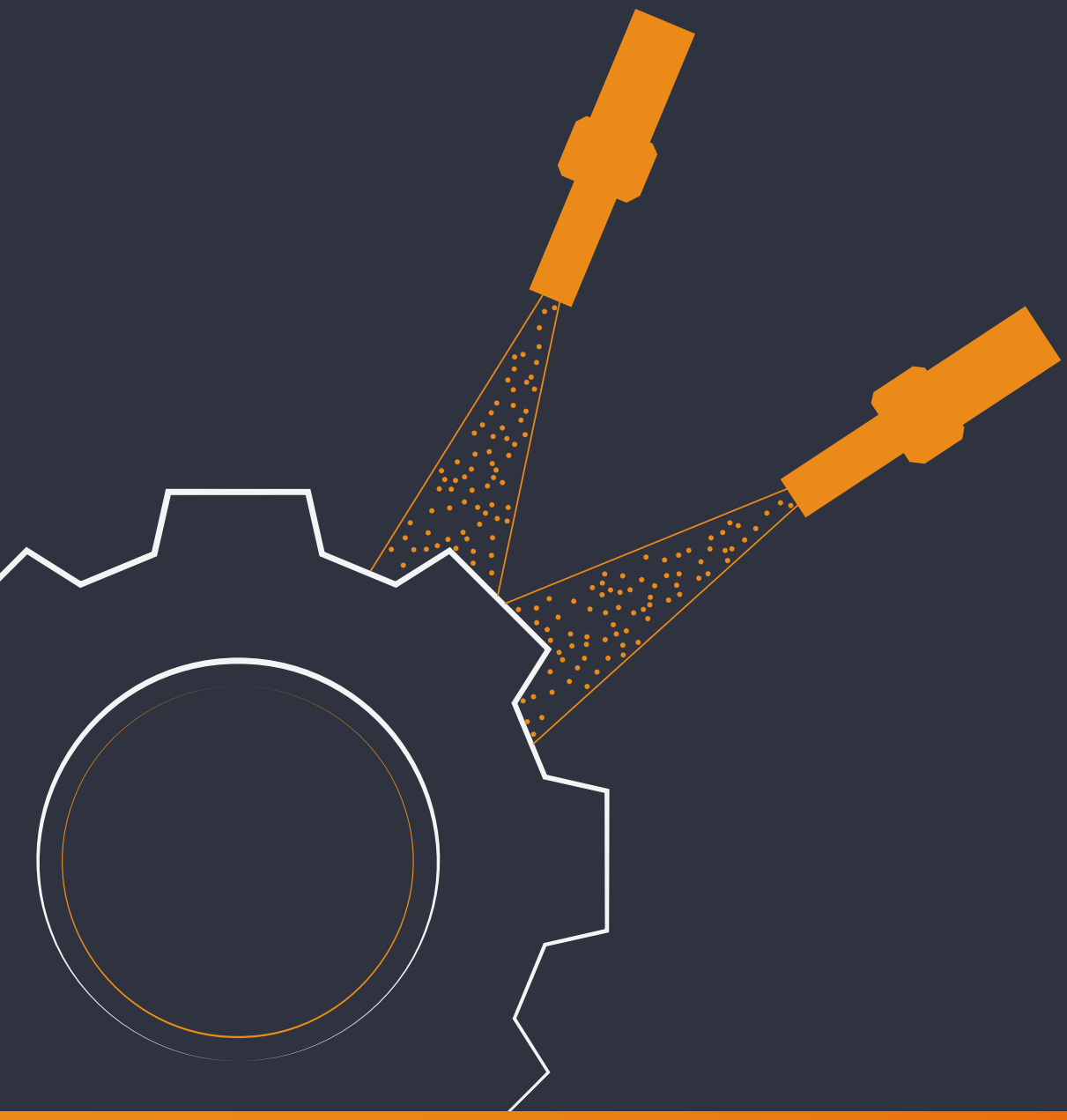
RÖSLER®
finding a better way ...

Airblast



Mass Finishing

High-performance equipment and innovative technologies – productive and cost-effective

Shot Blasting

Customer-oriented equipment technology and intelligent process solutions – long-lasting and energy-efficient

AM Solutions

Comprehensive solutions for additive manufacturing, especially 3D post processing equipment

›80 More than 80 years of **experience**

15 locations –
over **150** distributors –
over **1,500** employees **across the globe**

Worldwide **Customer Experience Center**

More than **15,000**
different types of media and compounds

Our technical service –
round-the-clock support

Transfer of professional knowledge
by certified trainers

RÖSLER finding a better way ...

Contents

BLAST CABINET RSK

For surface texturing, deburring, paint stripping, de-rusting, de-sanding, removal of coatings, descaling and cleaning

Rösler blast cabinets are **proven** standard blast machines. In the "Basic" version RSK cabinets are available with suction (RSKI) or pressure blast system and dust collector. The standard version is characterized by a roll-up front door and a large inspection window.

The cabin design is modular so that components like turntable or rotary basket can be easily added. In addition, numerous options, such as automatic blast nozzle movement, expanded blast media cleaning system or additional wear protection, are available.

RSKD with blast media recycling and cleaning system

Ideal manufacturing tool thanks to

- robust design in industrial quality
- numerous optional accessories

1 Design and technical features

- Loading of the work pieces by crane or lift truck possible: Front door opens across the entire front of the blast chamber all the way to the grate
- Small footprint: Integrated, powerful cartridge dust collector
- Unobstructed view: Steep angle of the inspection window prevents dust deposits
- Clever design and minimal wear: External cabin lighting, easily accessible through separate opening in the ceiling
- Standard equipment: Screen for coarse particles
- Easy cleaning: Blast chamber designed for optimal blast media flow
- Multi-purpose machine: Various accessories (pages 6 + 7) allow manual and semi-automatic operation

2 Suction blasting: RSKI version

- The blast media is collected in the bottom funnel
- There one or more blast guns are connected with hoses
- Compressed air creates a negative pressure in the blast gun: This causes the media from a storage hopper to be sucked into the blast gun and getting accelerated

3 Pressure blasting: RSKD version

- The air pressure in a pressure vessel accelerates the blast media and transports it to the blast gun
- The pressure vessel can be connected to the bottom funnel in the cabinet or attached to a cyclone cleaning system placed near the blast cabinet
- Compared to suction blasting higher blasting intensity
- The intensity can be increased by the use of larger blast media

