



Sheet Metal At Its Finest

Punching

Bending

Cutting

Copper Processing

Tool Grinding

Laser-/Plasma Cutting

Overview Brochure

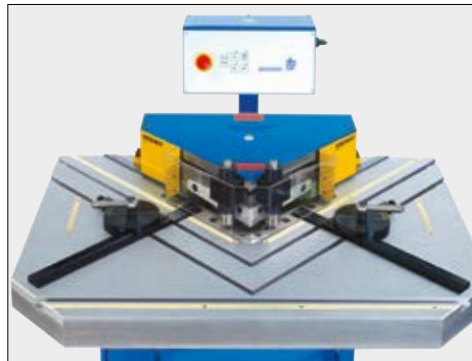


Notching Machines

Notching with 90°



LB12/4



LB 13



LB 15/2000

Type	Notching of 90°
LB 12/4	225 x 225 x 4 (3) mm
LB 12/6	225 x 225 x 6 (4) mm
LB 13	225 x 225 x 6 (4) mm
LB 15/2000	225 x 225 x 8 (6) mm

Hydraulic fixed angle machines permit notching at an angle of 90°. Clean cuts are guaranteed in all sheet metal thicknesses combined with high repetitive accuracy.

The TRI-GIDE System allows for cutting on one side of the blade and when used in conjunction with the depth stop bar, components and blanks can be sheared.

With the design features incorporated, extra long blade life is assured even when notching special steels. With the design features incorporated, extra long blade life is assured even when notching special steels.

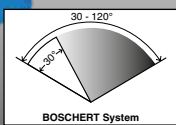


Three-Point Guiding

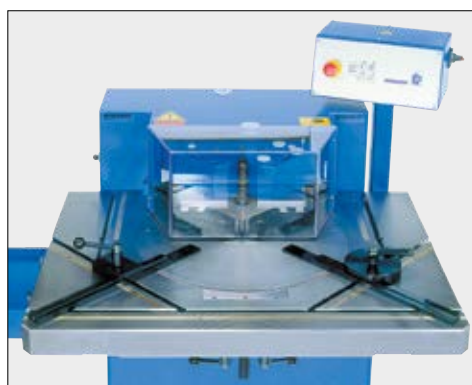
Adjustable angle from 30° - 120°



Mini S



Type	Notching from 30° bis 120°
K 30-120 Mini S	150 x 150 x 4 (3) mm
K 30-120	200 x 200 x 6 (4) mm



K 30 - 120

BOSCHERT's blade system for variable angle notchers is unique in the world whereby a 30° upper blade is directly connected to two corresponding lower blades.

All notches of more than 30° are accomplished automatically with a right and left notch.

Pneumatic power rotates after each stroke. This unique and innovative system guarantees exceptionally long blade life when compared with other conventional variable angle systems.

Second stations machine



Second stations for multi-purpose applications. Most of our models can be equipped with a second station. Please see our technical data for more details. For the second station we offer the highest flexibility on our models e.g. punching station for Trumf tools, fast exchange blades or coping station with 25x100 mm shape.





Manual Operated Punching Machine



ECCO LINE 500 digital

Mode of Operation:

When the tool is set, the material stops are repositioned in the X and Y axes and the work piece is moved against the stops. When the foot pedal is pressed the ram punches the hole.

Characteristics of the machine:

- Maintenance-free hydraulic drive
- Constant punching pressure
- Compact design
- Continuous stroke adjustment

ECCO LINE manual

The hydraulic punching machines from the Ecco Line series are designed for sheet metal, plate and profiles.

The design is proven through the machines' flexibility and accuracy.

The machines of the Ecco Line series have 28 tons (optional 40 tons) punching pressure using the well-known Trumpf tooling system

Type	throat depth	X-axis
EL 300	300 mm	500 mm
EL 500	500 mm	1000 mm
EL 750	750 mm	1500 mm

Tool change:

Punch



Die



Profile options:



EvoLine with option for working profiles

With this new option you can punch angles up to a height of 90 mm with the extended length tooling.



EvoLine 500 digital with profile option





CNC Punching Machines



COMPACT EVO 1250 x 2000

COMPACT EVO

The Compact punching machine from **BOSCHERT** is the perfect machine for the first-time user of CNC punching technology.

