



MULTIPUNCH 4020
Punching
Nibbling
Forming
Marking
Tapping



simply better!



Multipunch 4020 tool changer



Special features

- Sheet size up to super format 2000 x 4000 mm
- Tools up to Trumpf size 3 (Ø 105mm)
- Flexible forming from above and below (active die)
- Stable „O“ frame
- 12-way auto tool changer
- Punching machine part chute up to 400 x 2000 mm
- Sorting system for small parts up to 150 x 150 mm
- Expandable options / thread cutting / stud welding ...
- Repositioning for sheets up to 9999 mm length
- Fiber Laser cutting system up to 4KW can be combined

The new CNC punching machine **BOSCHERT** MultiPunch 4020 completes the proven MultiPunch series and is specially designed for the processing of sheets in the so-called super format of 2,000 x 4,000 millimeters.

With its universal punching head, the MP 4020 enables the user a flexibility and double-sided forming of sheet metal up to a sheet thickness of 6 mm. Up to 28 tons of punching force are available for this.

The newly developed O-frame gives it the necessary stability.

The **BOSCHERT** MultiPunch 4020 is equipped with a quick twelve-station tool changer that reduces idle times.

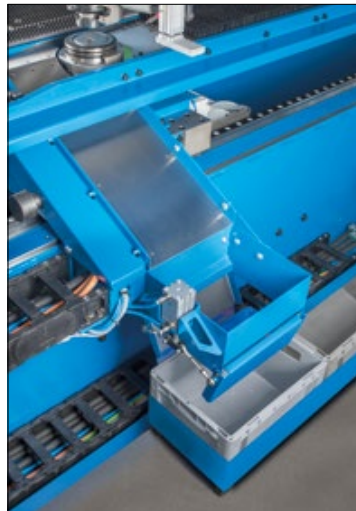
The machine can be expanded in many ways. For example, the **BOSCHERT** MultiPunch 4020 can be equipped with a thread cutting unit or with a fiber laser with a maximum output of 4 kilowatts. This gives the user numerous other options for sheet metal processing.

Axis guiding x-axis



Servo geared motor with precision rack and pinion drive.

Part chute



Movable disposal for small parts with sorting function for 5 stacking trays.

O-Frame/Part chute



Solid welded steel construction guarantees the highest stability for punching sheets up to 12,7 mm thickness.

Part chute on the left up to part size 400 x 2000 mm. A conveyor belt move the parts to the operator side

Electrical cabinet

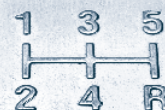
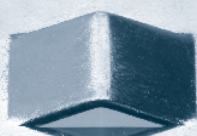
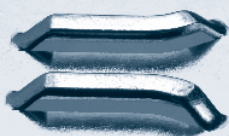


Open and easily surveyed panel includes digital control, cooling fan, transformers and control.

Industrial CPU

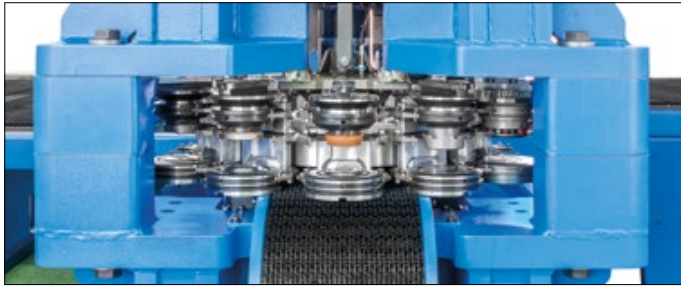


Control with internal memory, USB port and LAN RJ 45 for network connection. Possible remote maintenance by internet.



Rotation Index

360 degree stepless Rotation of all tools (incl. Revotool) up to a diameter of maximum 105 mm with 2 servo motors and pneumatic indexing.

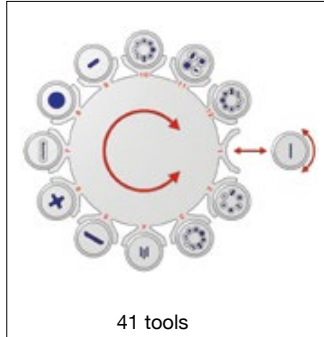


12 Tool stations with cassettes for automatic tool change with easy exchangeable cassettes for punch, stripper and die.

Tool change



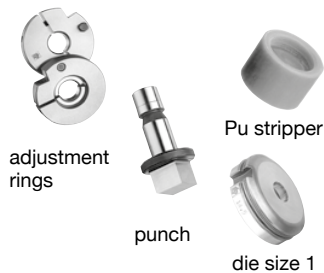
Possible tool setup



The MultiPunch 4020 could change tools in 3-5 seconds. In combination with Revotool are also less than 3 seconds possible.

