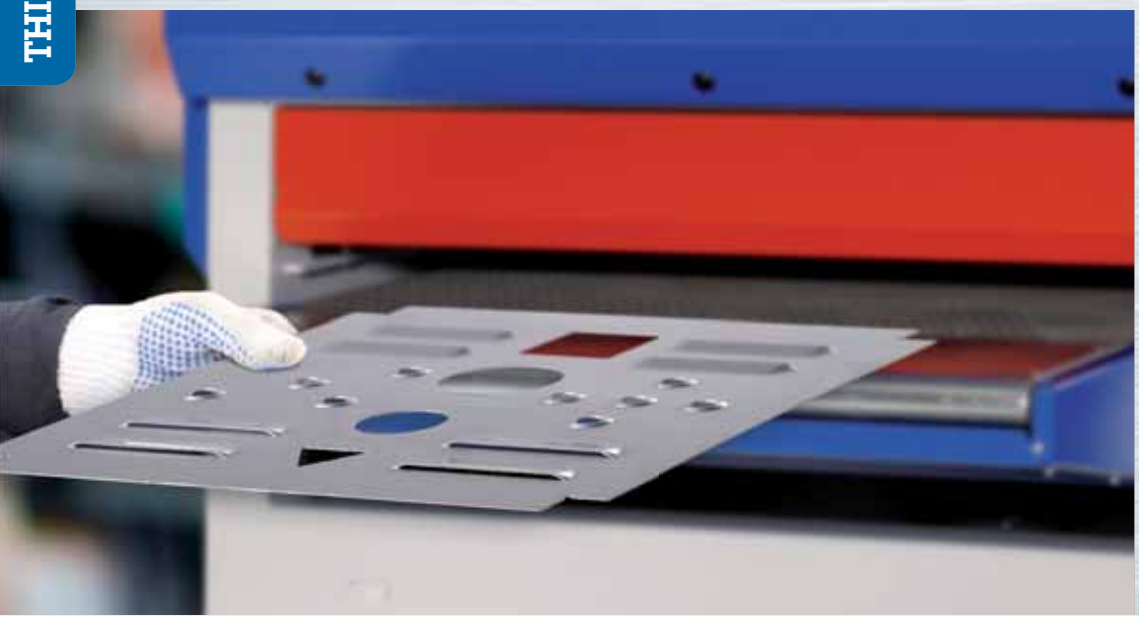
THIN SHEET MACHINING

WEBER Grinding Machines

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

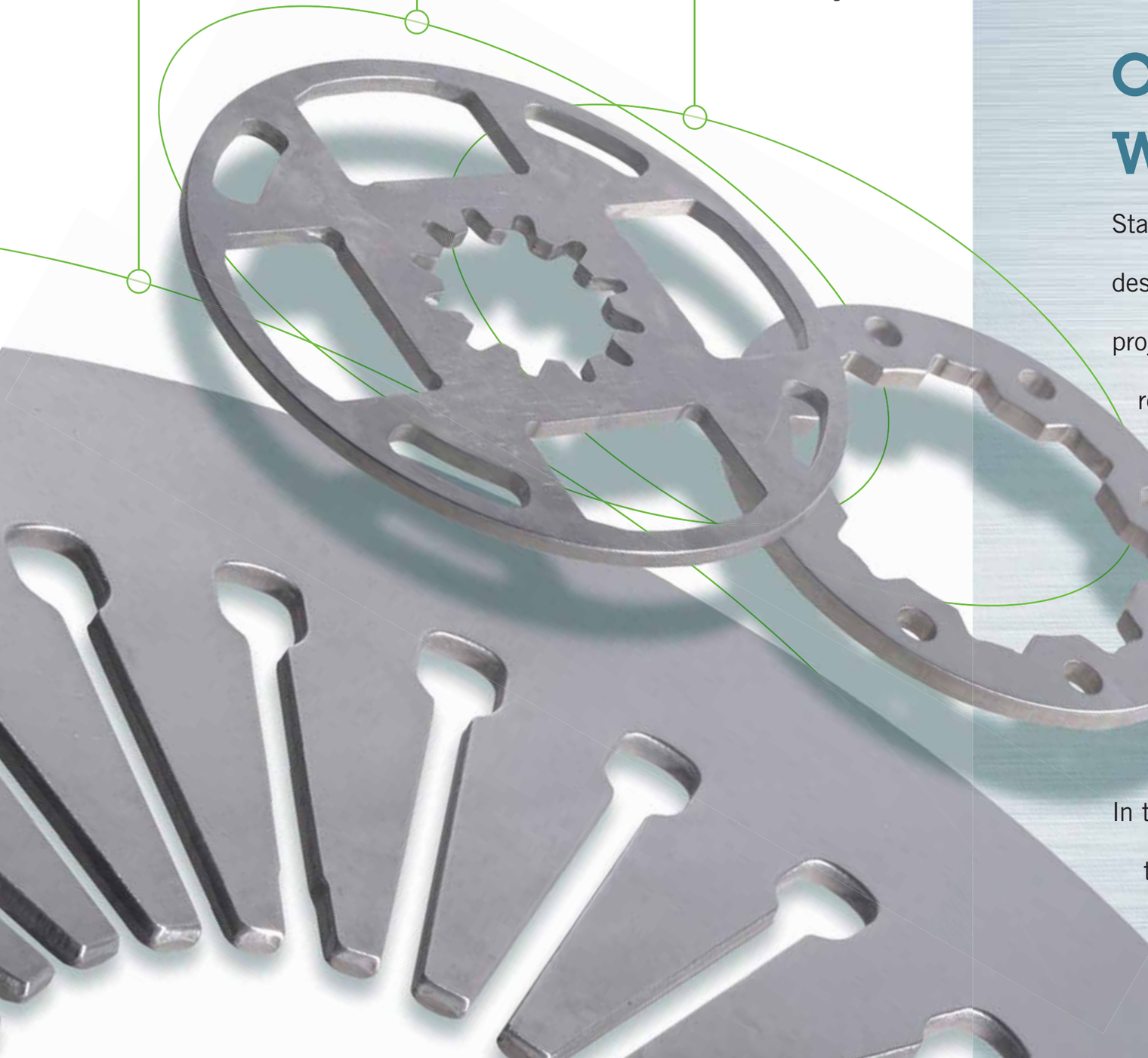


WEBER

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

2014
These days, WEBER sets new standards in the field of grinding technology with its 6 model ranges



OPTIMISING METAL WITH GREAT CARE.

Stability. Flexibility. Functionality. Regardless of the requirements designers and engineers have for the realisation of their projects – metal is the material that can meet these special requirements. There is no doubt: Metal is fascinating!

At the end of machining procedures which are as precise as they are efficient, more and more new application possibilities are revealed. For over 100 years, we have been developing and producing grinding technology to meet the highest demands. Of course, this includes technology for gentle thin sheet machining. In this way, our innovations contribute to the perfect utilisation of the potential metal has as a raw material. Our products fascinate people all over the world.

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.

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 grinding 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.

The best possible machining of punched and nibbled parts.

WEBER TTSC I Deburring machines

WEBER's compact model.
For deburring, rounding, descaling and surface grinding with a dry grinding procedure

10

WEBER TTSC

Perfect results with the highest possible output.

WEBER TT I Deburring machine

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

14

WEBER TT

Sophisticated technology for high-quality parts.

