HEAVY PLATE MACHINING

WEBER Grinding Machines

Grinding, rounding, deburring and descaling of flame-cut and plasma-cut parts

WEBER

1913
WEBER works according to a 100-year-old tradition and experience in building grinding machines

1955
For over 50 years, WEBER has been producing drum sanders

2017
These days, WEBER sets new standards in the field of grinding technology with its 6 model ranges

GETTING METAL INTO SHAPE.

Often large public and industrial projects are only feasible due to the use of metal. The best example: Steel as a real high-tech material. Its specific hardness combined with optimised material processing constitutes the foundation for impressive projects all over the world. These projects require sophisticated machining technologies and that is where we come in. Our teams have constructed, produced and installed grinding machines for 100 years. Our technology can withstand the heaviest strain, fulfil the highest quality requirements and satisfy our customers. You can expect consistent exciting innovation for all types of heavy plate machining.

QUALITY
IS OUR PROFESSION.

At WEBER we practice thorough quality control.

This is apparent in the overall concept of our

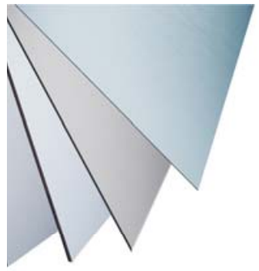
grinding machines, intelligent solutions and numerous

patented details, all of which have the same result:

Perfect surfaces and edges.

WEBER.
Ergonomic and intelligent design

Machine systems with complex functions have to be equipped with a control system that allows for precise work and intuitive operation: WEBER fulfils these requirements with an intelligent operating concept: The “i-Touch” control knob or, for example, the automatic thickness adjustment are WEBER’s guarantee for safe and reliable operation.



WEBER.
Individual and modular

The requirements of industry and craftsmanship are extremely diverse. Different punched or cut components and materials require increasingly specialised machining procedures. At WEBER we devote ourselves to the changing requirements for deburring, rounding and surface grinding of metals and provide suitable grinding technologies as a sensible and efficient solution. As our customer you will find the best solution for your requirements.

BLUeCOMPETENCE

WEBER.
Energy-efficient and resource-friendly

Considerate handling of energy and resources is the order of the day. For us, this is a matter of course. WEBER fulfils these high demands with its electric and mechanical systems. The sanding belt drives are equipped with high-efficiency rated motors, the main drives are equipped with “Eco Drive” technology. WEBER DR planetary head technology ensures an even wear of tools and lowers operating costs significantly.

Metal machining in a compact form.

WEBER TTSC | Deburring machines

WEBER’s compact model.
For deburring, rounding and descaling
of flame-cut and plasma-cut parts

10

WEBER TTSC

The best results through innovative technology.

WEBER MKS | Deburring machines

WEBER’s innovative model.
For deburring, rounding and descaling
of flame-cut and plasma-cut parts

14

WEBER MKS

Sturdy technology for difficult challenges.

WEBER MK | Deburring machine

WEBER’s universal model.
For deburring, rounding and descaling
of flame-cut and plasma-cut parts

18

WEBER MK

WEBER K combination unit

Increased flexibility through the combination of different grinding systems

Plates of different thickness are cut by means of different procedures and with different cutting parameters. Furthermore, plates of different thickness have different characteristics, which influence burr formation. The thicker a plate, the greater the thickness differences after cutting, due to warping and burr formation.

WEBER has been offering a solution to this problem for several years. The advantages offered by a flexible grinding beam and the performance of a grinding roller – optimised and combined in one grinding station – yield perfect results.

WEBER STC bolt grinding beam

Constant grinding pressure, high tolerance compensation

With this grinding beam system, WEBER has taken machining of thick and uneven plates to a new level: A constant grinding quality, a high material throughput and low operating costs due to a high grinding belt operating life are characteristic for this technology. This function is simple, but well-conceived. The grinding belt is pre-tensioned downward by a few millimetres and held in a flat position. Due to the long contact surfaces with the workpieces, it makes a stronger impact on all edges without creating secondary burrs. The pre-tension compensates for existing thickness differences between one part and another by itself and therefore makes economic multiple feeding possible – an enormous advantage, especially for small parts.

WEBER “i-Touch” and WEBER Matrix

For intuitive operation

Navigation, made easy: The “i-Touch” control knob helps you navigate through the most important menu functions. All grinding parameters such as e.g., grinding belt speed, feed speed and workpiece thickness can be directly accessed and operated via the “i-Touch” controller. Only the information necessary for the current operation is shown in the matrix display on the multi-colour touch panel. In addition to the main function, direct access to saved programs is also possible. The operator simply selects the desired type of machining.
The machine adjusts itself independently at the push of a single button.