Specifications RSKI

Model	RSKI 700	RSKI 1000	RSKI 1400
Overall widt (mm)	1,070	1,370	1,770
Overall depth (mm)	1,700	1,930	2,010
Overall height (mm)	1,710	1,740	1,780
Blast chamber width (mm)	690	990	1,390
Blast chamber depth (mm)	750	1,000	1,390
Blast chamber height (mm)	600	710	740
Blast gun suction blast system	SPI 38	SPI 38	SPI 38
Quantity	1 (to 2)	1 (to 4)	1 (to 4)
Air nozzle Ø (mm)	3.0 - 6.0	3.0 - 6.0	3.0 - 6.0
Blast nozzle Ø (mm)	8.0 - 14.0	8.0 - 14.0	8.0 - 14.0
Blast nozzel material	Steel/ Boron carbid	Steel/ Boron carbid	Steel/ Boron carbid
Compressed air requirements/ nozzle at 3 bar (m³/h)	20 - 80	20 - 80	20 - 80
Accessories			
Rotary basket/ turntable	o / o	o / o	o / o
Satellite stations SAT (quantity)	-	12	18
Special accessories	-	o	o
Air volume dust collector (m³/h)	300	300	600

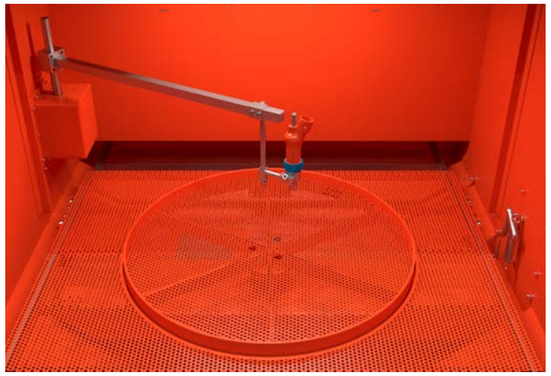
• = standard | - = not available | o = optional

Specifications RSKD

Model	RSKD 1000	RSKD 1400
Overall width (mm)	1,590	2,010
Overall depth (mm)	2,840	2,890
Overall heigh (mm)	2,480	2,580
Blast chamber width (mm)	990	1,390
Blast chamber depth (mm)	1,000	1,070
Blast chamber height (mm)	710	740
Blast gun pressure blast system	SPD 38	SPD 38
Quantity	1	1
Blast nozzle Ø (mm)	8.0 - 14.0	8.0 - 14.0
Blast nozzle material	Steel/ Boron carbid	Steel/ Boron carbid
Compressed air requirements/ nozzle at 3 bar (m³/h)	115 - 335	115 - 335
Volume of pressure vessel (l)	25	25
Accessories		
Platform, pressure vessel	•	•
Pressure vessel placed near the cabinet	o	o
Rotary basket / turntable	o / o	o / o
Satellite workstations SAT (quantity)	12	18
Air volume dust collector (m³/h)	1,000	1,000

BLAST CABINET RSK

Accessories

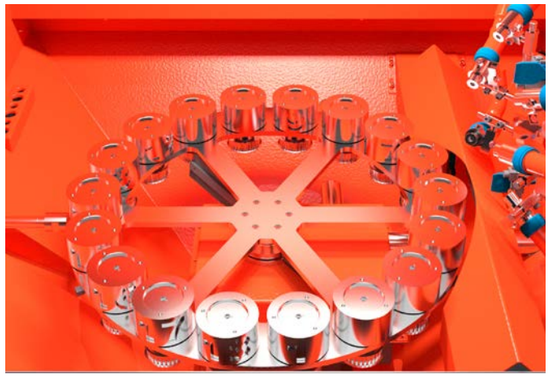


Turntable

For processing large and heavy work pieces the blast chamber can be equipped with a turntable. Several tables with different sizes and weight capacities are available. The table can be rotated by hand or by electric motor. Partial automation is possible with mechanical/pneumatic blast gun movement (horizontal/vertical).

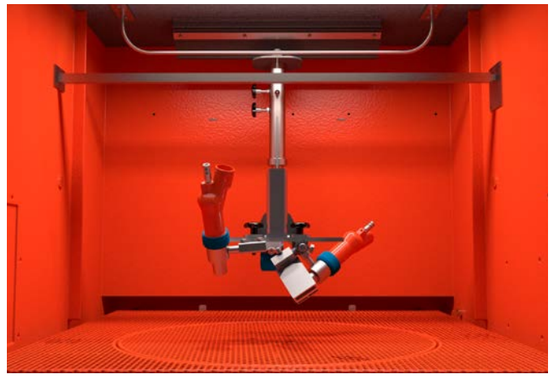
Rotary basket

This accessory allows shot blasting entire batches of small work pieces, which can tumble over each other. The basket can easily be inserted into star-shaped tiltable fixture. The rotation is induced by an electric motor placed on the outside of the cabinet.
The constant tumbling of the work pieces in the rotary basket ensures homogeneous and optimal blast results.



Turntable with satellite stations

With this accessory entire batches of round or nearly round components can be processed simultaneously. The work pieces are individually placed on the satellite stations. Between blast cycles the turntable is indexing from one satellite position to the next. The actual blast operation takes place with the table being stationary but under constant rotation of the satellite stations.



Blast gun movement

Pre-programmed blast gun movements allow automated shot blasting processes. The movement can be around a vertical as well as a horizontal axis.

You can find more information about our machine types and additional components under www.rosler.com or scan the QR-Code.

SWING TABLE BLAST MACHINE RWT

For shot blasting of targeted surface areas, cleaning, deburring, shot peening and creating homogeneous surface finishes

The Rösler swing table machines allow the shot blasting **of round or nearly round components,** for example, transmission parts. The swing table is equipped with **two satellite workstations located on opposite sides of the table.** This clever equipment design allows unloading/loading the work pieces at one station, while the work pieces at the opposite station are being blasted. During the blast cycle the satellite station is rotating. Once a blast cycle is completed, the pneumatic lift gate opens, and the table indexes by 180°.

Ideal manufacturing tool thanks to

- minimal unproductive times and, therefore, short cycle times
- high work piece throughput

RWT swing table machine with adjacent cartridge dust collector

1 Design and technical features

- External table drive minimizes wear and facilitates maintenance. Satellite workstation drive in the blast chamber by V-belt
- Wear protection of the blast chamber and door: Designed for aggressive shot blasting, it guarantees high uptimes and prevents dust escaping from the machine
- Automatic work piece loading/unloading by material handling device or robot possible
- Option: Numerous electronic features allow precise process control
- Flexible operation: The machine can be equipped with a suction as well as a pressure blast system. Adjacent cyclone unit provides additional blast media recycling and cleaning capability
- Easy compliance with customer requirements: The RWT shot blast machines will be precisely adapted to your specific requirements

2 Swing table

- Step gear motor guarantees precise table rotation
- External table drive minimizes wear and facilitates maintenance. Satellite workstation drive in the blast chamber by V-belt

3 Blast chamber

- Large maintenance door allows easy access to the blast chamber
- Stable processing with stationary blast guns
- Option: Vertical blast gun movement for optimal shot blasting of long work pieces

Specifications RWT

Model	RWT 1000	RWT 1400
Overall width (mm)	1,450	1,850
Overall depth (mm)	1,500	2,630
Overall height (mm)	3,050	3,050
Suction blast system	•	•
Pressure blast system	o	o
Max. work piece size (mm)	Ø 200 x 400	Ø 350 x 400
Max. weight single work piece (kg)	10	10
Number of satellite workstations	1+1	1+1
Number of blast guns, standard	1	1
Single step movement	•	•
Double step movement	-	o
Air volume dust collector (m³/h)	1,000	1,000

• = standard | - = not available | o = optional

SATELLITE TABLE BLAST MACHINE RSA

For descaling, surface texturing, cleaning, deburring, de-sanding, creating homogeneous surface finishes and shot peening

Satellite table blast machines are used for continuous processing of **delicate work pieces** that must not touch each other during the blast process. This machine type is particularly suitable for shot blasting of precisely targeted surface areas. It allows short cycle times, because **one set of work pieces can be loaded/unloaded, while another set is being blasted.** In addition, several processing steps in the machine are taking place simultaneously. Satellite table machines are primarily utilized for round or nearly round work pieces, which are mounted onto special fixtures contained in the satellite workstations.

