

# HYBRID

**Extraordinary Performances** 



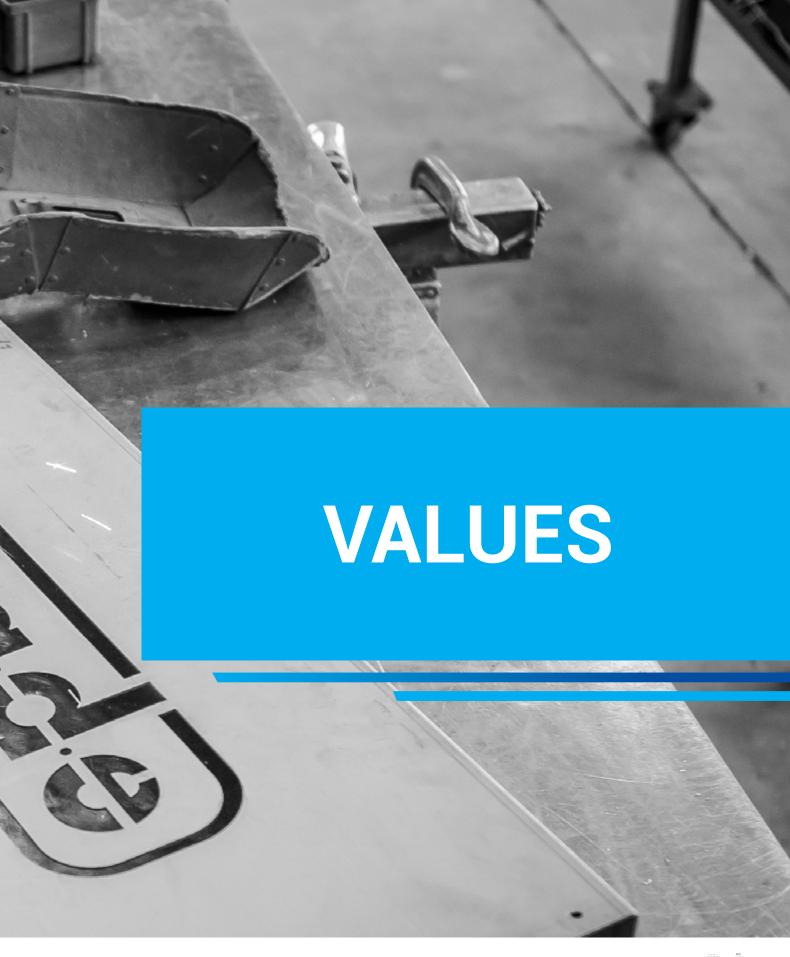


Collection

















Quality for Gade means control and management of the whole process. That's why total in-house production is still now Gade's outstanding feature. The company is certified ISO 9001 and ISO 14001 by TÜV.



The curiosity towards what is new, the drive towards innovation, the desire to improve. Gade is a dynamic company, open to evolution and new technologies.



Behind every machine there is always a mind: passion is the engine that drives operators to manage any projects with dedication, accuracy and precision.













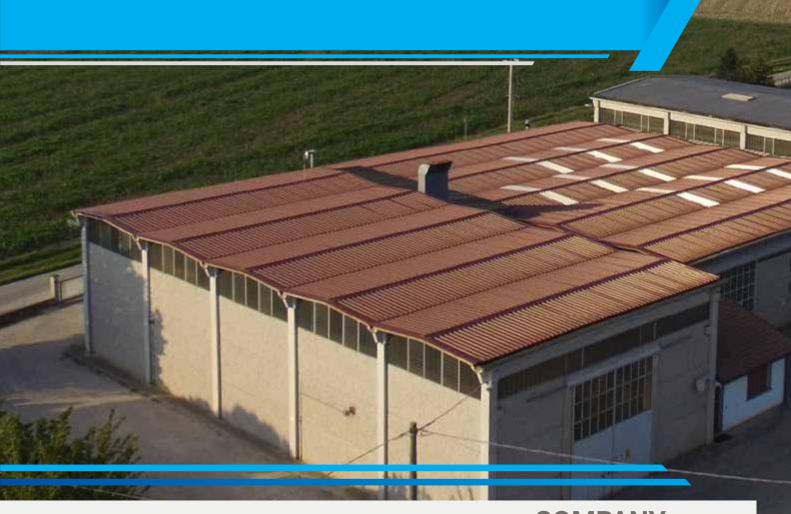












#### **COMPANY**

**4** 

The history of Gade has always been focused on passion and innovation.