WEBER controls

Perfect grinding results at the push of a button

As a standard, WEBER deburring machines are equipped with a high-quality touch operating terminal with colour mode. These terminals are based on the Siemens control system. Thanks to the graphical user interface, operation is simple and efficient. All adjustments can be made and saved on the operating terminal. Integration in higher ranking control systems or interlinking with other machines is no problem.

- **Simple operation due to graphic support**
- **7" screen (optional 9")**
- **Up to 300 Program memory positions**
- **External data backup (optional)**
- **Easy troubleshooting**
- **Remote maintenance (optional)**

WEBER TTSC

Deburring machine for flame-cut and plasma-cut parts

The **TTSC** model range is the most **compact** of all WEBER grinding machines. Its **variable operating height** makes the machine especially flexible, above all for manual feeding. For deburring, rounding, descaling and surface grinding: Different machining methods with one or two machining stations can be combined with each other.

1100 mm

1350 mm

1 to 2 grinding stations

- **Working widths 1100 and 1350 mm**
- **Working height 800–900 mm (variable)**
- **Version with 1 to 2 grinding stations**
- **Workpiece thickness 0.8–100 mm**
- **Infinitely variable feed speed (1–10 m/min)**
- **Grinding belt length 1900 mm**
- **Grinding belt drive up to 11 kW**
- **“i-Touch” controller**

Before

Flame and plasma cutting often creates strong burrs and scales which are hard to remove.

After

With WEBER grinding technology, materials of any size and up to 120 mm thickness can be ground perfectly and are then ready for problem-free processing.

WEBER GRINDING TECHNOLOGY

- **GD grinding roller**
- **DR planetary head**
- **STC bolt grinding beam**
- **“i-Touch” controller**

BRUSH TECHNOLOGY
FOR A PERFECT FINISH.

Regardless of whether you are using the compact planetary head P(2), double-row planetary head P(6) or the multi-rotation brush MRB: WEBER's sophisticated brush technology creates the ideal conditions for a perfect edge quality.

WEBER MKS

Deburring machine for flame-cut and plasma-cut parts

The **MKS** model range is the compact version of the MK series. Deburring, rounding and descaling of of thick and considerably warped plates and sheet metal parts is no problem for the MKS. Deburring is performed by the WEBER STC bolt grinding beam. Should the parts require edge rounding after deburring, additional stations, such as the WEBER DR planetary head or the WEBER MRB multi-rotation brush, can also be integrated.

600 mm

1100 mm

1350 mm

1600 mm

1 to 3 grinding stations

- **Working widths 600, 1100, 1350 and 1600 mm**
- **Working height 850 mm (constant)**
- **Version with 1 to 3 grinding stations**
- **Workpiece thickness 1–100 mm**
- **Infinitely variable feed speed (1–10 m/min)**
- **Grinding belt length 2150 mm**
- **Grinding belt drive up to 22 kW**
- **Siemens Touch Panel TP700 Comfort**
- **“i-Touch” controller**
- **Freely selectable arrangement of grinding stations**

WEBER GRINDING TECHNOLOGY

- **GD grinding roller**
- **DR planetary head**
- **STC bolt grinding beam**
- **BS brush rollers**
- **K combination unit**
- **“i-Touch” controller**

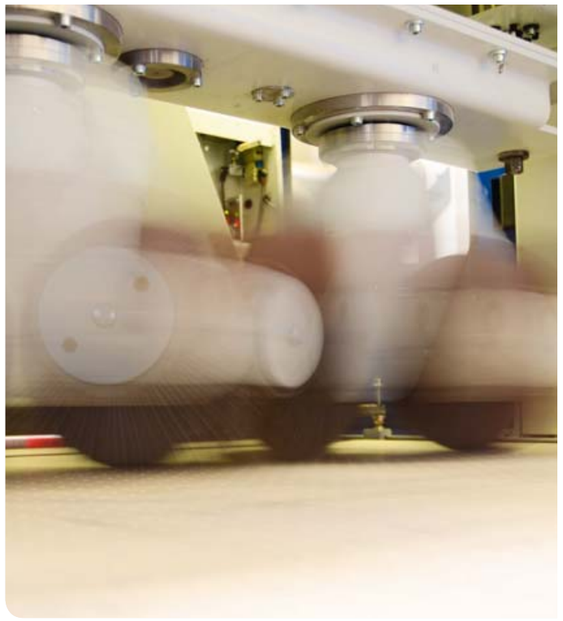
WEBER GD grinding roller

For perfect deburring and surface finishing

For surface finishing, WEBER uses its **GD grinding roller**: A perfect surface finish and ideal deburring are achieved in a single operating sequence. The grinding pressure is generated by positioning the roller downwards below the zero level. When the roller approaches the workpieces, the rubber coating of the roller is pushed inwards. The restoring force of the roller is thus the grinding force. Grinding rollers are available with different diameters and rubber hardness and can be adapted to all parts to be ground.