Ideal manufacturing tool for industrial volume production thanks to

- very high work piece throughput
- easy integration into existing manufacturing lines

RSA satellite table machine with adjacent blast media cleaning system

1 Design and technical features

- Easy compliance with customer requirements: The RWT shot blast machines will be precisely adapted to your specific requirements
- Flexible operation: The machine can be equipped with a suction as well as a pressure blast system. Adjacent cyclone unit provides additional blast media recycling and cleaning capability
- Compact machine design results in a small footprint
- Automatic work piece loading/unloading by material handling device or robot possible
- Ergonomic: Large access doors facilitate maintenance
- Option: Numerous electronic features allow precise process control

2 Satellite table

- Adaptable design: Machine can be equipped with 4 and 5 satellite stations in single step movement and 8 or 10 satellite stations for double step movement
- Consistent, stable blast processes: Step gear motor ensures precise indexing of the table
- Sturdy and efficient: Satellite rotation by V-belt

3 Blow-off station

- Integrated work piece cleaning station: In a separate machine segment compressed air nozzles blow off blast media from the finished work pieces
- Air nozzles precisely adapted to the work pieces

Specifications RSA

Model	RSA 1500-S4	RSA 1500-S5	RSA 1500-S8	RSA 1500-S10
Overall width (mm)	1,700	1,700	1,700	1,700
Overall depth (mm)	2,100	2,100	2,100	2,100
Overall height (mm)	2,500	2,500	2,500	2,500
Suction blast system	•	•	•	•
Pressure blast system	o	o	o	o
Max. work piece size (mm)	Ø 300 x 400	Ø 300 x 400	Ø 300 x 400	Ø 230 x 400
Max. weight single work piece (kg)	15	15	15	15
Number of satellite workstations	4	5	8	10
Number of blast guns, standard	4	4	4	4
Single step movement	•	•	-	-
Double step movement	-	-	•	•
Control panel with PLC	•	•	•	•
Air volume dust collector (m³/h)	2,000	2,000	2,000	2,000

• = standard | - = not available | o = optional

TUMBLE BELT BLAST MACHINE
RMBC WITH SUCTION BLAST SYSTEM

For de-sanding, descaling, de-rusting, deburring and creating homogeneous surface finishes

This machine type is ideal for **batch processing mass produced parts** made from a wide variety of different materials. RMBC systems allow the treatment of small, delicate duroplast parts as well as large, heavy forgings or castings. Contrary to turbine blasting the RMBC air blast system allows the use of a wide range of **mineral, highly abrasive, blast media**. To make shot blasting operations with media that cannot be used in turbine blast systems more productive and cost-efficient, we have adapted the tumble belt blast machines RMBC 1.1 and 2.1 for use with a pressure blast system.

Ideal manufacturing tool thanks to

- high equipment uptimes
- very low costs for maintenance

RMBC suction blast machine with adjacent cartridge dust collector

1 Design and technical features

- Easy and safe operation: Quick access to the load/unload area protected by limit switch
- Ergonomic: Low loading/unloading height
- Multi-purpose machine: Allows processing extremely small as well as large, complex work pieces
- Wear resistant: Blast chamber made from manganese steel
- Small footprint: Compact, space saving design
- Easy compliance with customer requirements: Specially adapted work piece loading/unloading systems facilitate integration into existing manufacturing lines

2 Work piece handling

- All-around and complete work piece cleaning: The optimal design of the troughed belt creates an intensive tumbling and mixing effect
- Rubber belt: For gentle processing of delicate work pieces

3 Blast media recycling and cleaning

- Consistent high quality of the operating mix:
  - Single stage, extra-wide air wash separator
  - Vibratory conveyor for discharging large debris from the system
  - Option: Automatic blast media replenishment

Specifications RMBC with suction blast system

Model	RMBC 1.1-Inj.	RMBC 2.1-Inj.
Troughed belt	Rubber belt	Rubber belt
Standard belt perforation (mm)	8	8
Blast gun	SPI 38	SPI 38
Number of blast guns	6	8
Max. batch volume (dm³)	90	160
Max. batch weight (kg)	300	400
Max. weight single work piece (kg)	10	10
Manual lift gate	•	•
Air volume dust collector (m³/h)	2,000	2,000
Blast chamber width (mm)	700	900