Building high quality machines for sheet metal processing is the goal we have set ourselves since our first day of activity, back in 1980.

More than thirty years have passed since then, but the commitment to the continuous improvement of our products has remained unchanged and has led Gade to become one of theest Italian companies in the sector.

**Gade**'s large market share has been possible thanks to its **reliable**, **sturdy and high-precision machines**.

**Gade** manufactures **top-of-the-range machine tools** for companies that process sheet metal and, in particular, supplies three product lines: hydraulic press brakes with electronic synchronization, electric bending presses and hydraulic guillotine shears.

Our company stands out in the Italian panorama not only for product high quality standards but also for theall-round assistance it provides to its customers. Both productesign and marketing as well as rapid and accurate customer service are performed inhouse.





A robust and properly dimensioned machine frame built using high performance machine tools and made of electro-welded thick plates able to resist higher workloads compared to the machine nominal bending parameters.







High-precision processing of the machine components thanks to the use of modern boring machines.







In-house machine coating in an environmental-friendly painting system operated by our qualified staff. Only water-based paints are used to ensure high quality and environmental respect.







Accurate performance of component part processing. Cylinder in-house assembly by highly qualified staff.





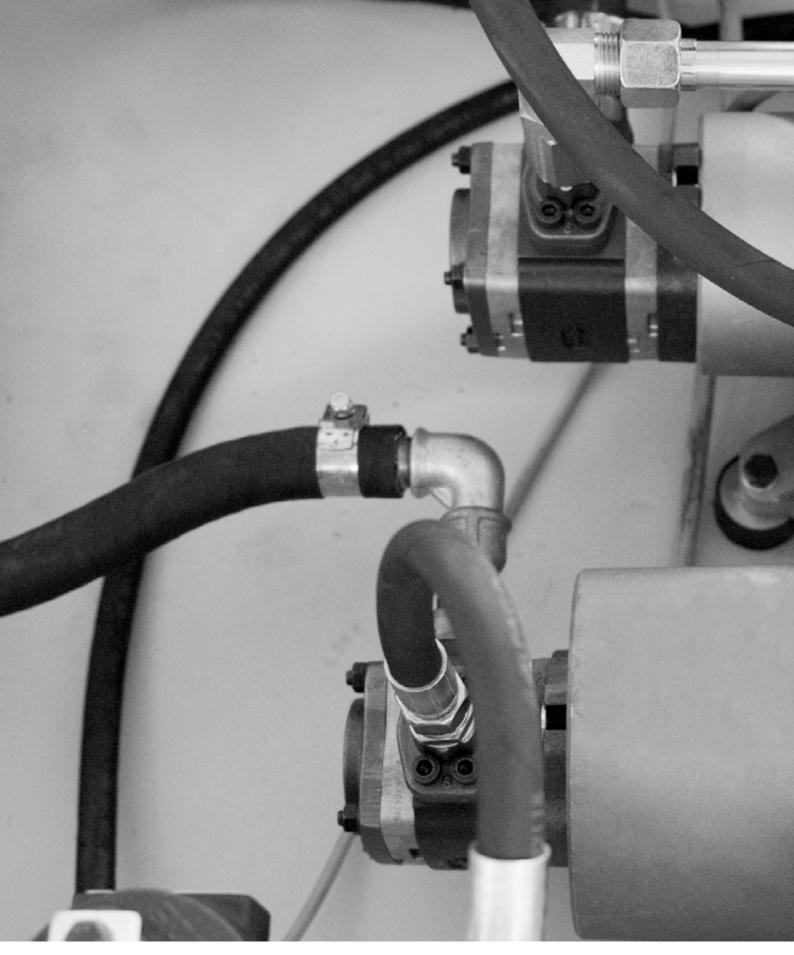




The press brakes of the Hybrid series, as well as all our machines, are totally in-house designed by our research and development department.















