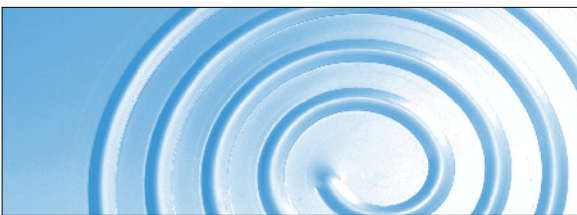
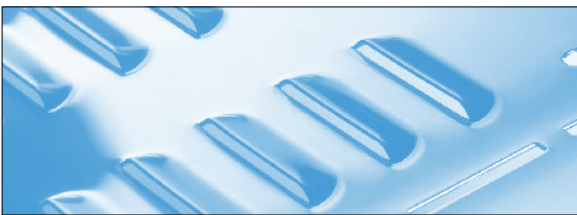
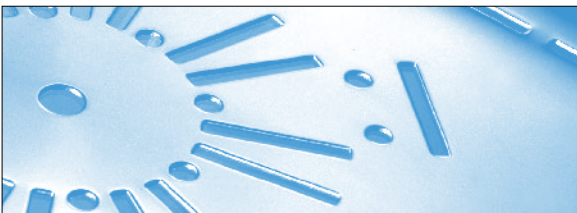
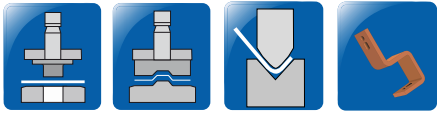




TWIN / TRI



Punching
Nibbling
Forming
Marking
Tapping



TWIN / TRI



The **TWIN/TRI** series machines are equipped, respectively with two or three independent punch heads.

Either series can be equipped with Revotool, Boschert's multi-tool solution. Up to 16 tools in the TWIN series and up to 24 tools in the TRI series allow the working of complex parts without tool change.

A distinct advantage of all Boschert CNC punching machines is the user-friendly software. The heavy-duty, open C-frame design allows turning of oversized sheets. The powerful software suggests options for automatic repositioning and turning/flipping of large parts

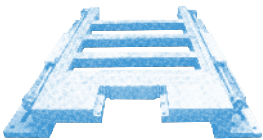


Frame

Solid welded steel construction designed using elemental analysis tools guarantees the highest stability for punching sheets up to 12,7mm thick.

Robust construction

Widely spaced ball screw and linear guides guarantee positioning accuracy and repeatability.



Electrical cabinet

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

Industrial CPU

with RS232 and Modem connection. As an option also available with expanded memory and USB or wireless LAN.



Control panel

10,5" TFT colour screen, ergonomically designed, it is adjustable and mounted on casters. Floppy disk drive, 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.





Rotation Index

One of the heads in either series machine can be equipped with full 360 stepless rotation of all tools up to 105mm in diameter. Designed especially for rotation machines, a 7-position Revotool includes a 5mm x 30mm

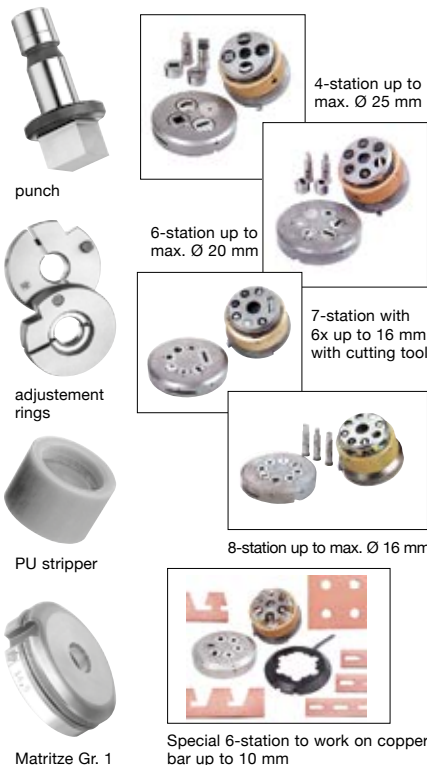
parting tool thus allowing contouring, shaker parts, etc. In addition to the slitting tool, 6 positions with a maximum diameter of 16 mm are accommodated.



