

Foundry & forge industry



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**



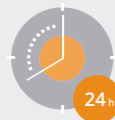
15 locations –
over **150** distributors –
over **1,500** employees **across the globe**



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

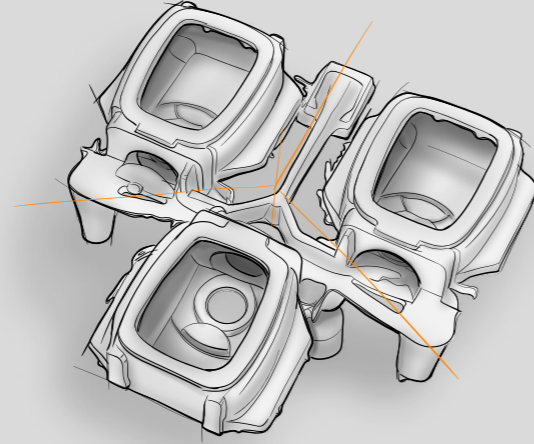
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SHOT BLAST EQUIPMENT FOR THE FOUNDRY & FORGE INDUSTRY

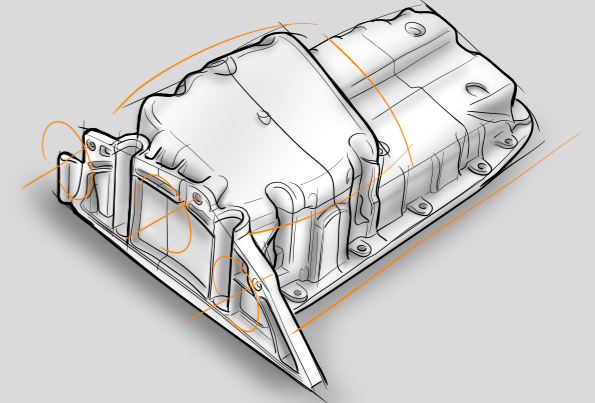
Cast iron, steel casting and forging:

The Rösler equipment program offers numerous possibilities for the surface refinement of castings and forgings. Precisely adapted to your individual shot blasting requirements, Rösler offers batch and continuous flow blast machines.



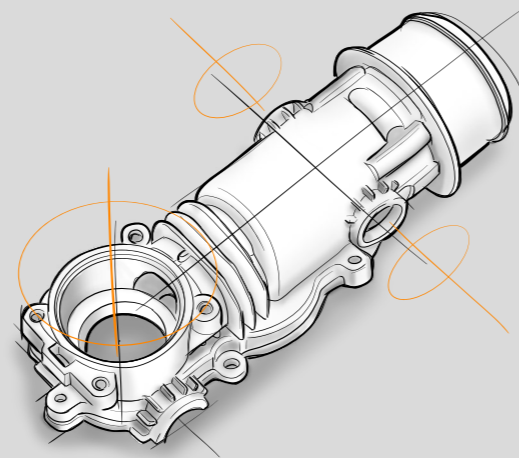
Work pieces that must not be nicked or scratched:

Rösler spinner hanger blast machines are ideal for blast cleaning delicate components with complex shapes. For work pieces that must not tumble over each other the RHBE / RHBD offer gentle processing without part-on-part contact. Spinner hanger machines are efficient, flexible and cost-effective and guarantee absolutely consistent results. An additional benefit is that a work piece batch can be loaded and unloaded while another batch is being processed in the blast chamber. This minimizes unproductive equipment times and saves costs.



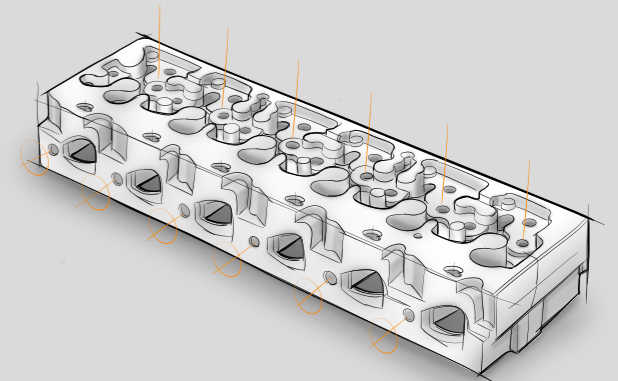
Work pieces that can tumble over each other and can be processed in batch mode:

To ensure high operational flexibility, our tumble belt machines and multi-tumblers can be supplied with different work piece loading and unloading systems and are available in different versions and sizes. Machines of the model range RMBC and RMT are equally suitable for handling large volumes of small, fragile work pieces as well as batches of larger, sturdy components. The Rösler continuous feed tumble belt blast machines of the model range RMBD can be perfectly integrated into automatic and semi-automatic manufacturing operations.