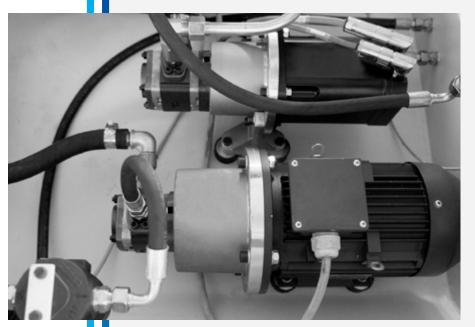




Lower t-table with sandwich-type hydraulic compensation of both top beam and t-table curve (HYDRAULIC CROWNING) for bending angle max precision on the whole length of the workpiece. All Gade press brakes are equipped with this system, which is automatically managed by numerical control.







Only components
manufactured by top
companies are installed
on Gade press brakes.
Hydraulic system
fine tuning for great
performances, reliability
and long lifetime.



Electrical panels are totally in-house designed and assembled using components manufactured by leading companies for great performances, reliability and long lifetime.





### **HYBRID: SPC-H series**

#### THE HYBRID PRESS BRAKE

- The operating principle of the HYBRID series press brake is based on two independent units (BRUSHLESS MOTOR + REVERSIBLE GEAR PUMP) each of them controlling a cylinder.
  Pros of the system:
- Electrical panels are totally in-house designed and assembled using components manufactured by leading companies for great performances, reliability and long lifetime.
- No proportional DIRECTIONAL valve is required and, as a consequence, no heat exchanger for oil heating has to be installed.
- Position accuracy of Y1, Y2 axes 0.001 mm
- High approaching, return and bending speed.
- Noiseless operation even during sheet bending.

#### **MAIN FEATURES**

- Specific features of Gade's Hybrid series press brakes:
- Improved bending precision thanks to micrometric linear transducers and brushless motors for direct pump control.
- Increased bending speed thanks to LazerSafe's IRIS system, supplied as standard with all the press brakes of this series.
  According to the sheet angular speed during bending the machine with linear speed up to 20 mm/sec.
- Improved dynamics and lower machine downtime thanks to speed change set at ZERO mm from the sheet plate
- Higher reliability and less maintenance required.





## SPC-H







### **HYBRID: SPC-H series**

#### STANDARD CONFIGURATION

- ESAUTOMOTION in PC version. 19" multi touch display.
- Increased cylinder stroke.
- 4 controlled axes (Y1 Y2 X1 R).
- Active hydraulic crowning.
- Promecam tooling with adjustable intermediate clamps and hardened and ground tools.
- Top tool clamps with quick release.
- Reduced length die holder.
- Front adjustable sliding backgauge fingers and locking brake.
- Iris LazerSafe laser front safety guard and manually adjustable support brackets.
- Mechanical side protections with safety switches.
- Rear safety protection with photocell curtain.
- Automatic centralized lubrication.
- Double pedal control.
- Sheet metal front supports sliding on ball recirculation guide.