• = standard | - = not available | o = optional

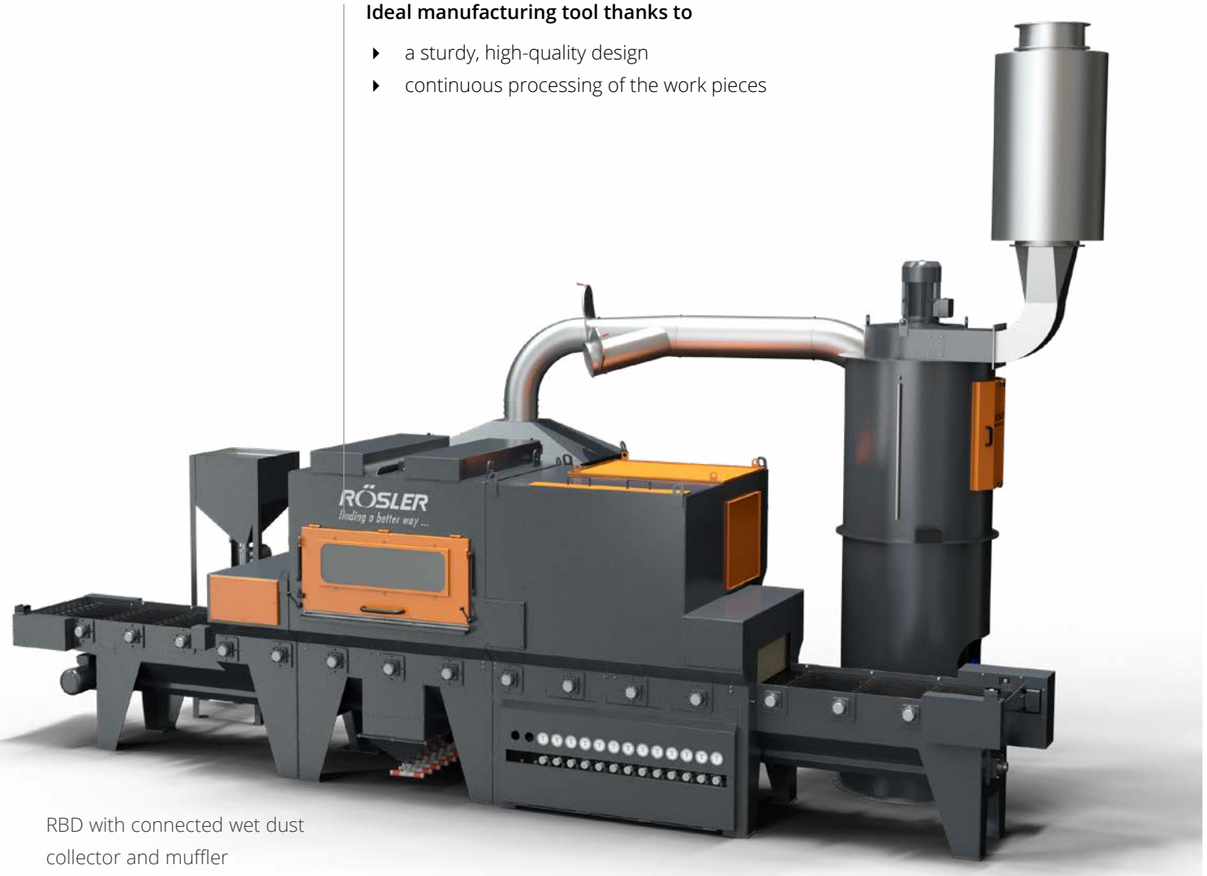
CONTINUOUS BELT BLAST MACHINE RBD

For cleaning, descaling and stripping

Continuous belt blast machines are primarily used for cleaning and paint & coating stripping **in continuous flow operation.** They are ideal for processing large work piece volumes in continuous production lines. The work piece flow takes place with practically no interruption for loading and unloading. The blast guns are placed above the belt. **Oscillation of the blast guns** ensures perfect blast coverage over the entire belt width.

Ideal manufacturing tool thanks to

- a sturdy, high-quality design
- continuous processing of the work pieces



RBD with connected wet dust collector and muffler

1

Design and technical features

- Cost-efficient: Designed for large volumes of flat work pieces with simple shape
- Small footprint: Compact, space saving design
- Easy integration into existing manufacturing lines

2

Optional: blow-off station

- Integrated work piece cleaning station: In a separate machine segment compressed air nozzles blow off blast media from the finished work pieces
- Air nozzles precisely adapted to the work pieces

3

Suction blasting

- The blast media is collected in the bottom funnel
- There one or more blast guns are connected with hoses
- Compressed air creates a negative pressure in the blast gun: This causes the media from a storage hopper to be sucked into the blast gun and getting accelerated

4

Pressure blasting

- The air pressure in a pressure vessel accelerates the blast media and transports it to the blast gun
- The pressure vessel can be connected to the bottom funnel in the machine housing or attached to a cyclone cleaning system placed near the blast cabinet
- Compared to suction blasting higher blasting intensity
- The intensity can be increased by the use of larger blast media

BLAST MACHINE WITH LATERAL TROLLEY ATT

For general surface cleaning, surface texturing prior to plasma coating, shot peening, wet blasting or shot wet shot peening

The Rösler ATT shot blasting system is **available in different designs** ranging from the standard version for relatively easy shot blasting tasks to high-performance machines for complex, challenging shot blasting operations. This machine type can be used **for blasting large components** (like fan rings) **as well as processing smaller work pieces**, such as turbine blades.

ATT machine with sophisticated blast system

Ideal manufacturing tool thanks to

- high work piece weights of 2,000 kg and more

1 Design and technical features

- Ergonomic: Easy work piece handling, for example, by crane
- Clean environment: Inflatable door seal ensures that no dust and blast media escape into the environment
- High operational safety: Separate work piece blow-off station with protective walls
- Option: Numerous electronic features allow precise process control

2 Blast guns and blast gun holders

- The number of blast guns is precisely adapted to the work pieces

3 System controls and blast gun movement

- Sophisticated controls: PLC, CNC or robot control systems
- Flexible design: Different axis movements can be utilized for a broad range of shot blasting tasks

4 Work piece trolley

- Simple handling: Hand-hold control device makes handling of the work pieces in the load/unload area easy

Specifications ATT

Model	ATT 1000	ATT 1200	ATT 1500	ATT 2000
Max. work piece size (mm)	Ø 1,000	Ø 1,200	Ø 1,500	Ø 2,000
Max. weight single work piece (kg)	200	200	300	500
Shot blasting operation	Flexible configuration	Flexible configuration	Flexible configuration	Flexible configuration
Control panel with PLC Control panel with PLC	•	•	•	•
Automatic work piece loading station	•	•	•	•
Multi-axis blast gun movement	•	•	•	•
Robotic blast gun movement	o	o	o	o
Turntable with precise positioning	o	o	o	o
Air volume dust collector (m³/h)	Depends on the blast process	Depends on the blast process	Depends on the blast process	Depends on the blast process