Trumpf® Standard Tools

All Trumpf standard tools up to size 3 can be used and also all **BOSCHERT** Revotools. Therefore the Multipunch could handle up to maximum 96 tools.



- easy handling
- low cost
- long tool life
- long regrind length



Technical Data

Working area

Multipunch 4020

Performance

Max. sheet thickness Choose material thickness clamps for either 7 mm (1/4") or 12,7 mm (1/2")

Revotool: 4 mm (5/32") Max. sheet lengths 9999 mm by repositioning

Max. hydraulic punching power 280 kN

Max. workpiece weight 400 Kg

Speeds

Max. positioning speed

X-axis 60 m/min

Max. positioning speed

Y-axis 60 m/min

Simultaneous X & Y 85 m/min

Max. strokes HDE hydraulic 800 strokes/min

Tooling

Trumpf tooling system

Max. punching diameter 105 mm or any shape within 105 mm

Revotool 4/6/8 stations, shapes fitting within 25/20/16 mm

Time of tool changing 1-5 sec.

Axes accuracy during punching process

Positioning difference + - 0,10 mm

Repeatability + - 0,03 mm

Space requirement and weights ¹

Multipunch 4020 9.400 x 6.500 x 2.600 mm

Weight 18000 kg

Electrical values

Electrical connection value 25 kVA

Hydraulic motor 15 kW

Electrical consumption 2 mm sheet thickness

Continuous operation 7,7 kW/h

Electrical consumption 4 mm sheet thickness

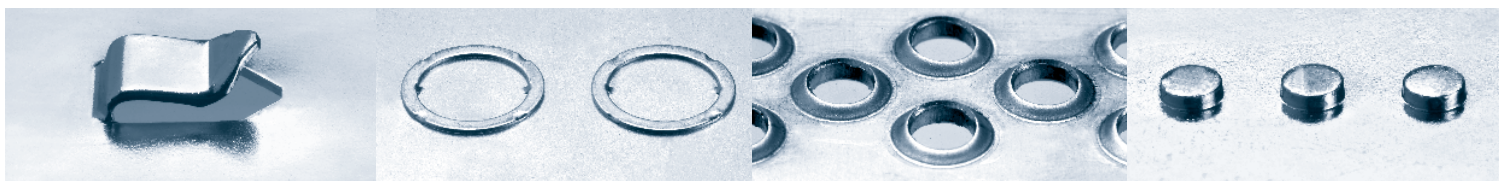
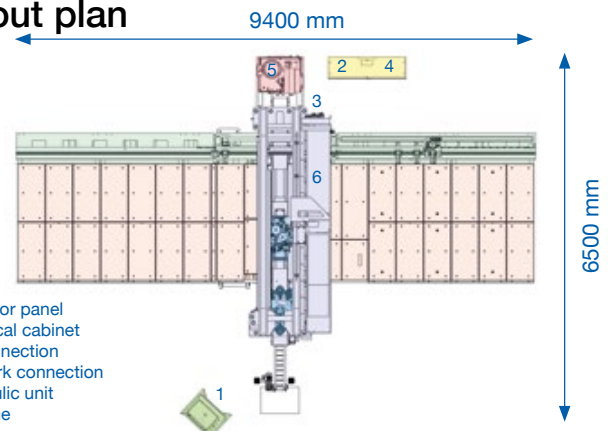
Continuous operation 8,75 kW/h

Required fuse 3 x 35 A

Pneumatic connection value min. 4 bar

¹ The exact values can be found in each specific layout plan.

Layout plan



Option Fiber Laser

- Machine could be equipped with Laser as a CombiLaser machine
- Independent drive of Y-axis
- Laser safety through safety cover
- 1 kW, 2 kW and 4 kW available
- Including suction unit

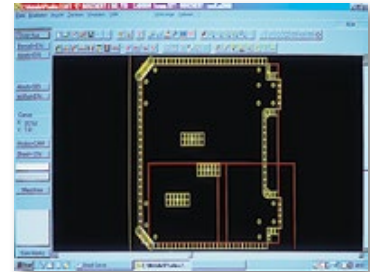


BG-Cut

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



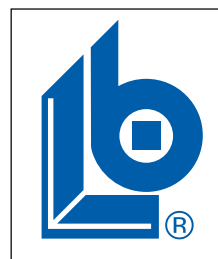
BG-Cut Auto Nest: (Option)

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



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