# WEBER PT WEBER NLC

Grinding, rounding, deburring and descaling of thin sheets and heavy plates – dry or wet





### 1913

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

# For over 60 years, WEBER has been producing wide-belt grinding machines

#### 2018

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

# METAL – PERFECTLY MACHINED.

Stability. Flexibility. Functionality. Regardless of the requirements designers and engineers may 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. We offer solutions for thin sheet and heavy plate 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.

# The future, today – at WEBER

"Maximum efficiency, maximum quality"

Traditionally, WEBER grinding machines are characterised by their uniquely high quality. The new WEBER machine design goes one step further: Extensive modularity, maximum energy competence and complete industrial quality are our premises. These aims were thoroughly implemented for our deburring machines **WEBER PT** and **WEBER NLC**.



WEBER tools offer every method of metal machining. A sophisticated quick-change system saves time and money.



Through tradition and innovative energy, WEBER has developed into one of the leading providers of grinding machines. Our name has become a symbol of German engineering worldwide – and has long become an exemplary representation of the quality mark "Made in Germany".



The "Eco Drive", i.e. motors with an increased efficiency class, increase the energy efficiency of our products. Through this and other technological improvements, WEBER has reached a top position in the area of responsible use of resources.

### WEBER modularity

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

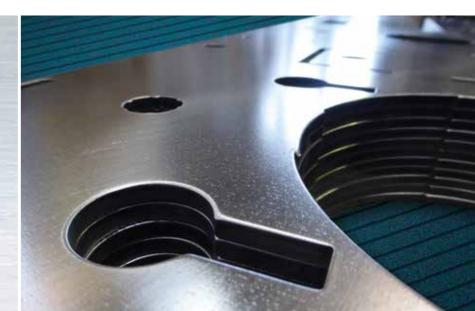
### WEBER: A tradition of quality

What can our customers expect from a German machine manufacturer? Quality - that goes without saying. And reliability. But for WEBER "Made in Germany" means much more. For our company, this certificate is a promise to our customers. Every single WEBER grinding machine was developed and manufactured in Germany. After delivery, the WEBER service department ensures problem-free commissioning and long-term production efficiency.

### WEBER Green Technology

A responsible utilisation of resources is one of our greatest challenges today. WEBER tries to optimise the efficiency of materials in all areas of grinding technology. For example: WEBER DR planetary head technology ensures an even wear of tools and lowers operating costs significantly.





# Perfect metal machining at its most beautiful

# WEBER PT | Deburring machine

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

The WEBER PT is a universal grinding machine of a new generation for deburring, rounding, descaling and surface grinding of thin sheets and heavy plates. Up to 5 grinding stations allow for all machining variations. A CBF station can be installed for a perfect surface finish. A perfect bolt grinding beam is available especially for flame-cut and plasma-cut heavy plates.

#### WEBER PT - advantages at a glance:

- Modern design
- Simplified operating structure through WEBER "i-Touch" with its faster and more easily accessible operating panel
- Increased grinding belt length
- Laterally extendible planetary head unit and MRB unit for improved integration into production lines
- Improved accessibility for maintenance
- Replaceable units through the modular design for improved flexibility in case of changing requirements
- Simultaneous machining top/bottom as an option

### Technical data

- Operating widths 1100, 1350 and 1600 mm
- Operating height 900 mm
- Version with 1 to 5 grinding stations
- Workpiece thickness 0.3-100 mm
- Infinitely adjustable feed speed
- Grinding belt length 2150 mm or 2620 mm
- Grinding belt drive up to 24 kW
- Siemens Multi Panel TP900 Comfort
- "i-Touch" controller
- Flexible arrangement of the grinding stations



1100 mm

1350 mm

1600 mm





# WEBER Innovations

Machining systems for thin sheets and heavy plates



## **WEBER DR Planetary Head**

All-round edge machining across the entire width

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 uses its P2 and P6 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. The compact design P2 decreases the space requirements significantly, allowing for problem-free combination with other machining stations.



As an alternative to the compact design P2, we at WEBER have also designed 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 compact design makes it easy to combine the brush head with other WEBER grinding technologies. This arrangement works perfectly for any material thickness starting from one millimetre.



# **WEBER GD Grinding Roller**

Perfect deburring and surface finishing

WEBER uses rubber-coated grinding rollers for surface finishing and deburring. The grinding pressure is generated by lowering the roller in relation to the set workpiece thickness. When the roller approaches the workpiece, the rubber coating of the roller is pushed upwards. The reset force of the rubber coating creates the necessary grinding force. Grinding rollers are available with different diameters and rubber hardness and can be adapted to all parts to be ground.