Advantages:
user-friendly graphic programming,
high quality with low cost, small floor
space requirement.

Heavy duty C-frame construction allows working of over-sized sheets, by using turning and automatic repositioning function.



COMPACT EVO

Type	500 mm x 1000
Type	750 mm x 1500
Type	1000 mm x 2000
Type	1250 mm x 2500
Type	1500 mm x 3000

Control panel

10,5" TFT colour screen, ergonomically designed, it is adjustable and mounted on casters. USB, dual palm buttons, tool change position button, emergency-off.

The powerful graphic and conversational software guarantees simple and fast programming. It is also available in a PC version.



Index equipment and also stripper height adjustment

COMPACT EVO Rotation Index

Stepless 360 degree rotation of all tools up to 105 mm diameter using brushless DC motors and pneumatic indexing of Revotools.

The 7-way Revotool was especially constructed for this model.

In addition to 6 tools with a diameter of 16 mm each, with a slitting tool of 5 x 30 mm it is possible to punch nearly every contour, allowing complete processing of the sheet without changing tools.



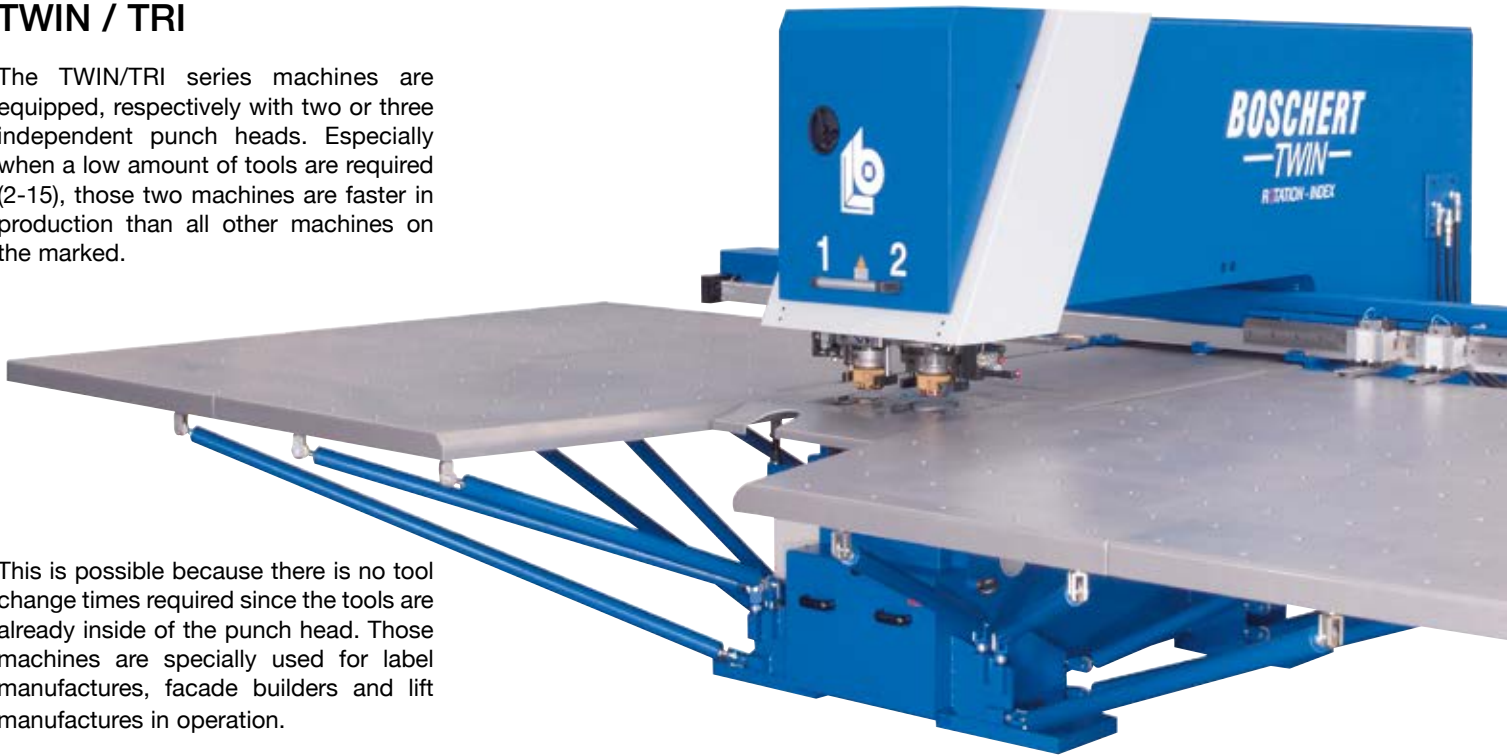


CNC Punching Machines

TWIN / TRI

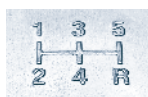
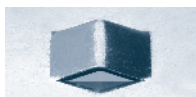
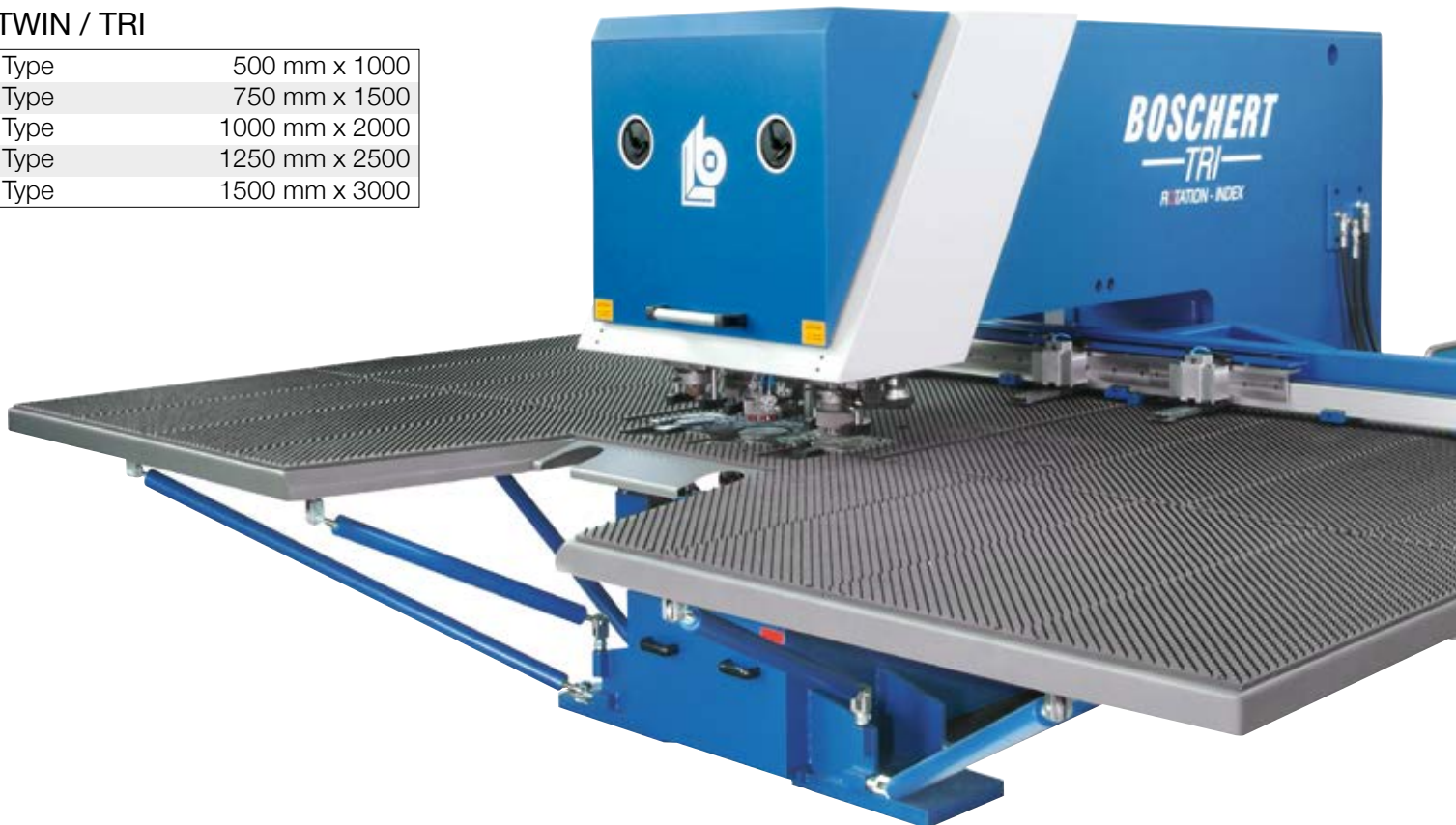
The TWIN/TRI series machines are equipped, respectively with two or three independent punch heads. Especially when a low amount of tools are required (2-15), those two machines are faster in production than all other machines on the market.