Solid construction of the punch heads with DC motor and measuring system



Punching head rotation
Index equipment and also stripper height adjustment



Trumpf® standard tooling

- easy handling
- low cost
- punch assembly mounts directly in the punch head without an adapter
- long tool life
- long regrind length

Technical Data

Working area

TWIN / TRI	500x1000	560x1000 mm
TWIN / TRI	750x1000	810x1500 mm
TWIN / TRI	1000x2000	1060x2000 mm
TWIN / TRI	1250x2000	1310x2500 mm
TWIN / TRI	1500x3000	1560x3000 mm

Performance

Max. sheet thickness	6,4 mm clamp opening / 4 mm Revotool ¹
Max. sheet length	9999 mm by repositioning
Max. hydraulic punching power	280kN
Max. workpiece weight	200Kg

Speeds

Max. positioning speed X- axes	60 m/min
Max. positioning speed Y- axes	30 m/min
Simultaneous X & Y	67 m/min
Max. strokes standard hydr.	250 strokes/min
Max. strokes fast hydr.	800 strokes/min

Toolings

Trumpf® tooling system	
Max. punching diameter	105 mm or any shape within 105 mm
Revotool	4 / 6 / 7 & 8 stations
Time of tool changing	2-4 sec. Revotool 15 sec. manual

Axes accuracy during punching process

Positioning difference	+ - 0,05 mm
Repeatability	+ - 0,03 mm

Space requirement and weights²

TWIN / TRI	500x1000	4480 x 4088 x 2100 mm	weight	7500 kg
TWIN / TRI	750x1500	5100 x 4713 x 2100 mm	weight	11500 kg
TWIN / TRI	1000x2000	6100 x 5338 x 2100 mm	weight	12500 kg
TWIN / TRI	1250x2500	7060 x 5963 x 2100 mm	weight	14000 kg
TWIN / TRI	1500x3000	8060 x 6588 x 2100 mm	weight	15800 kg

Electrical Values

	standard hydr. / fast hydr.
Electrical connecting value	20 / 25 kVA
Hydraulic motor	4,8 / 11 kW
Electrical consumption 2 mm sheet thickness continuous operation	4,9 / 7,7 kW/h
Electrical consumption 4 mm sheet thickness continuous operation	5,4 / 8,75 kW/h
Required fuse	3 x 25 A / 3 x 35 A
Pneumatic connecting value	min. 4 bar
Hydraulic oil	115 / 160 Liter

¹ Mild steel St 40/mm²

² The exact values can be found in each specific installation plan



Weitere Komponenten der TWIN / TRI



An L-sheet is provided with all machines for working very small pieces and pre-bent parts. (Standard)



Nibbling up to 800 strokes / min with integrated oil cooling



Programmable repositioning of the clamps for faster set up of the machine.



Vacuum slug removal



Tapping and drilling attachment for threads M3 up to M12 and smaller drilled holes in thicker sheet



The automatic tool lubrication serves to increase tool life when nibbling stainless steel (VA) and decreases edge burrs in aluminium



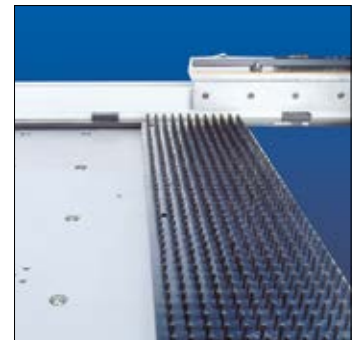
CNC/CAD software to import DXF-files into machine language, calculated punch time, graphic simulation



Marking apparatus for marking parts in 10 different fonts.



Repositioning up to 10 meters and clamp movement without contacting the sheet. 2 robust clamps for sheets up to 200 kg (expandable to 4 clamps). Standard capacity up to 7 mm or 12,7 mm when required. (Standard)rd



Sandblasted, corrosion resistant surface as standard. Balls in the table for heavier sheets and easy handling, brushes in the table for thin or scratch sensitive sheets are also available.



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