

ENGLISH

boeck

*Worldwide unique tools for
slag removal • pre-grinding • deburring
edge-rounding • oxide removal • finish-grinding*

Jochen

Marc

BOECK – ENTHUSIASTS IN TECHNOLOGY

Anyone who has had experience of the two entrepreneurs knows that the engineers Marc and Jochen Böck are certainly no normal “manufacturers”. Rather, in the Bavarian-Swabian town of Leipheim, something unique happens. For this is where the brothers and their specialist team devote themselves, body and soul, to the development and production of tools – predominantly for sheet metal deburring.

This is founded upon an extraordinarily profound understanding of application technology. In addition, they bring to their work state-of-the-art, personally constructed manufacturing technology that is at the limits of what is technically possible, as well as optimally coordinated high-performance processes. That just leaves the most important ingredient: a burning passion for perfection!

All this comes together to give “Made by boeck” tool solutions that are both credible and surprising. And this is precisely what creates genuine enthusiasm, time and again, from customers all over the world, as well as from their own employees!

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OUR BENEFITS



INNOVATION-DRIVEN EFFICIENCY

The key value for our costumers is in the center of our thoughts and actions. That is why we always work at the technological limit.



KNOW-HOW & CONSULTING

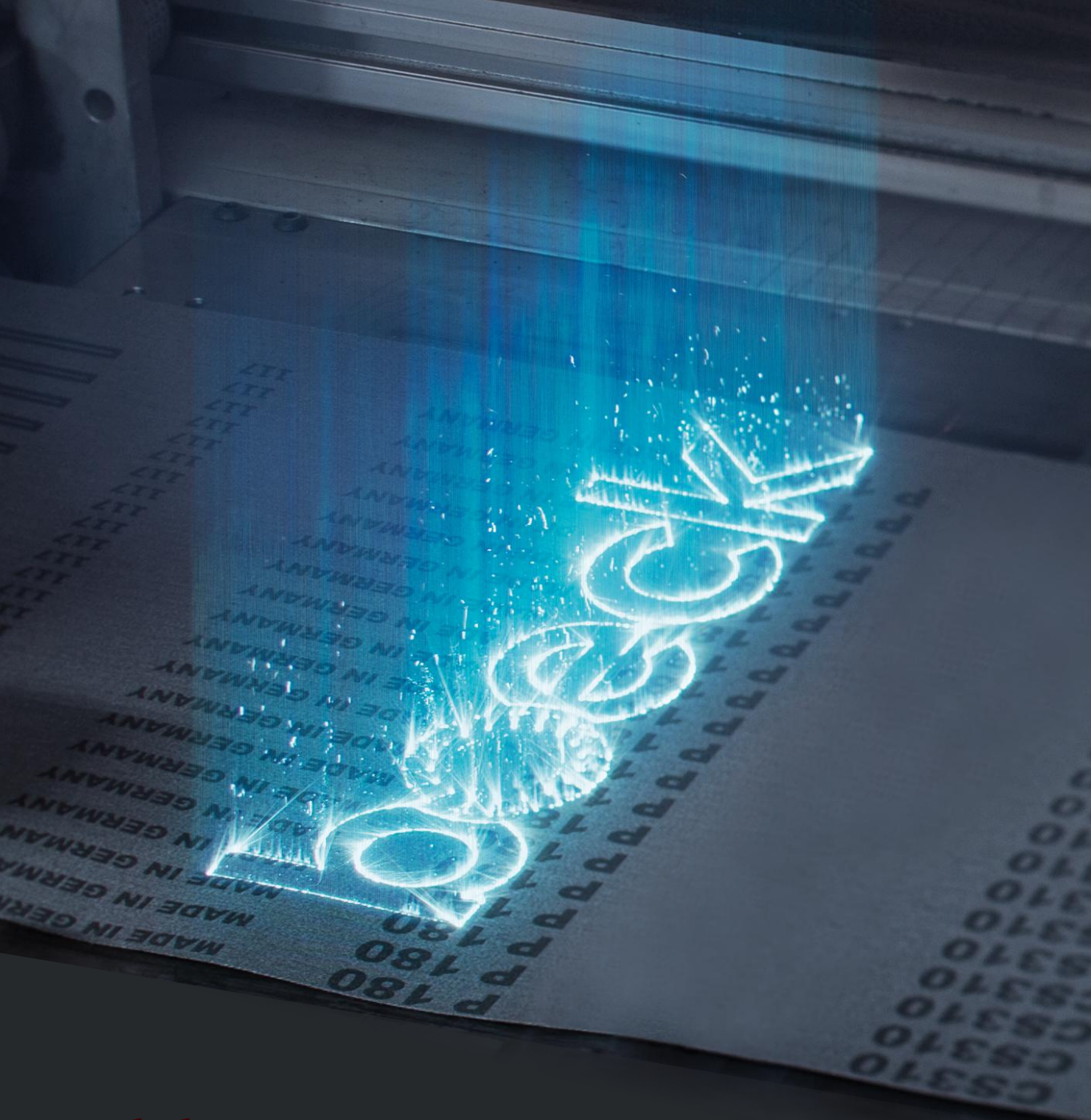
Benefit from our expertise in consulting and application. Our know-how guarantees high-performance processes in every production.