WEBER NLC I Wet deburring machine

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

18

WEBER NLC

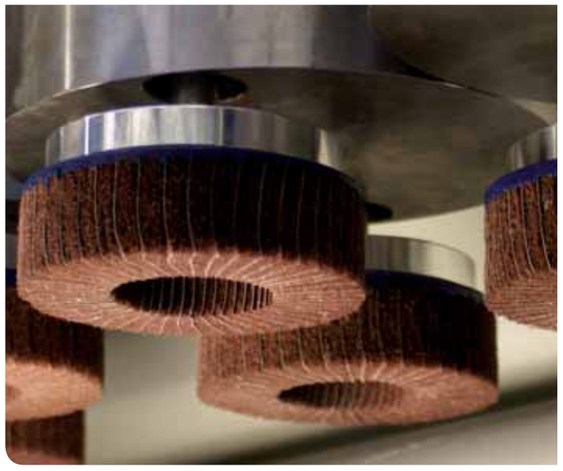
WEBER Innovations

For perfect edge machining

WEBER innovation brushes

Perfect arrangement of round and cup brushes

WEBER has found a convincing solution for the problem of large rotating brush systems. Dividing up the brushes onto several smaller tool carriers minimises the machining differences along the operating width of the machine, which occur otherwise. WEBER consistently uses this technology for round and cup brushes. The compact design decreases the space requirements significantly allowing for problem-free combination with other machining stations.



WEBER DR planetary head

All-round edge machining across the entire width

WEBER uses its planetary head technology for all-round edge machining with cup brushes. In this process, several rotating brushes arranged in groups are given an additional turning motion. This means that the brushes work at the ideal angle on the workpiece. In the patented WEBER solution, the tools of adjacent heads overlap in a way that ensures that there are no gaps during machining. As an alternative, we at WEBER also construct a two-row arrangement in which each tool carrier is equipped with six brushes.

WEBER MRB brush system

The ideal addition for perfect edge machining

When round brushes are used, several rotating heads are also arranged next to each other. The meshing of the brushes during the combing procedure and two brushes per head create even machining results along the entire operating width. The modular design of the brush heads allows for problem-free machining of each part with the procedure it requires. This arrangement works perfectly for any material thickness starting from one millimetre.

WEBER Operation

Precise controls with an intuitive operation

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. This is based on the Siemens S 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**
- **8" screen (optional 10" or 12")**
- **300 Program memory positions**
- **External data backup (optional)**
- **Troubleshooting**
- **Remote maintenance**

WEBER TTSC

Deburring machine for lasered, punched and nibbled parts

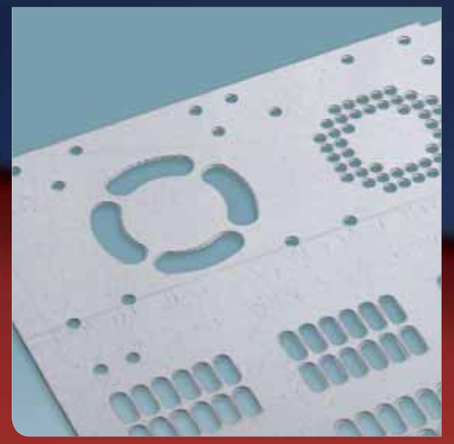
The **TTSC** model range is the most **compact** of all WEBER grinding machines, equipped with a **variable operating height**. Different machining methods with one or two machining stations can be combined with each other for deburring, rounding, descaling and surface grinding without any problems.

1100 mm

1350 mm

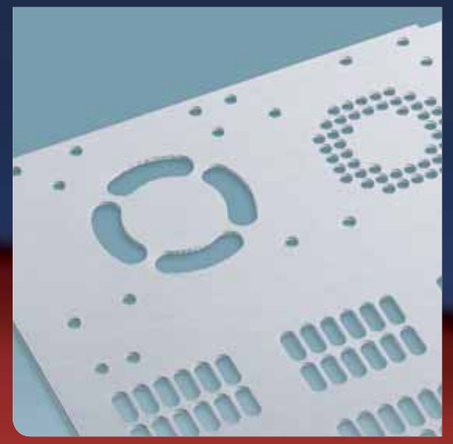
1 to 2 grinding stations

- **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

Lasered, punched and nibbled parts before the grinding process: The burrs are very pronounced. WEBER grinding and brush systems reach all points - even on highly complex parts



After

After machining with a WEBER TTSC: All burrs have been removed, even drill holes, rim holes and other hard-to-reach spots have been machined to perfection.