This is possible because there is no tool change times required since the tools are already inside of the punch head. Those machines are specially used for label manufactures, facade builders and lift manufactures in operation.



TWIN / TRI

Type	500 mm x 1000
Type	750 mm x 1500
Type	1000 mm x 2000
Type	1250 mm x 2500
Type	1500 mm x 3000





CNC Punching Machines



MULTIPUNCH 1250 x 2500

Rotation Index

360 degree stepless rotation of all tools, including Revotools. Maximum diameter of tools is 76.2 mm (3"). Driven by two brushless DC servo motors. The Revotools are changed by a pneumatic cylinder. 8 station tool carousel with cassettes that hold punch, die and stripper or Revotool head with 4, 6 or 8 tools.

Tool Changer

The Multipunch changes tools in 3-5 seconds. Revotools within the same cartridge are changed in less than 3 seconds.

MULTIPUNCH Auto Tool Change

The Multipunch tool carousel is mounted at the front of the machine, below table level.

The vertical and horizontal axis movements are controlled by ball screws with linear ball guides using double carriages.

The rotary axis positions the eight cassettes with a rack and pinion drive.

The Multipunch uses Trumpf style tools up to size II (3") and Boschert Revotools. It is possible to have up to 64 individual tools, all fully indexable, in the machine.

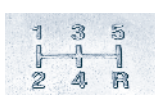
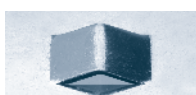
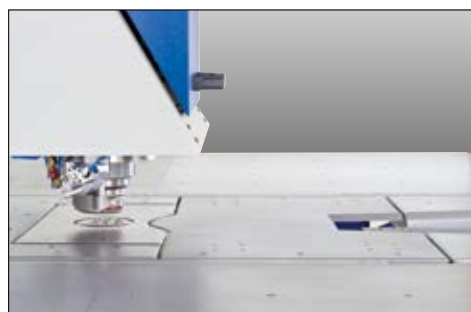
MULTIPUNCH

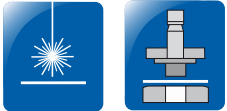
Type	1000 mm x 2000
Type	1250 mm x 2500
Type	1500 mm x 3000

The programmable small parts chute measures 200 mm x 300 mm.



8 station tool carousel with cassettes that hold punch, die and stripper or Revotool head with 4, 6 or 8 tools.





CombiLaser



CombiLaser Multipunch



Combicut laser TRI 3-head punching machine with 2xRevotool (head 1 + 3) and rotation / index (head 2)

Safety & Security



BOSCHERT has developed a security concept for the fiber laser in cooperation with the BG professional association. Optionally the machine can be also equipped with a sight protection device.

Programmable removal of small parts:



Finished parts on the CombiLaser can be quickly unloaded by means of two separate CNC controlled parts chutes. The part chutes are positioned directly in front of the fiber laser head and are 100x120 mm and 670x670 mm.

The ideal combination: Punching and Fiber Laser cutting

The trend in manufacturing is to make components that are lighter in weight, use less material, conserve resources and integrate functionality.

As such, customers are working with thinner sheet structures.

BOSCHERT has expanded its successful "Combi" series of machines to include fiber laser.

In close cooperation with our partner, Kjellberg Finsterwalde, Boschert has added the Kjellberg Xfocus 1000 fiber laser to its CNC punching line. The CombiLaser series is available with working ranges from 1000 x 2000mm to 1500 x 3000mm.