High-performance blast machines for special applications:

For difficult shot blasting tasks with complex work pieces Rösler offers a range of highly productive and proven shot blast equipment. For such challenging applications the Roboblaster, manipulator-based systems and crankshaft blast machines are specially adapted to the customer requirements. With their excellent blast performance and optimal placement of the turbines they guarantee excellent shot blasting results, even for difficult-to-reach internal surface areas.



TUMBLE BELT BLAST MACHINE RMBC

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

Batch tumble belt machines allow the effective shot blasting of **work pieces that can tumble over each other without the risk of damage.** They can handle extremely small as well as large, heavy work pieces with a high degree of efficiency.

RMBC machines are an ideal manufacturing tool thanks to

- ▶ perfect cleaning of difficult-to-reach surface areas
- ▶ high equipment uptime
- ▶ high process stability and consistent shot blasting results



Batch tumble belt blast machine with media replenishment system

- 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
 - ▶ All-purpose machine: Allows processing extremely small as well as large, complex work pieces
 - ▶ Fast: Powerful drive and high-performance dust extraction guarantee short cycle times
 - ▶ 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
 - ▶ Belt made from steel slats: For heavy, robust 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
 - ▶ Blast media flow control to the turbine(s):
 - By hand
 - Automatic
 - Automatic, including monitoring of the media flow
 - ▶ Option: Automatic blast media replenishment

Specifications RMBC

Model	RMBC 1.1-HD	RMBC 2.1-HD	RMBC 4.2-HD	RMBC 6.2-SB	RMBC 8.2-SB	RMBC 10.3-SB
Troughed belt	Rubber belt	Rubber belt	Rubber belt	Belt made from steel slats	Belt made from steel slats	Belt made from steel slats
Standard belt perforation (mm)	8	8	8	8	10	10
Turbines, standard	1 x Gamma 300G	1 x Gamma 300G	2 x Gamma 300G	2 x Gamma 300G	2 x Gamma 400G	3 x Gamma 400G
Turbine power, standard (kW)	5,5	7,5	7,5	11	22	22
max. batch volume (dm³)	90	160	370	550	800	1,000
max. batch weight (kg)	400	700	1,000	1,500	2,800	3,000
Pneumatic lift gate	•	•	•	•	-	-
Hydraulic lift gate	-	-	-	-	•	•
Vibratory conveyor	•	•	o	o	o	o
Capacity dust collector (m³/h)	2,000	2,000	3,000	5,000	7,500	10,000

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

You will find the available technical options for the special "foundry machine version" on page 24.

MULTI-TUMBLER RMT

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

Whenever **work pieces that can tumble over each other** must be processed, multi-tumblers ensure high process stability. The special drum design guarantees optimal and gentle mixing of the work pieces and, thus, consistent shot blasting results.



Batch processing with high process stability thanks to

- ▶ innovative, optimal drum geometry for intensive mixing of the work pieces

Multi-tumbler as stand-alone system

1

Design and technical features

- ▶ All-purpose machine: Allows processing extremely small as well as large, complex work pieces
- ▶ Easy and safe operation: Quick access to the load/unload area protected by limit switch
- ▶ Fast: Powerful drive and high-performance dust extraction guarantee short cycle times
- ▶ Wear resistant: Drum 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
- ▶ Machine requires no special foundation
- ▶ Option: Turbine speed control with frequency inverter

2

Blast media recycling and cleaning

- ▶ Consistent high quality of the operating mix: Single stage, extra-wide air wash separator
- ▶ Blast media flow control to the turbine(s):
 - ▶ - By hand
 - ▶ - Automatic
 - ▶ - Automatic, including monitoring of the media flow
- ▶ Option: Automatic blast media replenishment

Specifications RMT

Model	RMT 8	RMT 20	RMT 40	RMT 70	RMT 100
Standard drum perforation (mm)	6	8	10	10	12
Turbines, standard	1 x Gamma 300G	1 x Gamma 300G	1 x Gamma 400G	1 x Gamma 400G	1 x Ruten Gamma 520
Turbine power, standard (kW)	7,5	11	30	30	37
max. batch weight (kg)	200	500	1,000	1,800	3,000
max. batch volume (dm³)	80	200	400	700	1,000
max. work piece dimensions, measured diagonally (mm)	220	300	350	450	550
max. weight of single work pieces (kg)	10	25	60	100	100
Trommel made from manganese steel	•	•	•	•	•
No foundation required	•	•	•	•	•
Capacity dust collector (m³/h)	1,200	2,000	3,000	3,000	4,000

• = standard

You will find the available technical options for the special "foundry machine version" on page 24.