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 TT

Deburring machine for lasered, punched and nibbled parts

The **TT** model range is the **all-rounder** of WEBER grinding machines. Up to 5 machining stations enable you to use **any machining variation** for deburring, rounding, descaling and surface grinding of metal sheets and sheet metal parts. For a compact, two-side variation, a bottom grinding planetary head WEBER DR P(2) is directly attached.

600 mm

1100 mm

1350 mm

1600 mm

1 to 5 grinding stations

- Working widths 600, 1100, 1350 and 1600 mm
- Working height 850 mm (permanent)
- Version with 1 to 5 grinding stations
- Workpiece thickness 0.3-100 mm
- Infinitely variable feed speed (1-10 m/min)
- Grinding belt length 2150 mm
- Grinding belt drive up to 22 kW
- Multi Panel MP 377
- “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
- MRB multi-rotation brush
- “i-Touch” controller

Sophisticated technology for high-quality parts

WEBER dry grinding technology

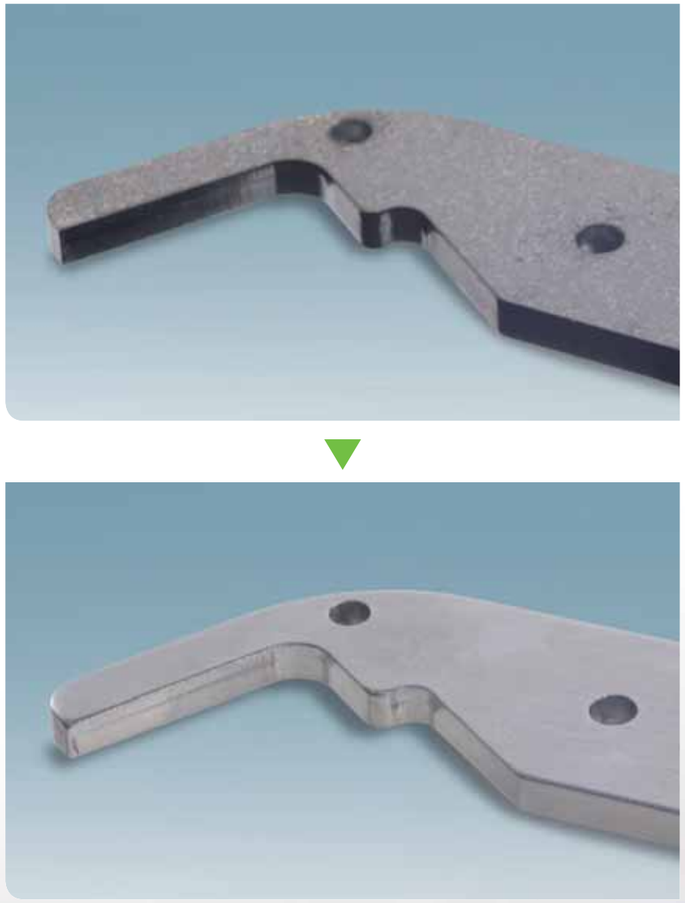
Convincing solutions for perfect results

WEBER‘s dry grinding technology stands out due to its easy handling and a well-conceived design. Our aim is an absolutely perfect, uniform grinding result and a long operating life of the tools used. Automatic tool length measurement, automatic grinding belt tensioning and other details contribute to keeping operating costs low.

WEBER tool technology

Long operating life,
easy handling

To guarantee a long operating life, WEBER has developed various innovations. Automatic tool length measurement guarantees the least possible wear during operation, thus keeping the operating costs low. If tools have to be changed, a sophisticated quick-changing system ensures that a single person can do so in very few steps. This saves time and money.



Results that speak for themselves

High-quality lasered, punched and nibbled parts do not achieve the desired quality until they have been ground by a WEBER machine. Smooth surfaces on the outside and inside as well as smooth edges create the conditions required for perfect, safe processing of the parts. The examples speak for themselves.