Now customers can produce complex parts on a single machine without repositioning.

CombiLaser

Type	1000 mm x 2000
Type	1250 mm x 2500
Type	1500 mm x 3000





FiberLaser

more than just light



FiberLaser 3015

Fiber laser in a compact design with many practical advantages

The **BOSCHERT** Fiber Laser is available in two sizes, 3015 and 4020 with a working range of 1500 x 3000 mm or 2000 x 4000 mm. Selectively these can be equipped with a 1 kW, 2 kW or a 4 kW fiber laser from our long-time plasma and laser technology partner Kjellberg.

The unique design results in very good accessibility when loading and unloading the machine table, which also has a part chute for the immediate discharge of cut pieces. These work pieces can be up to 350 x 1500mm and are reliably discharged over the entire table width.

Our design eliminates the problematic tipping of small, cut work pieces, which increases process reliability and ensures fast access to those work pieces.

In addition, waste products are transported via a second conveyor belt into a waste container which is located on the operator side.

Operational convenience for greater productivity and efficiency

The precise cutting system and the practical clamping concept also allow working on sheets as small as 500 x 50 mm, thus giving a very high degree of material utilization.

The sheet metal is clamped by a freely selectable number (max. up to 4) of pneumatic clamps guided on a ball screw.

The whole cutting unit travels and positions via a rack-and-pinion drive in the X-axis.

For the operator it is also an advantage that the maintenance opening for the laser head (for example for changing the nozzle) is arranged on the front, reducing the down time of the machine and increasing productivity.

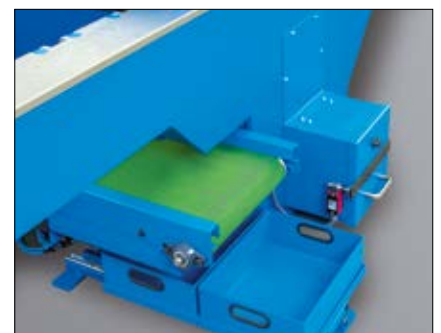
The laser head is moved and positioned quickly and precisely in the Y axis with a drive combination of ball screw spindle and linear guides.



Part chute

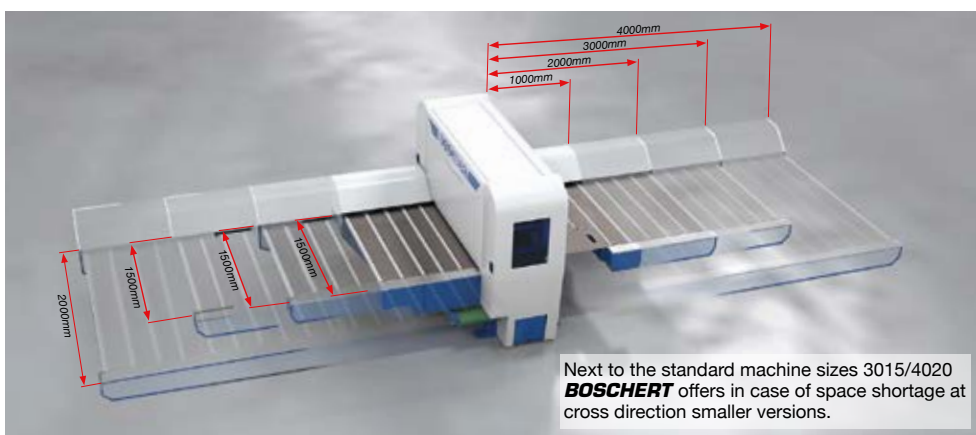


Easy maintenance



Part sorting

Variable machine sizes



Next to the standard machine sizes 3015/4020 **BOSCHERT** offers in case of space shortage at cross direction smaller versions.



Perfect accessibility





Plasma Cutting and Punching



COMBICUT

Producing complex inside and outside contours quickly at high quality is possible now also with Plasma.

Forming, offsetting, producing tongues, beads and even threads are the special domain of punching.

The **BOSCHERT** CombiCut unites the strength of all processes in one machine.