CONTINUOUS FEED TUMBLE BELT BLAST MACHINE **RMBD** & CONTINUOUS FEED LOOP BELT BLAST MACHINE **SBM**

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

Both machine types guarantee excellent shot blasting results. They are equally suitable for the cost-efficient processing of **work pieces produced in bulk as well as larger components with complex shapes**. In both machines the unique concept

of the troughed belt, consisting of specially designed individual rods, ensures a consistent forward movement of the work pieces through the blast machine.



Optimal shot blasting of bulk goods thanks to

- ▶ continuous flow of the work pieces through the machine

Continuous feed loop belt blast machine as stand-alone system

- 1** Transporting and shot blasting of the work pieces
- ▶ Highly dependable and gentle work piece transport: The transport system consists of a troughed belt that is formed by individual rods equipped with cams. The rods are either made from polyurethane or manganese steel
 - ▶ Batch integrity: Whenever different work pieces must be processed, the work pieces from the previous batch are completely removed from the machine
 - ▶ The continuous rotation of the work pieces ensures all-around processing
 - ▶ Customized blast systems: Numerous loading and unloading devices, such as lift & tip loaders, vibratory transport and storage hoppers and rotary storage tables, allow different equipment configurations

- 2** Problem-free integration
- ▶ No foundation required
 - ▶ Small footprint: Compact, space saving design
 - ▶ Continuous flow concept allows easy integration into existing manufacturing lines

- 3** Design and technical features
- ▶ SBM: Troughed belt work piece transport system consists of easily exchangeable polyurethane rods
 - ▶ RMBD: For quick and easy maintenance the entire troughed belt work piece transport system can be pulled out of the machine
 - ▶ Easy maintenance: Large inspection and maintenance doors allow quick access to all critical machine areas. All doors are protected by limit switches

- 4** 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
 - ▶ Blast media flow control to the turbine(s):
 - By hand
 - Automatic
 - Automatic, including monitoring of the media flow
 - ▶ Option: Automatic blast media replenishment

Specifications RMBD

Model	RMBD 500/2 E	RMBD 500/4 E
max. work piece dimensions, measured diagonally (mm)	400	400
Diameter troughed belt (mm)	500	500
Turbines, standard	2 x Gamma 300G	4 x Gamma 300G
Turbine power, standard (kW)	11	7,5
Capacity dust collector (m³/h)	3,000	4,000

Specifications SBM

Model	SBM 1010	SBM 1210	SBM 1520	SBM 2020
max. work piece dimensions, measured diagonally (mm)	100	165	190	225
Diameter troughed belt (mm)	210	290	290	364
Turbines, standard	1 x Gamma 300G	1 x Gamma 300G	2 x Gamma 300G	2 x Gamma 300G
Turbine power, standard (kW)	5,5	7,5	7,5	11
Troughed belt in manganese steel	o	o	o	o
Capacity dust collector (m³/h)	2,000	2,000	3,000	4,000

o = optional

SPINNER HANGER BLAST MACHINE RHBE / RHBD-T

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

RHBE spinner hanger blast machines are used for processing delicate work pieces that cannot tumble over each other; also for heavy and large components with complex shapes. The work pieces are placed on special carriers ("christmas tree"), which are then transported into the blast chamber. The simultaneous rotation and oscillation of the work piece carrier in front of the turbines ensures perfect, all-around shot blasting results.