Results that speak for themselves

Steel plates and sheet metal parts are important components for machine construction. These solid parts require special machining: Flame and plasma cutting. To obtain the best results from the raw material and achieve maximum quality, grinding is carried out after the cut – of course, with a WEBER grinding machine. The final results speak for themselves.



WEBER MRB brush system

Rounding of all sides of parts with rim holes and louvres/slots

To achieve a perfect result when machining parts that are not flat and parts with rim holes, for which the DR planetary head system cannot be used, WEBER uses its MRB brush system. The multi-rotation brush system machines parts from all sides - even in rim holes and slots - with even machining results along the entire machine width. Due to its compact, space-saving design, the brush unit is easy to combine with other grinding stations.

WEBER MK

Deburring machine for flame-cut and plasma-cut parts

The largest and **heaviest plates** and sheet metal parts pose no problem for the WEBER MK model range. The MK machines the thickest, heaviest and most warped plates and sheet metal parts. With its up to 4 machining stations and extremely sturdy design, the MK deals with even the most solid parts with ease.

600 mm

1100 mm

1350 mm

1600 mm

2000 mm

1 to 4 grinding stations

- **Working widths 1100, 1350, 1600 and 2000 mm**
- **Working height 900 mm (constant)**
- **Version with 1 to 4 grinding stations**
- **Workpiece thickness 4–120 mm**
- **Infinitely variable feed speed (1–10 m/min)**
- **Grinding belt length 2620 mm**
- **Grinding belt drive up to 30 kW**
- **Siemens Touch Panel TP700 Comfort**
- **“i-Touch” controller**
- **Freely selectable arrangement of grinding stations**

WEBER GRINDING TECHNOLOGY

- **GD grinding roller**
- **DR planetary head**
- **STC bolt grinding beam**
- **BS brush rollers**
- **K combination unit**
- **MRB brush system**
- **“i-Touch” controller**

WEBER DR planetary head

Perfect edge rounding for strong plates with dry grinding

To guarantee perfect edge rounding, WEBER uses its **DR planetary head**. The machining station can be used optionally from the top or from the bottom. The result is an even, definable and reproducible result on all sides. The tools are arranged in a compact machining station in groups on planetary heads. To keep operating costs low, WEBER has developed an automatic tool length measuring system. An even wear of tools lowers operating costs to a minimum. The DR planetary head is available with 2 or 6 brushes per unit.