COMBICUT

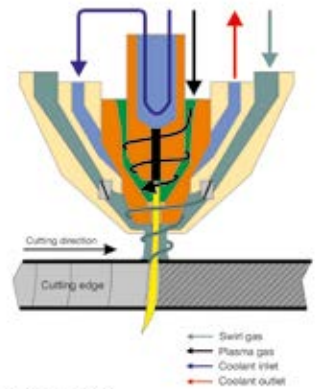
Sheet thickness up to 12 mm /
Plasma power 160A

Type	750 x 1500
Type	1000 x 2000
Type	1250 x 2500
Type	1500 x 3000

COMBICUT TWIN 1500x3000

Productivity, Quality, Flexibility:

The exceptional quality of the cutting surfaces is characterized by dross free cuts, the fine tolerance of the cut angle and straightness of cut, as well as smoothness of the cut edge and a positioning tolerance of +/- 0.2 mm. In addition, repeatability is 0.03 mm and is based on the technology of the HiFocus system, which is known world-wide.



Procedure principle



ErgoCut



ErgoCut 3015

The ErgoCut is manufactured with a stable, rigid portal design and equipped with a sophisticated linear guide system as well as a 5 axis CNC control system. Dynamic drives ensure positioning speeds of up to 30 meters/minute, with a guaranteed positioning accuracy of +/- 0.1mm. The cutting head speed can be adjusted from 10 to 8,000 mm/min, and therefore can be optimally adapted to the material to be cut and its thickness.

The Kjellberg system HiFocus 160i, which has proven itself time and again in industrial use is used as the plasma source.

The Hypertherm HyPerformance plasma system is also available as standard equipment. The Kjellberg- and also the Hypertherm - systems have been successfully utilized in the Boschert CombiCut combination punch machines for many years and are distinguished by an outstanding cost/benefit ratio.

ErgoCut

3015	Working area	1530 x 3030
4020	Working area	2030 x 4030
	Cutting range	0,5-50 mm





CuProfi



The CuProfi is a specially designed machine for punching copper, aluminium and steel bar.

The CuProfi is capable of using eight tools to process highly efficient and complete copper bars in lengths up to 4000 mm or 6000 mm and in thicknesses from 2 to 15 mm (optionally 20 mm).

Moreover, the machine has a separating tool station (60 x 8 mm), and with this, it is possible to accurately cut the copper bars to the desired length.



Optional threading from M3 to M16.
Three thread diameters can be in operation simultaneously.

The copper bars may be 12-200 mm wide. The material is fed by clamps gripping the bar from each side, resulting in flat and straight parts with nearly no waste.



CuMaster



With the CuMaster, **BOSCHERT** offers a universal solution for copper processing. This machine can punch copper up to 305mm wide and 20mm thick material. All 8 stations can be equipped with 8-way (D. 16 mm) or 3-way (D. 31.7 mm) Multitools. Additionally, the CuMaster could also have a 200x8 mm cutting station. The clamp width is automatically adjustable and can be moved on both sides in the X direction. This enables processing without a leftover piece.



Working range





CU-FLEX

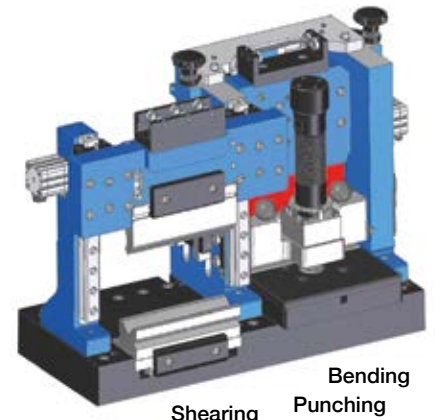


BOSCHERT CU-FLEX

The new CuFlex from **BOSCHERT** is a cost effective 3 in 1 machine.

Due to the compact design, significant floor space is saved versus three single machines. The machine is also suitable for handling aluminium and steel. Back gauge and bending control with CybTouch 15 CNC.