• = standard | - = not available | o = optional

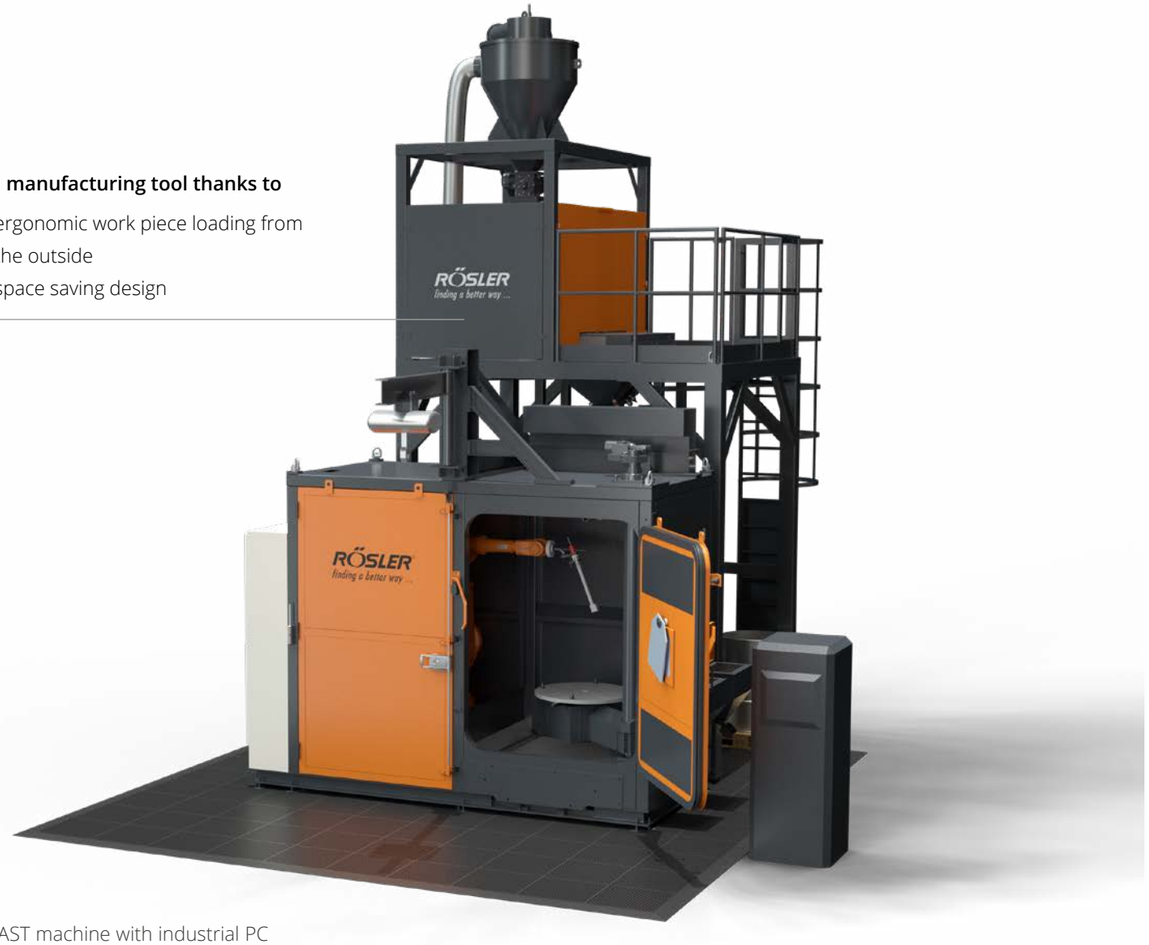
BLAST MACHINE WITH SWING-OUT TURNTABLE AST

For general shot peening, shot peening of targeted surface areas, pickling, cleaning, wet blasting and stripping

This machine was developed for shot blasting complex work pieces, especially **components requiring external as well as internal blast treatment**. All kinds of processes, from removal of coatings (for example stripping of plasma coatings) to shot peening, can be run in this machine. Thanks to different machine sizes components with up to 1,500 mm in diameter and 2,000 mm in height can be processed. These can be cylindrical work pieces such as shafts and drums, landing gears, housings, etc.

Ideal manufacturing tool thanks to

- ergonomic work piece loading from the outside
- space saving design



AST machine with industrial PC integrated into the control panel

1 Design and technical features

- Ergonomic: Swing-out turntable allows loading/unloading of the work pieces outside of the machine
- Multi-purpose machine: Allows the processing of work pieces with round as well as very complex shapes
- Flexible processing: Special blast lance allows blasting of tight internal surface areas
- Option: Numerous electronic features allow precise process control

2 Blast gun movement

- High versatility: For very complex work pieces blast gun movement by robot is recommended
- Option: Semi- and fully automatic tool change systems simplify handling and minimize set-up and other unproductive times

3 Internal blasting of long work pieces

- All-around shot blasting: A special blast lance, mounted on the cabin roof, allows the blasting of the internal surface of long work pieces. The blast lance movement is controlled by a separate axis and can be coordinated with the movements of the robot. The up/down movement is determined by the work piece length
- Precise: With a special calibration system the lance movement orients itself around the center point of the turntable. Therefore, the shot blast results on the internal and external surface areas of the work pieces are absolutely consistent and repeatable

4 Option: PC supervisor system

- An easy-to-operate “PC Supervisor PLC” controls the shot blasting process and creates process logs and Almen curve diagrams. The PC can be linked to higher level computer systems. It also permits a complete visualization of the machine and the shot blasting system

Specifications AST

Model	AST 800	AST 1000	AST 1200	AST 1500
Max. work piece size (mm)	Ø 800 x 1,000	Ø 1,000 x 1,000	Ø 1,200 x 1,800	Ø 1,500 x 2,000
Max. weight single work piece (kg)	150	200	250	300
Shot blasting operation	Flexible configuration	Flexible configuration	Flexible configuration	Flexible configuration
Control panel with PLC	•	•	•	•
Automatic swing-out turntable	•	•	•	•
Robotic blast gun movement	o	o	o	o
Satellite workstations for the turntable	o	o	o	o
Internal blast lance	o	o	o	o
Automatic tool change system	-	o	o	o
Air volume dust collector (m³/h)	Depends on the blast process	Depends on the blast process	Depends on the blast process	Depends on the blast process

• = standard | - = not available | o = optional

BLAST MACHINE WITH L-SHAPED DOOR ALS

For stripping, surface texturing and shot peening of very large work pieces

This machine was developed for processing **very large work pieces**, for example, landing gear components with lengths of up to 3,000 mm. The external shot blasting operation with robot-guided blast guns is complemented by the simultaneous blasting of internal surface areas. ALS machines can be equipped with a manual or automatic clamping system. This permits quick and easy **horizontal clamping of work pieces with different lengths.**

Ideal manufacturing tool thanks to

- all-around accessibility
- ergonomic loading/unloading of the work pieces
- high operational flexibility: Allows the processing of work pieces in all sizes and shapes

ALS machine with horizontal and vertical turntable

1 Design and technical features

- Easy access to the blast chamber
- Highly precise and flexible: To accommodate work pieces with complex shapes, different turntable versions are available. For example, turntables with simple rotation or with precision positioning and tilting feature
- Clean environment: Inflatable door seal ensures that no dust and blast media escape into the environment
- Option: Numerous electronic features allow precise process control

2 Internal blasting of work pieces in horizontal position

- All-around shot blasting: A special blast lance, mounted on the cabin wall, allows the blasting of the internal surface of the work pieces. The blast lance movement is controlled by a separate axis. If needed, it can be coordinated with the movements of the robot.
- Operational safety: The blast lance is mounted in a protective enclosure

3 Shot blasting systems

- Numerous possibilities: Rösler offers a broad program of different blast systems ranging from simple suction blasting to highly precise shot peening. Our experts will develop the blasting solution that perfectly fits your requirements
- With decades of experience and proven equipment concepts we are able to fulfill all technical standards, for example, "AMS 2430", "AMS 2432" and other shot blasting standards

4 Option: PC supervisor system

- An easy-to-operate "PC Supervisor PLC" controls the shot blasting process and creates process logs and Almen curve diagrams. The PC can be linked to higher level computer systems. It also permits a complete visualization of the machine and the shot blasting system