FAST SHIPPING

We ship almost all of our tools on the same day of the order. Because standstill is not an option.





**“HIGH-PERFORMANCE PROCESSES =
ENTHUSIASM X TECHNOLOGY²”**

OUR HISTORY IS STILL A SHORT STORY

But we continue to write it with the greatest of enthusiasm. You may well be curious. And we are already looking forward to the next chapter.



2021



NOVEMBER 2021

FOCUS Growth Champion 2022 in 6th place of all German machinery and plant engineering companies

MARCH 2021

FT 1000 – boeck is one of the fastest-growing companies in Europe

2020



NOVEMBER 2020

FOCUS Growth Champion 2021 in 9th place of all German machinery and plant engineering companies

AUGUST 2020

Wood processing tools manufacturing facility launched

2019

DECEMBER 2019

Production space doubles

JANUARY 2019

ISO 14001:2015 certificate granted

2018

JANUARY 2018

Introduction of new deslagging brush



2017

APRIL 2017

Production space doubles

2016

OCTOBER 2016

First patent application

2015

MARCH 2015

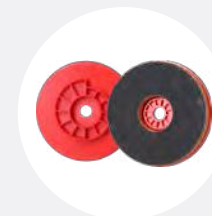
Enhanced product development of multi-row deburring tools

2014

OCTOBER 2014

Presentation of the latest generation deburring rollers and development of rapid clamping systems

2013



14 OCTOBER 2013

Sale of the first product – the QUICK 115 deburring disc

JULY 2013

Founding of boeck GmbH



Click to watch



Slag removal



Pre-grinding & deburring



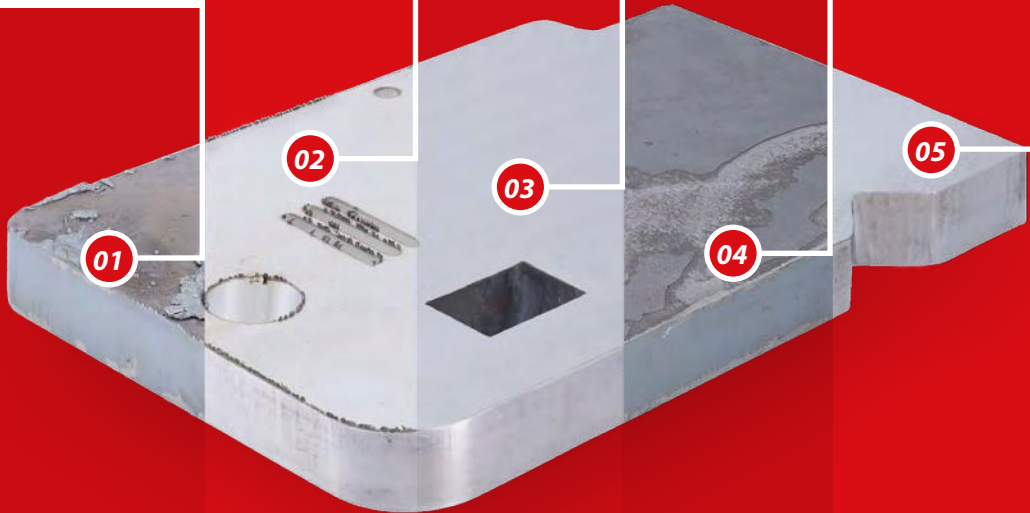
Oxide removal



Deburring & edge-rounding



Finish grinding



THE RIGHT TOOL FOR EVERY JOB



01

SLAG REMOVAL

During plasma or gas cutting, strong melting often occurs, with the molten metal sagging on the beam-exit side. This so-called slag occurs both on the inner and outer contours of the workpiece and must be removed for economical further processing.



Common manual methods for slag removal include chipping it away using a hammer and chisel, or grinding using an angle grinder.

In terms of mechanical processes, excess accumulations of material can be removed by grinding with a soft contact roller. Another industrial method is knocking it off using a slag hammer brush made up of multiple flexibly mounted pins.



Slag removal



PRE-GRINDING & DEBURRING



Burr formation on laser-, plasma- and gas-cut, or stamped, sheet metal parts often cannot be avoided. The burr respectively primary burr is a material formation on the cut edge of workpieces that protrudes beyond the original workpiece edges and surfaces. Other deviations from the target state include, e.g., spatters on the workpiece surface caused by laser cutting, unevenness, or scaling of the surface.

A by-product of removing primary burr is the so-called secondary burr. This spreads out in the direction of the workpiece surface and forms due to insufficient removal and simultaneous recasting of the residue material.

Primary burrs, spatters, unevenness and/or scale layers are normally removed by grinding. When removing primary burrs, the focus is on minimising the formation of a secondary burr. In order to remove these undesired secondary attributes from the sheet without leaving a residue, special support units are required for grinding belts, -discs or -sheets.



