending phase.

YOU NEED PIECES WITH VERY ACCURATE ANGLES?

Fit your new machine with an angle check system.

MANY PIECES WITH FLATTENED BEND?

Buy a table with a hemming features to make operations easier and eliminate tool changeover times.

YOU HAVE PIECES WITH COMPLEX SHAPES OR YOU WANT TO BEND SEVERAL PIECES AT A TIME?

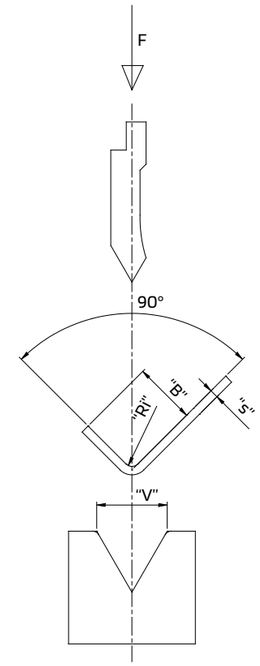
Check with Vimercati which and how many axes are actually needed for your machine.

YOUR OPERATORS ARE USED TO USING A NUMERICAL CONTROL?

With Vimercati, you can install the numerical control you want.

YOU HAVE LONG PIECES AND STRUGGLE TO MAINTAIN THE ANGLE ACROSS THE WHOLE LENGTH OF THE PIECE?

Ask Vimercati for a bending system suitable to your needs that enables you to compensate for the deformation of the machine during bending.



s	mm	4		5		6		8		10		12		15		20	
V	mm	32	40	40	50	50	63	63	80	80	100	100	125	125	160	160	200
B min (mm)	90°	21,0	26,0	26,0	32,5	32,5	41,0	41,0	52,0	52,0	65,0	65,0	81,5	81,5	104,0	104,0	130,0
	60°	23,1	28,6	28,6	35,8	35,8	45,1	45,1	57,2	57,2	71,5	71,5	89,7	89,7	114,4	114,4	143,0
	30°	33,6	41,6	41,6	52,0	52,0	65,6	65,6	83,2	83,2	104,0	104,0	130,4	130,4	166,4	166,4	208,0
Ir (mm)	Aluminium	3,2	4,0	4,0	5,0	5,0	6,3	6,3	8,0	8,0	10,0	10,0	12,5	12,5	16,0	16,0	20,0
	Iron	4,0	5,0	5,0	6,3	6,3	7,9	7,9	10,0	10,0	12,5	12,5	15,6	15,6	20,0	20,0	25,0
	Stainless steel	5,6	7,0	7,0	8,8	8,8	11,0	11,0	14,0	14,0	17,5	17,5	21,9	21,9	28,0	28,0	35,0
F (KN/m)	R=200 N/mm2 - Al	165	132	206	165	238	189	335	264	413	330	475	380	594	464	825	660
	R=450 N/mm2 - Fe	371	297	464	371	535	424	754	594	928	743	1069	855	1337	1044	1856	1485
	R=700 N/mm2 - Stainless steel	578	462	722	578	832	660	1173	924	1444	1155	1663	1331	2079	1624	2888	2310

The data in the table are to be considered as average values

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ADDICTED TO **ACCURACY**