Specifications ALS

Model	ALS 2000	ALS 3000	ALS 4000
Max. work piece size (mm)	2,000 x 1,500 x 1,500	2,500 x 2,000 x 2,000	3,000 x 2,200 x 2,200
Max. weight single work piece (kg)	500	1,000	1,000
Shot blasting operation	Flexible configuration	Flexible configuration	Flexible configuration
Control panel with PLC	•	•	•
Automatic sliding door	•	•	•
Robotic blast gun movement	•	•	•
Satellite workstations for the turntable	o	o	o
Internal blast lance	o	o	o
Automatic tool change system	-	o	o
Manual shot blasting	o	o	o
Air volume dust collector (m^3/h)	Depends on the blast process	Depends on the blast process	Depends on the blast process

• = standard | - = not available | o = optional

BLAST MACHINE WITH SWING DOOR ARD

For shot peening, high pressure water jet blasting, cleaning, wet blasting and stripping

The applications for this machine range from cleaning of castings to precision shot peening of shafts and transmission components. Each side of the **swing door - with a turning radius of 180°** - contains one workstation with one or more satellites. This allows the loading/unloading of one work piece batch, while another batch is being processed. Since the **loading/unloading and shot blasting operation take place simultaneously**, unproductive times are minimal.

Ideal manufacturing tool thanks to

- high operational efficiency with practically zero unproductive times
- excellent productivity with high work piece throughput
- can be fully automated

ARD machine with suction blast system and blast media classification by screen

1 Design and technical features

- Ergonomic: Easy work piece handling, for example, by crane
- Clean environment: Inflatable door seal ensures that no dust and blast media escape into the environment

2 Satellite workstations and swing door

- Easy compliance with customer requirements: For increased work piece throughput the workstations can be equipped with multiple satellite stations
- Operational flexibility: The work pieces can be blasted under rotation or with precise positioning. The blast operation can take place simultaneously or sequentially, one station after the other

3 Wet blasting

- Flexible processing: From straightforward wet blast cleaning to highly precise wet peening
- With decades of experience and proven equipment concepts we are able to fulfill all technical standards, for example, “AMS 2430”, “AMS 2432” and other shot blasting standards
- Economical: The Rösler process water cleaning and recycling system by centrifuge reduces your water consumption by up to 90%

4 Controls

- Sophisticated: PLC, CNC or robot control systems

5 Option: PC supervisor system

- An easy-to-operate “PC Supervisor PLC” controls the shot blasting process and creates process logs and Almen curve diagrams. The PC can be linked to higher level computer systems. It also permits a complete visualization of the machine and the shot blasting system

Specifications ARD

Model	ARD 1400	ARD 2000	ARD 2500	ARD 3000
Max. work piece size (mm)	Ø 500 x 1,000	Ø 800 x 1,000	Ø 1,000 x 1,200	Ø 1,200 x 1,200
Max. weight single work piece (kg)	100	150	200	250
Shot blasting operation	Flexible configuration	Flexible configuration	Flexible configuration	Flexible configuration
Control panel with PLC	•	•	•	•
Satellite workstations on each side	1 - 4	1 - 4	1 - 6	1 - 8
Robotic blast gun movement	o	o	o	o
Air volume dust collector (m³/h)	Depends on the blast process	Depends on the blast process	Depends on the blast process	Depends on the blast process

• = standard | - = not available | o = optional

ACCESSORIES

Numerous accessories can be added to further **optimize a shot blasting operation** resulting in **lower costs, less material input** and **reduced manual work piece handling**.

Our technical experts will gladly assist you in planning your new shot blast machine.

Dust collectors

Rösler offers different dust collectors, for example, collectors with dry filter cartridges or explosion protected dry filter cartridges and wet dust collectors. With dry filter cartridges the residual dust load in the clean air can be as low as <1mg/Nm³, considerably lower than what is mandated by the German regulations, which stipulate 3 – 5 mg/Nm³. The air flow capacities of the Rösler collectors range from 1,000 bis 25,000 m³ per hour.

Noise absorbing cabin

Depending on the machine type and local conditions, the noise level around a shot blast machine can reach over 80 dB(A). Rösler supplies noise absorbing cabins that are perfectly adapted to the respective shot blast equipment. The noise absorbing cabins consist of high-quality dual-wall segments with a lining on the inside. Their individual design ensures that the specified max. noise level is not exceeded. To save costs Rösler noise absorbing cabins are only placed around those equipment components that require protection against noise. This keeps the costs low without affecting the desired noise suppression. Depending on the machine type and size multiple inspection windows are installed. Double wing doors allow easy access. If a complete enclosure is required, the noise absorbing cabins can also be supplied with a roof.

Automated shot blasting operations

Process stability, short loading and unloading times, high work piece weights and consistent shot blasting results, all these are demands that in today's manufacturing environment make the use of robots and automatic handling systems indispensable. Of course, this applies also to shot blasting systems, which are increasingly automated. Whether you are looking for initial automation concepts, detailed process solutions and cycle time studies – broken down to the costs per piece - Rösler is your qualified partner for all automation aspects. The integration of shot blast equipment into complex manufacturing centers is one of Rösler's core competencies. Custom-engineered gripper systems for precise work piece handling are developed in close cooperation with our customers and extensively tested and optimized before installation.

Our experts for robotic handling and programming around the world stand ready on short notice to make adjustments and optimize your equipment.

Internal blasting

For shot blasting the internal surface of cylindrical components we offer specially designed internal blast nozzles connected to a pressure blast system. We will be happy to assist you with your shot blasting challenges.

PROCESS WATER CLEANING AND RECYCLING

For ecological and economic reasons the cleaning and, preferably recycling, of the process water has a high priority in many industrial manufacturing operations. Customers are looking for proven, high-capacity cleaning and recycling systems that can be used for a broad spectrum of applications such as wet blasting, high pressure waterjet blasting, mass finishing operations and other industrial processes.

Functional principle

Depending on the desired results, the process water contaminated with solid particles may have to be guided through different cleaning systems. These can be simple and straightforward or highly complex with multiple stages.

At the heart of the all-round cleaning system from Rösler are centrifuges available in different configurations. A screen at the inlet of the collecting tank removes coarse particles from the contaminated process water. While the water is in the collecting tank, an integrated stirrer prevents the solid fines from settling at the bottom of the tank.

With a rotary speed of 3,000 RP, the aluminum drum in the centrifuge generates an extremely high centrifugal force. This permits the separation of very fine and light solids from the water. Depending on the centrifuge type, the sludge with its surprisingly low water content, can be removed from the drum either manually or fully automatically.

Besides cleaning centrifuges Rösler supplies numerous accessories such as band filters, settlement tanks, UV systems, pH and conductivity measuring systems, water softening devices, cooling systems, and many more. In addition, Rösler offers fully integrated, digital process control systems for monitoring and adjusting all major water parameters. They allow automatic operation without operator interference for long time periods.