WEBER NLC

Wet deburring machine for lasered, punched and nibbled parts

The **NLC** model range is WEBER's metal grinding machine with a **wet grinding technology**. For **special types of material**, excessive **material heating** and machining **sheets with a heavy oil film** The NLC wet-grinding technology makes deburring, rounding, descaling and surface grinding easy and safe. The arrangement of up to 5 different machining stations can be varied as required

600 mm

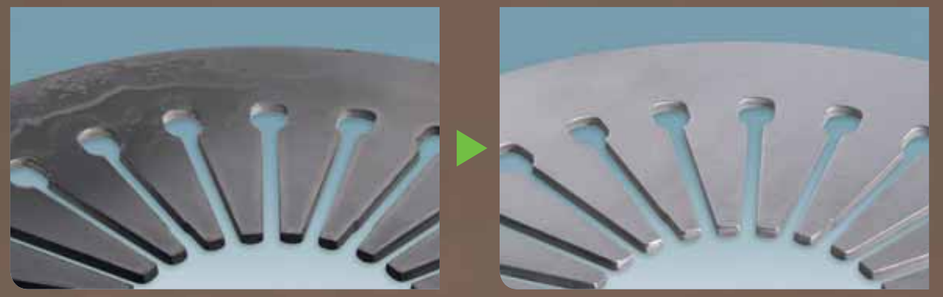
1100 mm

1350 mm

1600 mm

1 to 5 grinding stations

- Working widths 600, 1100, 1350 and 1600 mm
- Working height 900 mm (constant)
- Version with 1 to 5 grinding stations
- Mode of operation: top grinding
- 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
- Multi Panel MP 377
- "i-Touch" controller
- Freely selectable arrangement of grinding stations



Before

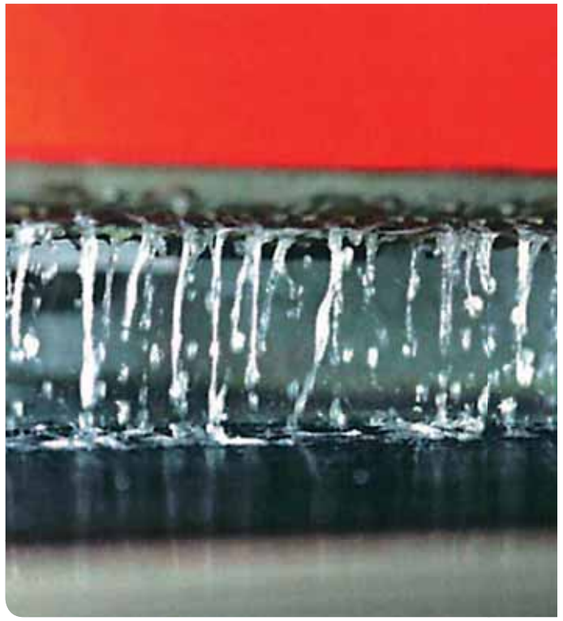
Punching creates pronounced burrs and oil residue on metal parts.

After

WEBER's grinding and cleaning technology lets you grind any material to perfection and prepare it for immediate processing.

WEBER GRINDING TECHNOLOGY

- GD grinding roller
- DR planetary head
- BS brush rollers
- MRB multi-rotation brushes
- "i-Touch" controller