## SPC-H

















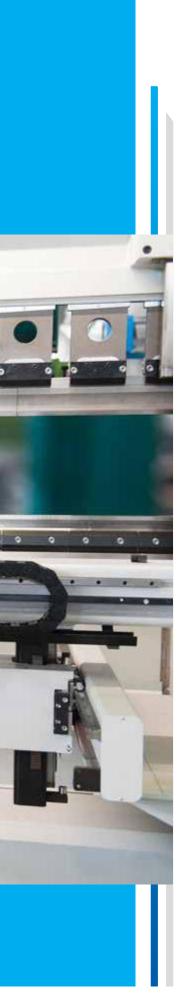




# Multi-axis backgauge.





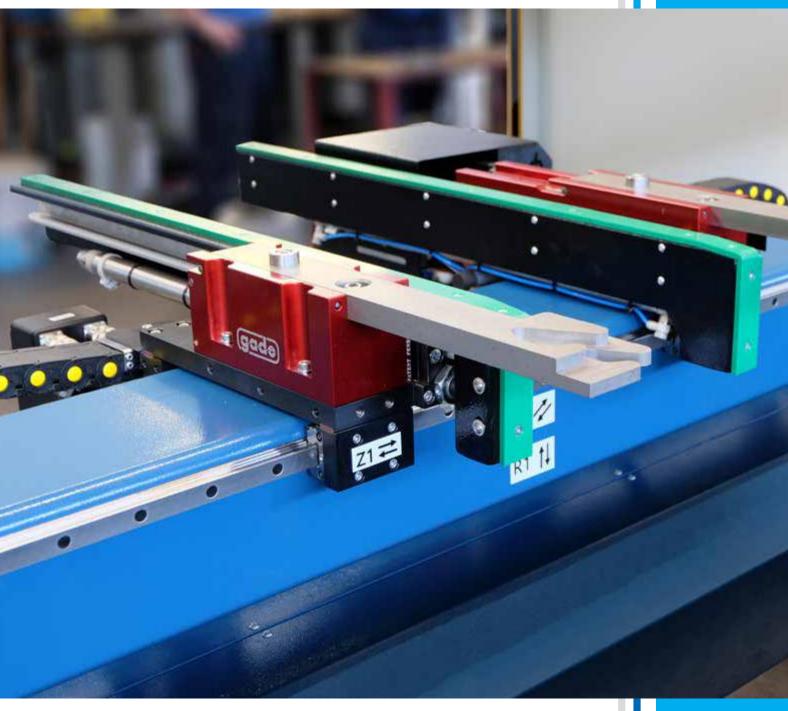




\* ATFL-type Cartesian multi-axis backgauge.







Additional backgauge fingers with contact LEDs.









Pneumatically operated retractable rear supports.







Intermediate clamps with front locking and unlocking, manual quick release and self-alignment.



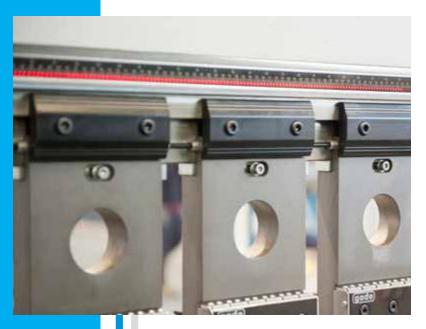
Adjustable intermediate clamps with front locking and unlocking, pneumatic clamping and selfalignment.



Adjustable intermediate clamps with front locking and unlocking, pneumatic clamping and selfalignment.







Top beam LED bar to ease machine tooling and the use of more bending units.



# Heavy duty adapter.







Motorized brackets for work area protection. CNC-controlled automatic positioning according to the installed top tool.







Real-time bending angle control through DATA M SYSTEM.



Bending angle control through LAZER SAFE Mod. IRIS PLUS









**CNC-controlled pneumatically operated hemming bench.** 







CNC-controlled automatic front supports (to be used together with hemming bench.)











CNC-controlled front sheet followers for easier bending.









**Wireless console.** 











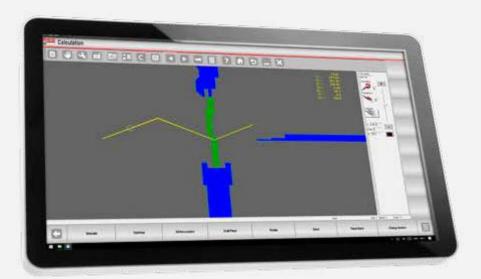






CNC S660W with 19' multi-touch PC screen





CNC 675 with 21' multi-touch PC screen (optional)





Software: Cad Cam 3d - include import dxf/other formats, 3d optimizer.