Applications	Function
Wet blasting	Removal of solid fines and broken-down blast media
High pressure water jet blasting	Removal of abrasive particles consisting of stripped ceramic and plasma coatings
Mass finishing	Removal of ceramic, plastic and metal fines
Metal processing	Cleaning of coolants and grinding oil
Technical ceramics	Cleaning of the cooling liquid used for sawing, grinding and polishing operations
Glass industry	Cleaning of liquids used for all kinds of technical operations like polishing of optical lenses
Production of solar panels, wafers	Sawing, grinding
Paint operations	Cleaning of the process water in wet paint operations
ECM processes	Cleaning of electrolytes
Reclamation of valuable materials	Gold, silver, copper, etc. in the process water
Dewatering of sludge	Reduction of the residual water content prior to disposal

EQUIPMENT AUTOMATION

Maximum precision and high process stability

Automated shot blasting yields **more precise blast results** and consistent compliance with specifications and standards. With our automated air blast systems we make processes and products a lot safer and achieve **significant savings in material and personnel costs**. This applies not only to volume production but also to high-value single components.

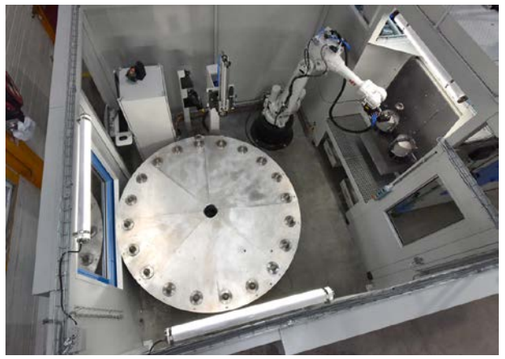
With Rösler automation solutions you gain the following benefits:

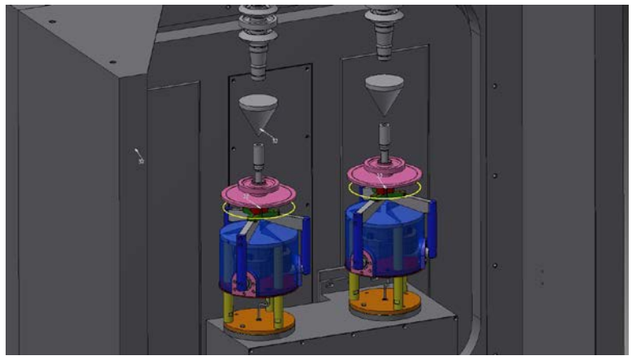
- Saving of valuable manufacturing space and reduced costs combined with a **high capacity utilization**
  - Custom-engineered solutions require a minimum of space
  - Fully automatic work piece handling for the entire process minimizes unproductive times

- **More precise results and higher process stability**
  - Combining sequential manufacturing steps into one single operation (for example, optical inspection, quality control and measurements) saves time and prevents the need for manual operations by trained personnel
  - Fully automated masking and mask removal lowers material costs
  - Automatic measurements and work piece recognition speed up the manufacturing flow
  - Tracing the work pieces during the entire manufacturing operation facilitates the quality control function

- Decades of experience and global **Customer Experience Centers**
  - Comprehensive know-how based on numerous successful automation projects
  - Development of special material handling solutions for the tough shot blasting environment
  - Development of manual and automatic work piece fixtures on the basis of proven fixturing concepts

- Integration of **industrial robots**
  - Consultation about and setup / programming of multi-robot handling systems with 14 and more simulated axis
  - Comprehensive experience with ABB and RobotStudio





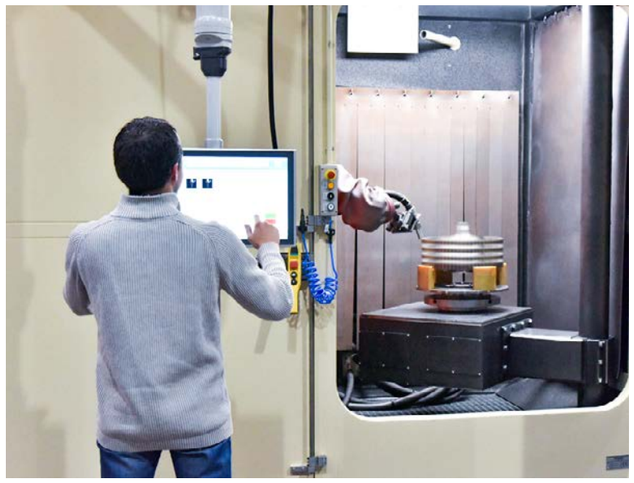
EQUIPMENT CONTROLS AND DIGITIZATION

Implementation of industry 4.0

Shot blasting applications also extend to very precise and complex components. This demands a high degree of **process stability, operational efficiency** and **absolutely repeatable results**. With our sophisticated control and digitization solutions we help our customers to oversee their production and automate internal processes.

Rösler control and digitization solutions provide you with the following benefits:

- Elimination of unproductive times through **digital 3D modeling of the shot blast equipment**
  - Programming of shot blasting processes for new work pieces by simulation, offline programming and remote trouble shooting
- Improved cost efficiency through **automatic scheduling of maintenance and remote trouble shooting**
  - Display and recording of component failures
  - Safe remote trouble shooting with VPN connection, allows access to all Rösler sub-systems
  - Preventive maintenance with uptime projections and replacement schedules for all wear parts. Includes automatic replenishment orders.
- **Direct communication across all systems** ensures optimized manufacturing processes
  - Integration of the Rösler equipment into your company network
  - Automatic work piece recognition and data management for every work piece
  - Exchange of work piece data and process parameters with external computer systems (for example, data bank within the company network, SAP interfaces, etc.)
  - Logging of all process parameters for the treated work pieces in a separate document facilitates compliance with certification regulations
  - Combining PLC, CNC and robot controls into one single integrated system



AFTER-SALES-SERVICE

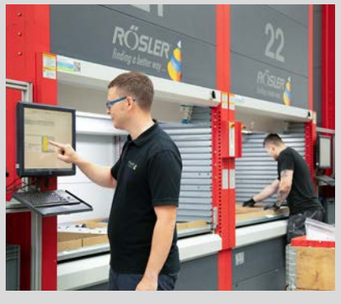
Twenty-four-seven technical support – throughout the life of your machine!

Irrespective of what surface treatment issues you might have, we offer professional support and meet all your requirements:

- Spare and wear parts, also for equipment supplied by other manufacturers
- Tailormade maintenance contracts
- Control and calibration of dust collectors
- Modernization and relocation of existing equipment
- Expert advice for all process questions
- Blast media analysis
- Support in meeting the operating standards for your equipment
- Protective ground wire tests (in accordance with EN 60204-1 / VDE 0113)
- BUS measurements
- Customer Experience Centers and process labs around the world
- Training courses for operators and maintenance personnel
- Added value through service contracts: 24 h emergency hotline

Maintenance and repair service

Our professional service team stands ready to serve you, be it helping with an emergency, a repair or a scheduled maintenance. With quick response times and well-equipped service vehicles we are able to maintain your onsite equipment or get it running again.