### **WEBER STC bolt grinding beam**

Uniform grinding pressure, high tolerance compensation

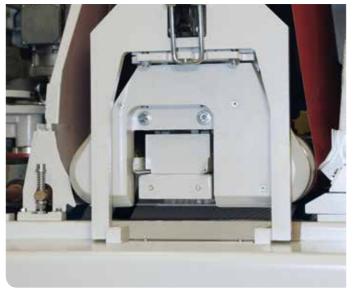
With the STC grinding beam system, WEBER has taken machining of thick and uneven plates to a new level: A constant grinding quality, a high material throughput and low operating costs due to a high grinding belt operating life are characteristic for this technology. The grinding belt is pre-tensioned downward by a few millimetres and held in a flat position. Due to the long contact surfaces with the workpieces, it generates a stronger impact on all edges without creating secondary burrs.





Pre- and finish grinding on a single grinding station

Plates of different thickness are cut by means of different procedures and with different cutting parameters. The thicker a plate, the greater the thickness differences after cutting, due to warping and burr formation. WEBER offers the solution to this problem. The advantages offered by a flexible grinding beam and the performance of a grinding roller have been optimised and combined in one grinding station.



# WEBER technologies

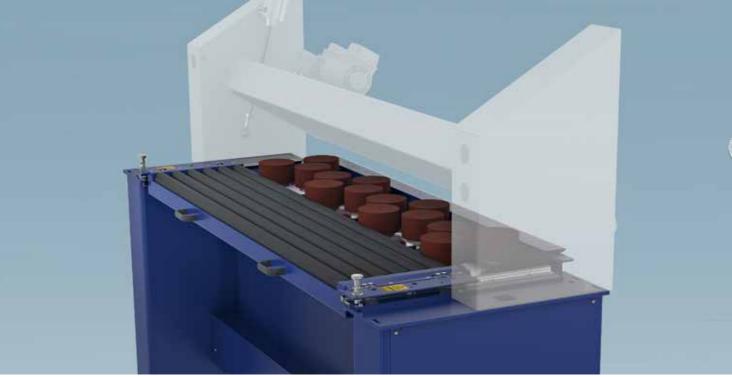
Technologies for perfect edge and surface finishing

# Simultaneous machining top and bottom as an option

Perfect grinding quality times two

The concept of the PT series is, above all, designed for industrial use. For this reason, WEBER also offers this grinding machine as a top/bottom version. The selection and arrangement of the machining stations for top and bottom machining can be varied as required, for instance the P2 planetary head unit can be added as an adaptation.





### **WEBER CBF technology**

For a perfect surface finish

The WEBER CBF technology is primarily used in the metal sector to produce an adjustable coating length for surface grinding. A perfectly ground metal surface is an outstanding quality feature. WEBER has found the solution with its CBF technology.



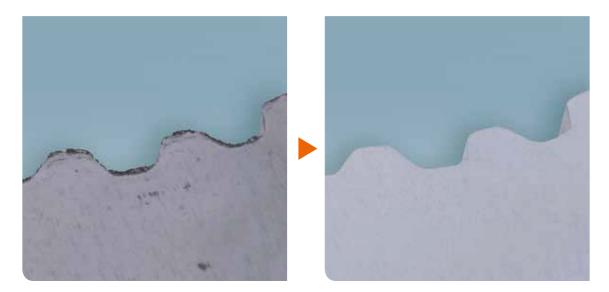
The ideal brush options for any application

WEBER offers diverse round and cup brush options for any type of metal machining. Automatic tool length measurement guarantees the least possible wear during operation, thus keeping the operating costs low. A sophisticated quick-changing system ensures that a single person can change the tools in very few steps. This saves time and money.



# WEBER results

Results you can be proud of



# A perfect surface and edge finish for thin sheets

High-quality lasered, punched and nibbled parts do not achieve the desired quality until they have been ground by a WEBER deburring and grinding 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.



# Perfect deburring and edge rounding of thicker plates

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 – ideally with a WEBER grinding machine. The final results speak for themselves.



# Ideal machining of special plates and plates with oil films

# WEBER NLC | Wet deburring machine

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

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.



### Before

Punching creates pronounced burrs and oil residue on metal parts.