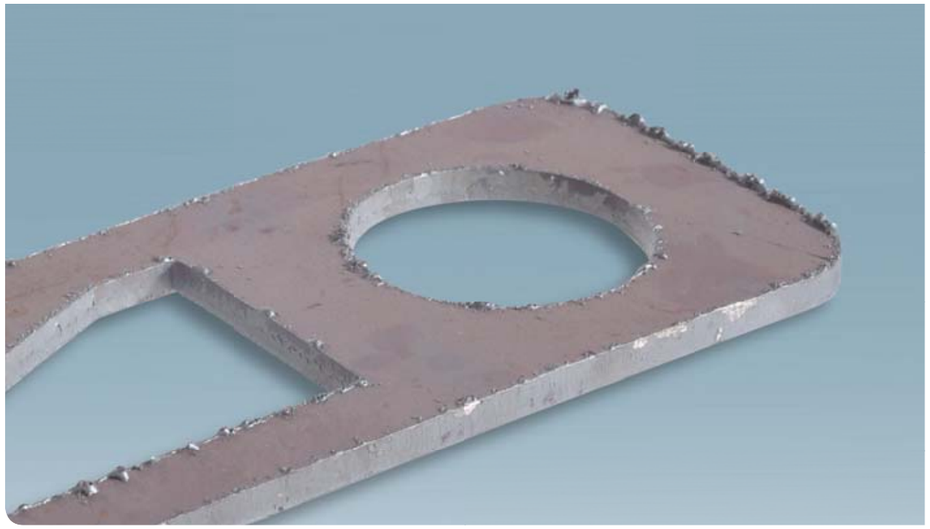
WEBER BS brush rollers

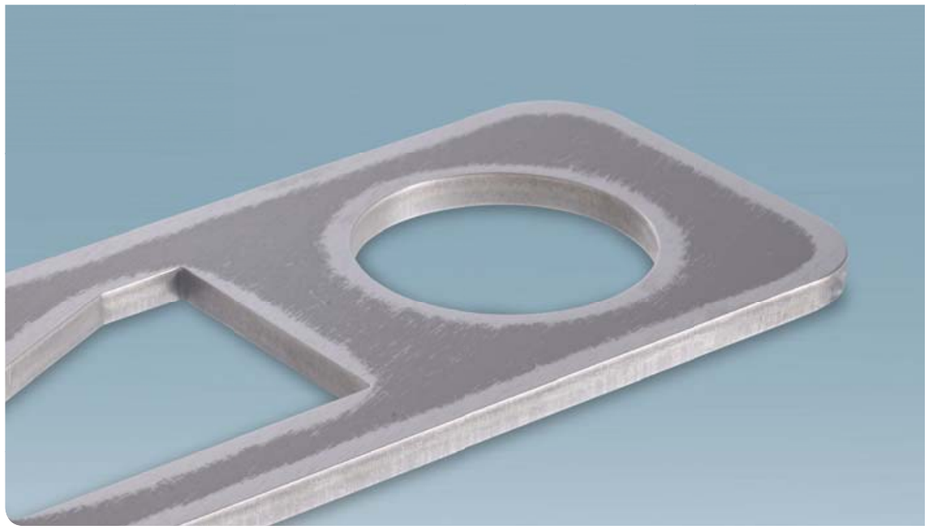
Final deburring of ground edges

The BS brush rollers are used for removing secondary burrs after grinding or milling. They machine the surface and to some extent the edges. For system-related reasons, the rounding action is much more effective on the transverse edges than on the longitudinal edges that are barely rounded. The BS brush rollers improve the surface quality, change the surface roughness or surface structure. They also make it possible to remove material residue after grinding or milling without damaging the surface.

Convincing results

Flame and plasma cutting for heavy plates often creates strong burrs and scales which are hard to remove. With the unique WEBER grinding technology, materials of any size and up to 120 mm thickness can be ground perfectly and are then ready for further processing.





WEBER grinding machine for thin sheet machining

Grinding, deburring, rounding and descaling of lasered, punched and nibbled parts

Of course, WEBER also offers machines for machining thin sheets as well as wet grinding systems. The machining of lasered, punched and nibbled parts makes high demands on the machines and technologies used for this process.

For this purpose, WEBER offers the special model ranges TTSC and TT. For further information, please refer to the brochure on thin sheet machining or **www.metallschleifmaschine.de**

Before

Lasered, punched and nibbled parts before machining: The burrs are very pronounced.

After

After machining: The edges have been deburred, degrated and rounded, the surfaces are properly grinded.

Perfect results with the highest possible output.

WEBER TT | Deburring machine

WEBER's all-rounder.
For deburring, rounding, descaling and surface grinding with a dry grinding procedure

- **Working widths 600, 1100, 1350 and 1600 mm**
- **Working height 850 mm (constant)**
- **Version with 1 to 5 grinding stations**
- **Workpiece thickness 0.8–100 mm**
- **Infinitely variable feed speed 1–10 m/min**
- **Grinding belt length 2150 mm**
- **Grinding belt drive up to 22 kW**
- **Siemens Touch Panel TP900 Comfort**
- **"i-Touch" controller**
- **Freely selectable arrangement of grinding stations**

WEBER TT

Sophisticated technology for high-quality parts.

WEBER NLC | Wet deburring machine

WEBER's wet grinding model.
For deburring, rounding, descaling and surface grinding of special material types

- **Working widths 600, 1100, 1350 and 1600 mm**
- **Working height 900 mm (constant)**
- **Version with 1 to 5 grinding stations**
- **Workpiece thickness 0.8–120 mm**
- **Infinitely variable feed speed 1–10 m/min**
- **Grinding belt length 2620 mm**
- **Grinding belt drive up to 30 kW**
- **Siemens Touch Panel TP900 Comfort**
- **"i-Touch" controller**
- **Freely selectable arrangement of grinding stations**

WEBER NLC

Quality “Made in Germany”

Our company, rich in tradition, can look back on over 100 years of grinding machine manufacturing. The WEBER machine works are synonymous with innovation and high-quality machine construction.

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