Schematic view of the working stations



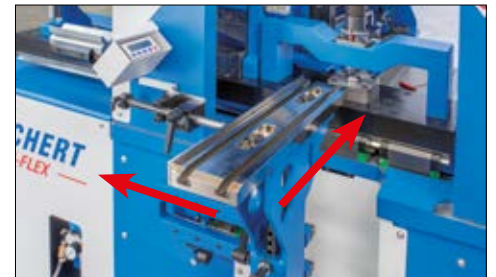
Bending



Shearing



Punching



Movable front gauge with digital readout



Stierli-Bieger Universal Bending Center

The Stierli-Bieger horizontal bender is a modern and powerful solution for the efficient fabrication of busbar.

The integrated angle correction automatically compensates for any spring back and differences in material, thus achieving extremely high precision and reliability. In addition to the measuring tools, many other tools including those for edgewise bending, offset bending and twist bending can be quickly and economically added. Programming can be done at the machine with the simple yet powerful graphic control or by off-line systems used in conjunction with the **BOSCHERT** punching systems.



Technical data:

220 CNC-WP

Working force:	220 kN
Tooling height:	150 mm
Bending capacity:	150 x 16 mm
CNC length stop:	1 m / 2 m / 3 m

420 CNC-WP

Working force:	420 kN
Tooling height:	200 mm (250mm)
Bending capacity:	200 x 16 mm (20)
CNC length stop:	1 m / 2 m / 3 m



Messuring prism with automatic spring-back compensation and bending without marks for copper, aluminium and steel.



Profi Bend28 NC / CNC



Profi Bend 28/1000 NC



CybeleC CybTouch15

Profi Bend 28/1000 CNC

Profi Bend 28

NC	28t Bending force	1000 Bending length
CNC	28t Bending force	1000 Bending length

The Profi Bend 28 is simple to operate. The ram can be adjusted under pressure by using the hand wheel.



The powered back gauge is programmable with up to 99 programs of 30 lines each.

The **BOSCHERT** Profi Bend 28 NC and Profi Bend 28 CNC are precision hydraulic press brakes.

With a maximum bending force of 28 tons, typical work could include parts up to 300mm long and 10mm thick. Standard tooling is Amada style, with other systems available on request. Material stops are adjustable vertically and horizontally and have stop fingers with three faces each.

The extremely compact and robust structure of these machines and the twin guides guarantee ram repeatability of 0.02mm.

The Profi are designed to manufacture small parts and perfectly complement your existing larger machines. By forming small parts on the Profi and larger parts your existing machines, plant productivity is greatly improved.



2 or optional 4 side adjustable back gauges and optional 2 adjustable front supports



Profi Bend 56 CNC



Profi 56/1400 CNC

The Profi Bend 56 CNC models are available in 1400 and 2200 mm bending lengths. The pressure of 56 tons takes place with 2x28 ton force cylinders.

All CNC Profi Bend 28/56 Press Brakes machines are equipped with the Cybelec CybTouch15 as a standard control.



Optional CYBELEC VisiPac 19

Profi Bend 56 CNC

56 t Bending force	1400 Bending length
56 t Bending force	2200 Bending length



Quick Bend 28 CNC



Quick Bend 28 CNC
Hybrid Technologie

Productivity and ergonomics are combined in perfect harmony.

The nearly silent press brake Quick Bend, with up to 250mm/s approach speed and 200mm/s return speed is setting new standards in production.

Thanks to the hybrid technology, up to 80% energy savings compared with conventional hydraulic systems can be achieved.

The Quick Bend corresponds to all CE - Safety requirements with the CYBELEC VisiPac19 graphic controller, Rexroth hydraulics and the Fieessler AKAS V. Other standard equipment includes the R-axis, linear guide for the X axis and the quick-change tool system ROL 200.

Quick Bend

28 t Bending force	1000 Bending length
56 t Bending force	1400 Bending length
56 t Bending force	2200 Bending length



BOSCHERT Gizelis Press Brakes and Shears

Press Brakes and Shears from Gizelis:

To provide a complete line of sheet metal processing machinery, **BOSCHERT** created a partnership with Gizelis. This Greece based, joint venture, operates from a brand new modern factory developed by the partners.

Gizelis has over 55 years experience in building high quality press brakes and shears and has delivered over 2.000 machines.



