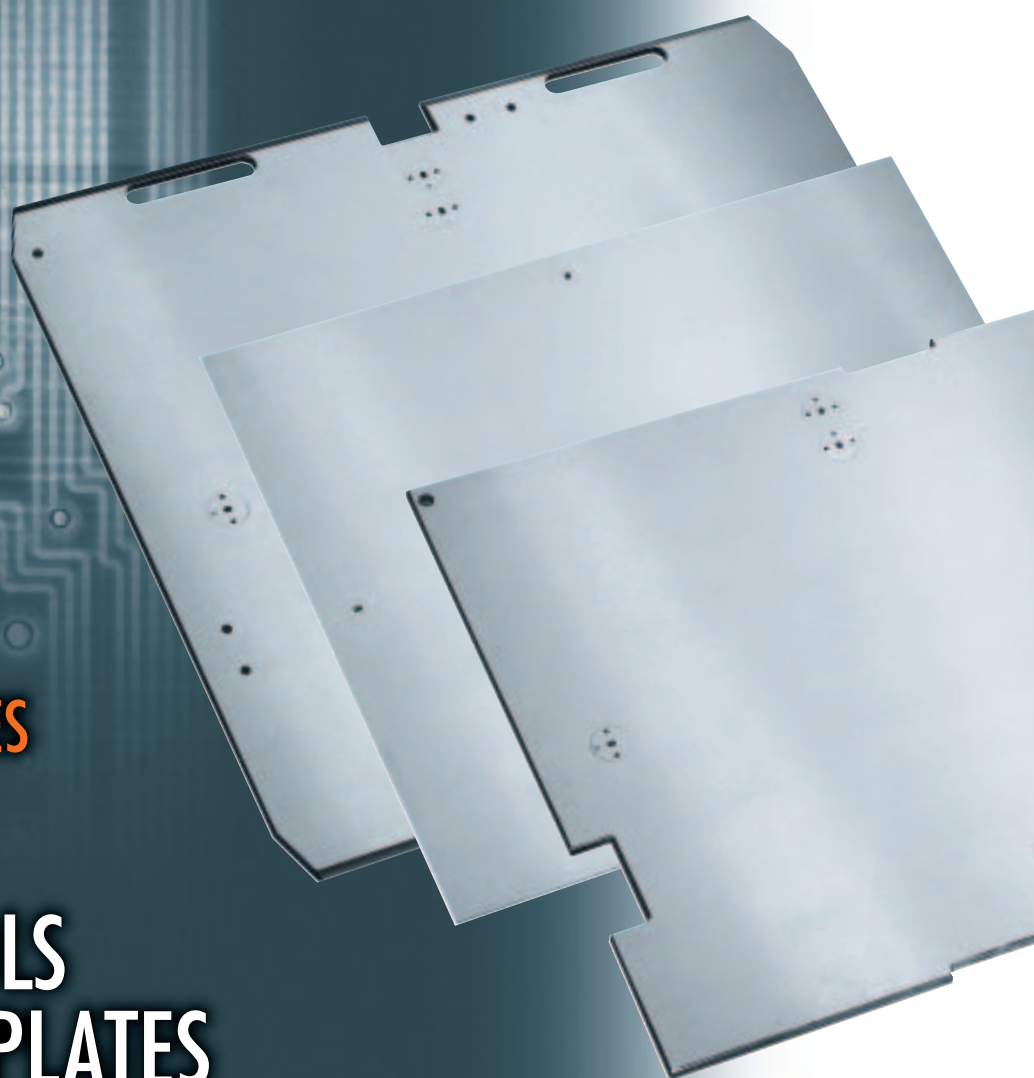
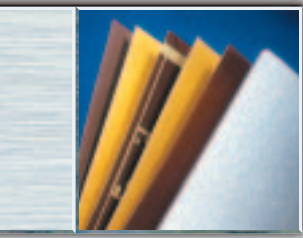


BÖHLER SPECIAL PLATES -
DO THE JOB ALL OVER THE WORLD



BÖHLER PRESS PLATES

**MULTILAYER
PRESSING TOOLS
& SEPARATOR PLATES**



BÖHLER PRESS PLATES FOR MULTILAYER

OUR ADVANCED TECHNOLOGY GUARANTEES HIGHEST QUALITY AND COST-EFFECTIVE FABRICATION OF PRINTED CIRCUIT BOARDS.