WEBER wet grinding technology

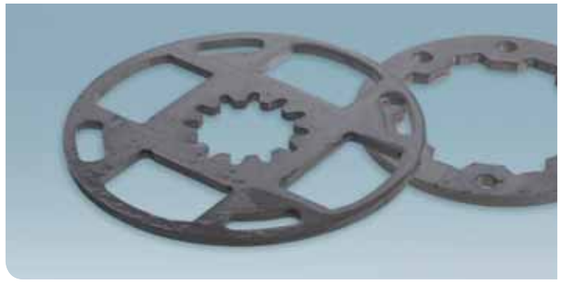
The best results despite low costs

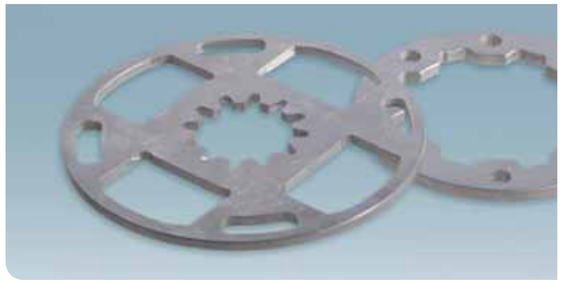
Our many years of experience and sophisticated technology make WEBER‘s wet-grinding systems our customers‘ first choice. Our time-tested technology creates first-class results.
In addition, WEBER‘s special focus is on the cost-effective and environment-friendly design of our systems. The cleaning systems required for the grinding fluid are highly economical to operate and stand out due to their simple operation, cleaning and maintenance.

Weber flat bed filter

PS-160

The gravity-based paper belt filter ensures continuous cleaning of coolants (emulsions, oils or similar fluids).
The high cleaning quality achieved by this filtering system contributes to a perfect surface quality and decreases tool wear.





Convincing results

For complex parts

WEBER‘s sophisticated wet grinding technology shows convincing results when grinding special materials, when there is a risk of excessive material heating and when machining metal sheets with a heavy oil film.
Furthermore, special demands on surface quality can be met with our wet-grinding systems. Specially developed grinding technologies are used for WEBER wet-grinding systems.
The planetary head system, brush systems and grinding rollers ensure perfect surface quality during wet grinding.

WEBER centrifuge

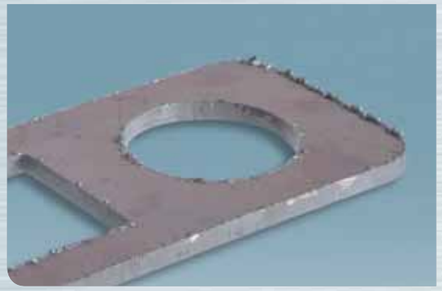
W-130 I FA-11-0068

The fluid is pumped to the centrifuge by means of a feeding pump. A hub with an optimised flow accelerates the fluid until it reaches the drum rotational speed. Particles are compacted on the edge of the sludge insert. The clean fluid is returned with an outlet pressure of approximately 0.5 bar via a skimming valve.
If the centrifuge is at a standstill, the process fluid remaining in the drum is drained into a leakage container.
Advantages: Compact design, easy handling, cleaning and maintenance

WEBER grinding machines for heavy plate machining

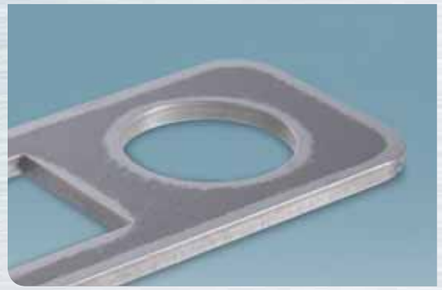
Deburring, rounding and descaling of flame-cut and plasma-cut parts

Of course, WEBER also offers machines for machining heavy plates. The machining of very thick, heavy sheet metal parts makes high demands on the machines used for this process. For this purpose, WEBER offers the special model ranges MK and MKS.
For further information, please refer to the brochure on heavy plate machining or www.metallschleifmaschine.de



Before

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



After

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

The best results through innovative technology

WEBER MKS | Deburring machines

WEBER's compact model.
For deburring, rounding and descaling of flame-cut and plasma-cut parts in a dry grinding process

- 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
- Multi Panel MP 377
- "i-Touch" controller
- Freely selectable arrangement of grinding stations

WEBER MKS

Perfect technology for special challenges.

WEBER MK | Deburring machine

WEBER's universal model.
For deburring, rounding and descaling of flame-cut and plasma-cut parts in a dry grinding process

- 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
- Multi Panel MP 377
- "i-Touch" controller
- Freely selectable arrangement of grinding stations

WEBER MK

Quality “Made in Germany”

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

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