Pre-grinding & deburring

DEBURRING & EDGE-ROUNDING



At this stage of the process, the primary and secondary burrs are removed and the edges rounded off. In order to lay the foundations for subsequent process steps (powder coating, wet painting, galvanisation, anodisation, bonding, etc.) and rule out any risk of injury due to sharp edges, the removal of the primary respectively secondary burr is often combined with the so-called edge-rounding. The edge rounding range from a few decimillimetres to radii of 2mm or even greater. These radii are now stipulated by standards such as e.g. DIN EN 1090.

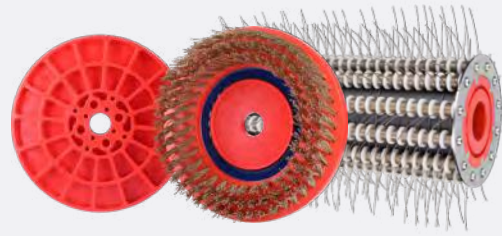
The deburring and edge-rounding is carried out using flexible, abrasive tools with high adaptability to internal and external contours such as radii, boreholes and cut-outs. The corresponding deburring discs, deburring wheels, deburring blocks and deburring brushes are used on portable machines as well as various grinding and deburring machines. These have, for example, planetary head systems or oscillating units for uniform processing of the edges.



Deburring & edge-rounding

04 OXIDE REMOVAL

Oxygen-cut workpieces have oxide layers on the cut edges. These "dark layers" pose a risk for subsequent processes. These layers can lead for example to chipping of the coating and must be removed.



Mechanical removal of the oxide layer is achieved by grinding or using brushes. Both processing options can be implemented for manual processing procedures. In terms of mechanical processing, it is mostly brushes that are used, which, thanks to a specially developed wire fill in an innovative multi-row arrangement, flexibly follow the contours of the workpiece and achieve blank metallic edge surfaces.

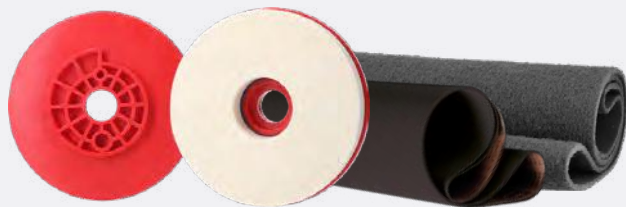


Oxide removal



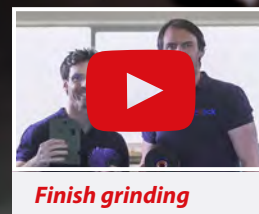
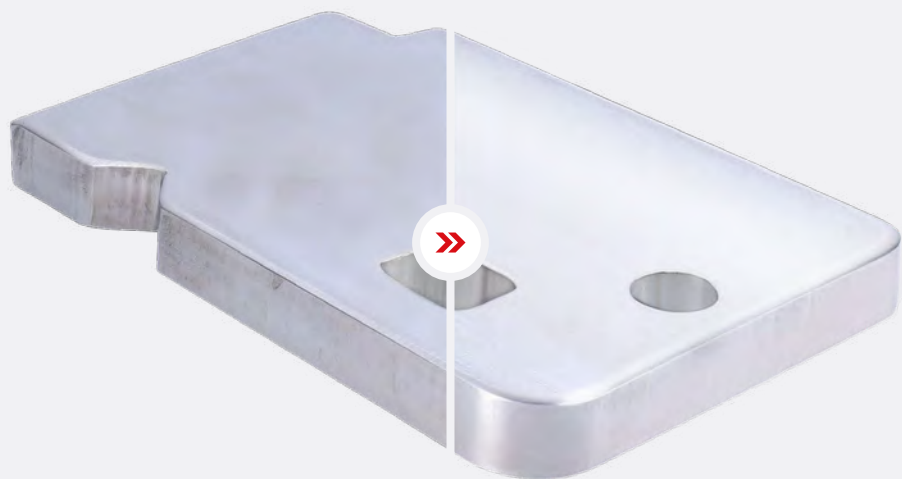
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FINISH-GRINDING



The purpose of this process step is to grind out scratch marks and create a decorative surface. Specific grinding patterns right up to a high-gloss mirror finish can be achieved on the sheet metal surfaces.

During the last processing step, it is primarily abrasive cloth, nonwoven abrasive, and felting tools that are used, as a continuous belt or roller. With manual processing techniques, the results, and their reproducibility, depend heavily on the operator. For mechanical finishing, the machine must have appropriate setting options.





“BOECK IS A VERY GOOD PARTNER FOR US, BECAUSE, LIKE US, THEY ALWAYS HAVE A CUSTOMISED SOLUTION TO HAND. WHEN SOMETHING SEEMS IMPOSSIBLE, THAT’S WHEN THINGS REALLY GET GOING HERE!”

Torsten Klimmer, Executive Partner, Ernst Klimmer GmbH, www.klimmer-gmbh.de

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