Our long tradition in metal processing combined with our motivation in the development of new ideas has made us one of the most significant producers of press plates world wide.

Integrated production – this means durable control in all production steps, from melting to surface finishing – helping to guarantee the constant high quality of our press plates. Only the cleanest steel is used during our manufacturing process which can only be achieved with state-of-the-art melting technologies.

Our cross rolling technology decisively influences the isotropic mechanical and physical properties of the press plates and in combination with the use of our precipitation hardenable steel Böhler N702 (AISI 630) – a material developed and patented for this application by Böhler – excellent flatness behaviour and highest tolerance requirements can be guaranteed.

And this is only half the success – our strengths are our service and our qualified and committed workforce.

Flexible because of know-how and competent because of our highest standards in quality and service.



TECHNICAL SPECIFICATION PRESSING TOOLS

GRADE	Böhler N702	Böhler M461
Standard	DIN 1.4542 / AISI 630	~ NAK 80
Hardness (HRC)	45 – 50	38 – 43
Thermal conductivity 200° C (W/m.K)	34	29,5
Thermal expansion 20 – 200° C (m)	10.8 x 10 ⁻⁶	12.2 x 10 ⁻⁶
STANDARD TOLERANCES		
Length, Width (mm)	+ / – 0.5	
Thickness (mm)	+ / – 0.1	
Parallelism (mm)	0.03	
Flatness (mm)	< 0.2	
Registration holes (mm)	Ø 0.04	
SURFACE FINISH		
Böhler K80 (Ra µm)	1,2 – 2,5	

Other demands and closer tolerances upon request.

UNEQUALLED PERFORMANCE FOR THE ELECTRONIC PRODUCTS OF TOMORROW

PRESSING TOOLS

High pressure as well as temperatures up to 400° C requires precise standards for Top- and Bottom tooling plates. The grades **Böhler N702** and **Böhler M461** were specifically selected for this purpose to achieve stability against distortion and thermal shock stresses. This leads to consistent high dimensional stability and optimum flatness, which is essential for high quality Multilayer Boards, trouble free processing and extended plate life. As a matter of course precisely positioned hardened bushings and standard round or sparked slotted registration holes with the tightest tolerances can be manufactured.

SEPARATOR PLATES

Separator plates are exposed to high stresses caused by changing pressure, temperature and by the cleaning operation with brushes. The quality of our separator plates in grade **Böhler N702** ensures an excellent performance due to the high hardness, flatness and parallelism including a superior surface finish. The outstanding properties of Böhler separator plates create a positive influence on each production process. Special melting technologies guarantee the superior cleanliness of Böhler steel which helps to prevent pitting. This ensures the consistent high quality of Multilayer Boards and cost efficiency.

We also provide a fast and professional service to refurbish used press plates.



TECHNICAL SPECIFICATION SEPARATOR PLATES

GRADE	Böhler N702	
Standard	DIN 1.4542 / AISI 630	
Hardness (HRC)	45 – 50	
Thermal conductivity 200° C (W/m.K)	34	
Thermal expansion 20 – 200° C (m)	10.8 x 10 ⁻⁶	
STANDARD TOLERANCES		
Length, Width (mm)	+ / – 0.5	
Thickness (mm)	+ / – 0.1	
Parallelism (mm)	0.03	
Flatness (mm)	< 3.0 / m	
Registration holes (mm)	sparked Ø 0.04	lasered Ø 0.10
SURFACE FINISH		
Böhler K320 (Ra µm)	0,15 – 0,30	

Other demands and closer tolerances upon request.



BÖHLER BLECHE GMBH

**BLECKMANNGASSE 10
A-8680 MÜRZZUSCHLAG**

**TELEFON: +43 (0) 3852 / 555 250
TELEFAX: +43 (0) 3852 / 3723
E - MAIL: bbg.ts@bohler-bleche.at**

www.bohler-bleche.at

The data obtained in this brochure shall not be binding and shall, in case of a contract conclusion, not be regarded as warranted. These data shall merely constitute average values that become binding only if explicitly specified in a contract concluded with us. The manufacture of our products does not involve the use of substances detrimental to health or to ozone layer.