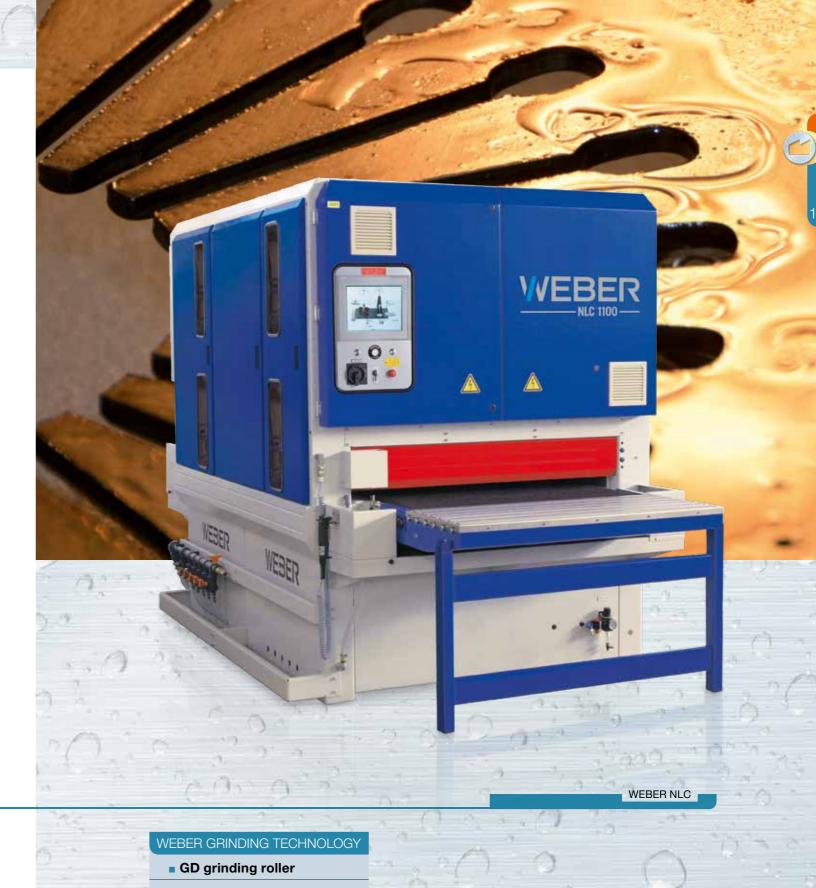
### After

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

### Technical data

- 300 mm 600 mm 1100 mm
  - 1600 mm
  - 1 to 5 grinding stations

- Working widths 300, 600, 1100, 1350 and 1600 mm
- Working height 900 mm
- Version with 1 to 5 grinding stations
- Mode of operation: top grinding
- Workpiece thickness 0.3-100 mm
- Grinding belt length 2620 mm
- Grinding belt drive up to 24 kW
- Siemens Touch Panel TP900 Comfort
- "i-Touch" controller



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

# WEBER NLC

Sophisticated technology for high-quality parts

# **WEBER** wet grinding technology

The best results at low cost

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.







## **Convincing results**

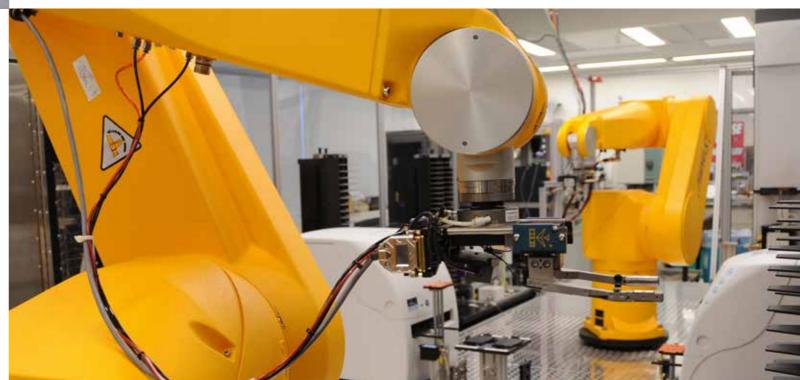
For complex parts

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** peripherals

From filters to robot systems

From flat bed filters to centrifuges, wet and dry separators and component handling - even beyond grinding technology, WEBER offers all peripheral added stations from one source to meet our customers' requirements.



With optimised operating structure

By default, WEBER grinding and deburring machines are equipped with a high-quality 9" and 12" touch operating terminal with colour mode. This is based on the Siemens control system. Due to the new graphical user interface, operation is even simpler and more efficient. As an alternative, the tried and tested "i-Touch" control knob can guide you through the most important menu functions. All adjustments can be made and saved on the operating terminal. Integration into higher ranking control systems or interlinking with other machines is no problem.



### **WEBER Smart Control**

The intelligent control system for grinding and brushing



#### **WEBER Vision Control**

Visual process control for quality and quantity



#### WEBER "i-Touch"

Simple and perfect control and navigation



# WEBER support

More than just grinding machines

### **WEBER** technical centre

Presentations and customer training at our own technical centre

All WEBER grinding machines are developed and manufactured in Kronach. For the development of new technologies, we at WEBER trust only our own specialists. We provide our customers with our in-house technical centre where we test innovations, develop them further and finally make them ready for their market launch. Even after delivery of a machine, the WEBER after-sales service ensures problem-free commissioning and long-term production efficiency.



# WEBER consulting and support

Our focus is on our customers

Our customers play the most important part in our consultation, installation and support services. Thanks to our close cooperative contact with our customers, we can make their requests and requirements the focus of all new developments. As a result we can provide our customers in various industries with grinding machines which meet the highest demands on quality, performance and efficiency.

# 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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