Spare and wear parts – also for equipment supplied by other manufacturers

By nature all shot blast machines are subject to wear! Rösler maintains a large stock of spare parts. This guarantees quick delivery and a high equipment uptime. If needed, we will arrange for delivery overnight.

Please find more information to our service for shot blast machines at www.rosler.com

CUSTOMER EXPERIENCE CENTER SHOT BLAST TECHNOLOGY

A special feature of the Rösler philosophy is our **integrative approach** to surface treatment challenges. Equipment and processes are not only tailored to the respective finishing task but also optimally integrated into the overall manufacturing operation. Practically all our Rösler locations have their own **Customer Experience Center** (CEC) equipped with state-of-the-art machinery.To develop the best processing solutions we conduct comprehensive processing trials with the work pieces from our customers in our CEC's.

Process development and optimization

From the processing trials, the process development and equipment selection to an excellent after sales service, we provide "total" solutions from one single source. In our well-equipped Customer Experience Centers (CEC) we can demonstrate all shot blasting processes under actual production conditions. Ultramodern physical and chemical measuring technologies support the process development and optimization. The process and design engineers from our **development and engineering departments** develop custom-engineered solutions on a daily basis. For the development of shot blasting solutions the processes are frequently planned with computer simulations. Thanks to ultramodern software we are able to electronically reproduce the possible finishing results on the surface of the work pieces. These simulations allow us to **optimize the physical arrangement** of the media acceleration systems relative to the work pieces that must be blasted.

Product development and optimization

The unique depth of our Rösler equipment portfolio, our Customer Experience Centers (CEC) around the world and our well-equipped lab in Untermerzbach, Germany, are ideal conditions for innovative and cost-effective product development in the field of shot blasting.

LEARNING FROM THE GLOBAL MARKET LEADER

Our expertise in the field of mechanical surface treatment is based on over 80 years of experience. As global technology and market leader in the refinement of surfaces we offer excellent complete solutions – from equipment and accessories, all the way to after sales service. We are happy to pass this unique knowledge to you in our training seminars.

Rösler Academy

The central training center of the Rösler Oberflächentechnik GmbH

- An area of more than 1,350 m² for learning and working
- Equipped with the latest digital media and communication technologies
- Certified professional trainers
- Specialized fields: Mass finishing, shot blasting, additive manufacturing
- More than 10 different training seminars
- Focus on hands-on learning
- Training seminars in German and English
- Customized training seminars at customer locations upon request

Our professional trainers

All our trainers are certified and are among the best in their respective fields. In our training seminars you will benefit from the extensive experience of our trainers, who will provide you with first-hand practical knowledge.

Ø Participants per year	Ø Rating	Ø Recommendation rate
Over 1,000	★★★★★ 9.6 out of 10 possible points[1]	99 %[1]

[1] Source: Evaluation questionnaires filled out by participants, Status 31/12/2022

You can find more information about our seminars, dates and registration procedures under www.rosler-academy.com or scan the QR-Code.

RÖSLER®
finding a better way ...

Mass Finishing

Shot Blasting

AM Solutions

www.rosler.com

Germany

Rösler Oberflächentechnik GmbH
Werk Memmelsdorf
Vorstadt 1
D-96190 Untermerzbach
Tel.: +49 9533 / 924-0
Fax: +49 9533 / 924-300
info@rosler.com

Rösler Oberflächentechnik GmbH
Werk Hausen
Hausen 1
D-96231 Bad Staffelstein
Tel.: +49 9533 / 924-0
Fax: +49 9533 / 924-300
info@rosler.com

USA

Rösler Metal Finishing USA, L.L.C.
1551 Denso Road
USA-Battle Creek
MI 49037
Tel.: +1 269 / 4413000
Fax: +1 269 / 4413001
rosler-us@rosler.com

France

Rösler France
Z.I. de la Fontaine d'Azon
CS 50513 – St. Clément
F-89105 Sens Cedex
Tel.: +33 3 / 86647979
Fax: +33 3 / 86655194
rosler-fr@rosler.com

Italy

Rösler Italiana S.r.l.
Via Elio Vittorini 10/12
I-20863 Concorezzo (MB)
Tel.: +39 039 / 611521
Fax: +39 039 / 6115232
rosler-it@rosler.com

Switzerland

Rösler Schweiz AG
Staffelbachstraße 189
Postfach 81
CH-5054 Kirchleerau
Tel.: +41 62 / 7385500
Fax: +41 62 / 7385580
rosler-ch@rosler.com

Spain

Rösler International GmbH & Co. KG
Sucursal en España
Polg. Ind. Cova Solera C/Roma, 7
E-08191 Rubí (Barcelona)
Tel.: +34 93 / 5885585
Fax: +34 93 / 5883209
rosler-es@rosler.com

Netherlands

Rösler Benelux B.V.
Reggestraat 18
NL-5347 JG Oss
Postbus 829
NL-5340 AV Oss
Tel.: +31 412 / 646600
Fax: +31 412 / 646046
rosler-nl@rosler.com

Belgium

Rösler Benelux B.V.
Avenue de Ramelot 6
Zoning Industriel
B-1480 Tubize (Saintes)
Tel.: +32 2 / 3610200
Fax: +32 2 / 3612831
rosler-be@rosler.com

Austria

Rösler Oberflächentechnik GmbH
Hetmanekgasse 15
A-1230 Wien
Tel.: +43 1 / 6985180-0
Fax: +43 1 / 6985182
rosler-at@rosler.com

Romania

Rösler Romania SRL
Str. Avram Iancu 39-43
RO-075100 Otopeni/ILFOV
Tel.: +40 21 / 352 4416
Fax: +40 21 / 352 4935
rosler-ro@rosler.com

Russia

Rösler Russland
Borovaya Str. 7, bldg. 4, office 107
111020 Moscow
Tel. / Fax: +7 495 / 247 55 80
rosler-ru@rosler.com

Great Britain

Rösler UK Ltd.
Unity Grove, School Lane
Knowsley Business Park
GB-Prescot, Merseyside L34 9GT
Tel.: +44 151 / 4820444
Fax: +44 151 / 4824400
rosler-uk@rosler.com

Brazil

Rösler Otec do Brasil LTDA
Av. Antonio Angelo Amadio, 1421
Centro Empresarial Castelo Branco
18550-000 Boituva
São Paulo - Brasil
Tel.: +55 15 / 3264-1117
Tel.: +55 15 / 3264-1112
info@rosler-otec.com.br

China

Rosler SURFACE-TECH (BEIJING) CO., LTD.
Beijing Office
Fu Hua Mansion, Office A-11-K
No. 8, Chao Yang Men North Avenue
Beijing 100027, P.R China
Tel.: +86 10 / 6554 73 86
Fax: +86 10 / 6554 73 87
rosler-cn@rosler.com

and over 150 additional distributors
around the world

Find your contact

Publ.-Nr.: EN.273.04 – Revision: 10/2024 – Specifications are subject to change without notice.