G-Blend Plus 3140



Hybrid

G-Bend Plus

Bending force	800 - 8800 kN
Working lengths	2000 - 7000 mm

G-FLEX / G-BEND PLUS / HYBRID

Bending force	800 - 4400 kN
Working lengths	2000 - 7000 mm



G-Cut 3006 CNC



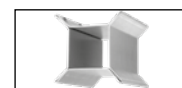
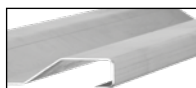
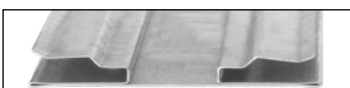
G-Cut 3010 CNC

G-ELECTROCUT CNC

Cutting thickness for mild steel	6 mm
Cutting lengths	2000-4000 mm

G-CUT CNC

Cutting thickness for mild steel	4-20 mm
Cutting lengths	2000-6000 mm



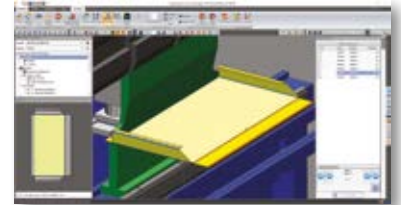


BG-Soft BG-Bend / BG-Cut

The performance Soft-Package for Bending and Punching/Cutting.
On request also available as a single version.

BG-Bend

BG-Bend is an application for programming and import of SolidWorks, Solid Edge and Inventor 3D files. The software generate with the automatic or manual tool selection the bend sequencing with collision detection and back gauge finger stops positioning the program. These programs from the Press Brake could be used for 2D BG-Cut of punching or Laser machines considering all information's of the bending result of the Press Brake tools.

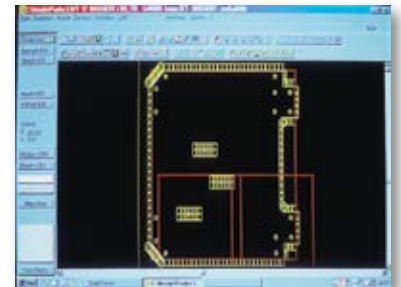


BG-Bend:

- 3D Import and design
- Automatic and manual tool selection
- Automatic and manual bend sequencing with collision detection
- Automatic and manual finger stop positioning with graphic control of all axis
- Automatic retraction calculation
- 3D simulation of bending process with collision detection
- Online capability
- Setup reports for the machine operator including bend sequences, tooling and bend-by-bend graphics

BG-Cut

BG-Cut produce depending on automatic or manual selection the processing contours with the required tools. After the machine program for the punching or laser machine has been created, a setup and processing report can be created.



BG-Cut:

- Direktimport von BG-Bend
- 2D Import and drawings
- Machine selection punch or laser
- Automatische sowie manuelle Werkzeug- oder Laserauswahl
- Special tools
- Manual nesting
- Automatic nesting (option Auto Nest)
- 2D simulation
- Online capability
- Setup reports

BG-Cut Auto Nest (Option):

Offers optimal material utilization with AutoNest - CNC automatic nesting module. AutoNest is a powerful True Shape nesting tool offering versatile methods for automatic and manual nesting to achieve the best possible nesting solutions.



1 BG-Soft enhanced your productivity:

- Faster design-to-production times with automated features
- Offline programming means minimal machine down-time
- Collision-less bend sequences mean reduced stock wastage
- Tool libraries are compatible to available tooling resulting in production-ready Setup reports
- Technology report



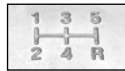
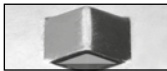
Punching Tools



We supply punching tools of very high quality.

Part of our Service Strength, is that we offer Punch Tooling for all of our Punching Machines, including Tools for Special Applications from design to supply.

This includes **BOSCHERT** Revotool, Trumpf and Amada Style.



Grinding Machine

Easy-sharp

Typ Trumpf

Typ Amada



BOSCHERT now offers a tool grinding machine which easily justifies its purchase, even for a small amount of tools.

To maintain the punch and die hardness during grinding our Easy Sharp is equipped with a coolant system.

Regular and timely grinding of the tools guarantees a constant punch quality and increases the tool life as well as protecting your punching machine.

We would be happy to discuss the advantages of the user-friendly EASY SHARP tool grinding machine from **BOSCHERT**.



BOSCHERT

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