**#** Workpiece 3d visualizer.

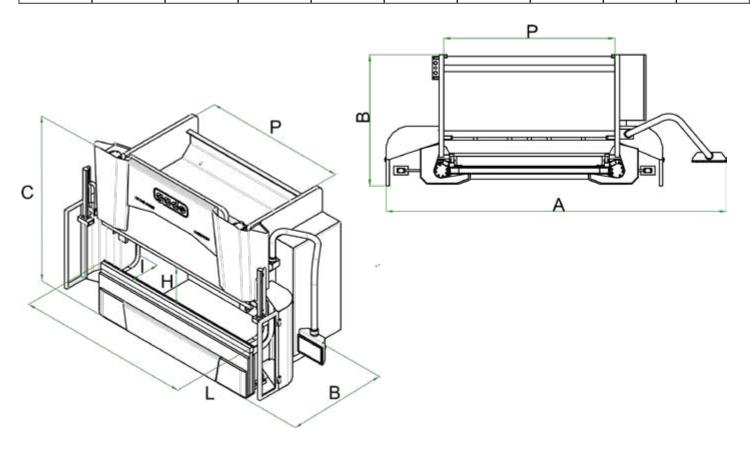


Software to manage Production Tracer events.





MODELS	NOMINAL FORCE	BENCH LENGTH L	DISTANCE BETWEEN SIDE FRAMES P	тнвоат <b>I</b>	BENCH/TOP BEAM DISTANCE H	Y-AXIS MAX STROKE	X1 AXIS STROKE	X5 X6 AXES STROKE	R AXIS STROKE
	kN	mm	mm	mm	mm	mm	mm	mm	mm
SPC-H 2595	950	2700	2100	500	560	350	800	± 150	150
SPC-H 395	950	3200	2600	500	560	350	800	± 150	150
SPC-H 3130	1300	3200	2600	500	560	350	800	± 150	150
SPC-H 4130	1300	4200	3600	500	560	350	800	± 150	150
SPC-H 3180	1800	3200	2600	500	560	350	800	± 150	150
SPC-H 4180	1800	4200	3600	500	560	350	800	± 150	150
SPC-H 3245	2450	3200	2600	500	610	400	800	± 150	250
SPC-H 4245	2450	4200	3600	500	610	400	800	± 150	250
SPC-H 3345	3450	3200	2600	500	660	400	800	± 150	250
SPC-H 4345	3450	4200	3600	500	660	400	800	± 150	250
SPC-H 3445	4450	3200	2600	500	660	400	800	± 150	250
SPC-H 4445	4450	4200	3600	500	660	400	800	± 150	250







Z1-Z2 AXES STROKE	APPROACHING SPEED	WORKING SPEED	RETURN SPEED	A	В	၁	MAX POWER CONSUMPTION	APPROX. WEIGHT	ВЕАМ НЕІСНТ
mm	mm/sec	mm/sec	mm/sec	mm	mm	mm	kW	kg	mm
2100	300	1 : 20	300	4700	1900	2950	14	9100	950
3100	300	1 : 20	300	5700	1900	2950	14	10700	950
2100	300	1 : 20	300	4700	2000	3000	20	12550	950
3100	300	1 : 20	300	5700	2000	3000	20	14600	950
2100	300	1 : 20	300	4700	2050	3000	21	15000	950
3100	300	1 : 20	300	5700	2050	3000	21	16900	950
2100	300	1 : 20	300	4700	2200	3300	28	19800	1000
3100	300	1 : 20	300	5700	2200	3300	28	22500	1000
2100	200	1:13	200	4700	2300	3500	33	23500	1000
3100	200	1:13	200	5700	2300	3500	33	28000	1000
2100	200	1:13	200	4700	2400	3550	52	26500	1000
3100	200	1:13	200	5700	2400	3550	52	32000	1000