Flexible equipment concept

- ▶ RHBE machines are equally suitable for processing single components as well as entire work piece batches
- ▶ Robust design allows multi-shift operation
- ▶ Optimal turbine placement around the blast chamber guarantees maximum performance with a minimum of wear

Spinner hanger blast machine RHBE as stand-alone system

- Design and technical features**
 - ▶ Excellent protection against blast media spillage: Patented seal in the ceiling of the blast chamber with multiple sealing strips and brushes
 - ▶ An even distribution of the media curtain in the extra wide air wash separator ensures optimal cleaning of the blast media
 - ▶ Fully automatic return of the media into the media recycling system
 - ▶ High uptime with a minimum of maintenance:
 - Blast chamber welded from 8 mm thick manganese steel
 - Extra wear protection in the blast chamber with easily exchangeable hung or bolted manganese steel plates
 - ▶ Dropout box with impact plate in the air duct increases the usable life of the filter cartridges by 30 %
- Economy version: RHBE-L**
 - ▶ Available in special sizes to match specific customer requirements
 - ▶ Sturdy design: Heavy-duty version guarantees long equipment life
- High performance version: RHBE-HD**
 - ▶ Available in special sizes to match specific customer requirements
 - ▶ Sturdy design: Heavy-duty version guarantees long equipment life
- Foundry version: RHBE-F**
 - ▶ Extra sturdy design: Engineered for the harsh operating conditions in foundries. Equipped with Gamma 400G high performance turbines for short cycle times and excellent shot blasting results
 - ▶ De-sanding: Version with magnetic separator and special de-sanding filter cartridges
- Continuous feed spinner hanger blast machine: RHBD-T**
 - ▶ High degree of automation, easy integration into existing manufacturing lines
 - ▶ Also available in high performance (HD) and foundry version (F)

Specifications RHBE-L:

Model	RHBE 11/15-L	RHBE 13/18-L	RHBE 17/22-L	RHBE 22/27-L	RHBE 22/32-L
Max. hook load, standard (kg)	500 each	500 each	1,000 each	1,000 each	1,000 each
Blast chamber door width (mm)	1,100	1,300	1,700	2,200	2,200
Blast chamber door height (mm)	1,500	1,800	2,200	2,700	3,200
Recommended diameter of the work piece carrier (mm)	900	1,100	1,500	2,000	2,000
Recommended length of the work piece carrier (mm)	1,300	1,600	2,000	2,500	3,000
Turbines, standard	2 x Gamma 300G	2 x Gamma 300G	3 x Gamma 300G	4 x Gamma 300G	4 x Gamma 400G
Turbine power, standard (kW)	5.5	7.5	7.5	7.5	11
Linear rail	o	o	o	o	o
Y rail, open	o	o	o	o	o
Y rail, closed	o	o	o	o	o
Pneumatic door movement	•	•	•	•	•
Number of door wings	1	1	2	2	2
Safeguard for gate opening and closing area	o	o	o	o	o
Lifting/lowering device for carrier hook	o	o	o	o	o
Installation in foundation pit	-	o	o	o	o
10 mm thick wear plates on the ceiling and opposite of the turbines	•	•	•	•	•
Wall thickness of the manganese steel blast chamber (mm)	8	8	8	8	8
Capacity dust collector (m³/h)	2,000	3,000	4,000	7,500	15,000

• = standard | o = optional

Specifications RHBE-HD:

Model	RHBE 11/15-HD	RHBE 13/18-HD	RHBE 17/22-HD	RHBE 22/27-HD	RHBE 22/32-HD	RHBE 22/42-HD	RHBE 27/27-HD	RHBE 27/32-HD	RHBE 27/42-HD	RHBE 32/32-HD
Max. hook load, standard (kg)	500 each	1,000 each	1,000 each	1,000 each	2,000 each	2,000 each	2,000 each	3,000 each	3,000 each	3,000 each
Blast chamber door width (mm)	1,100	1,300	1,700	2,200	2,200	2,200	2,700	2,700	2,700	3,200
Blast chamber door height (mm)	1,500	1,800	2,200	2,700	3,200	4,200	2,700	3,200	4,200	3,200
Recommended diameter of the work piece carrier (mm)	900	1,100	1,500	2,000	2,000	2,000	2,500	2,500	2,500	3,000
Recommended length of the work piece carrier (mm)	1,300	1,600	2,000	2,500	3,000	4,000	2,500	3,000	4,000	3,000
Turbines, standard	2 x Gamma 300G	3 x Gamma 300G	3 x Gamma 300G	4 x Gamma 300G	4 x Gamma 400G	6 x Gamma 400G	4 x Gamma 400G	4 x Gamma 400G	6 x Gamma 400G	5 x Gamma 400G
Turbine power, standard (kW)	5,5	7,5	11	11	11	15	15	15	15	15
Magnet separator	-	-	-	-	-	-	-	-	-	-
Pneumatic door movement	•	•	•	•	•	•	•	•	•	•
Number of door wings	2	2	2	2	2	2	2	2	2	2
Safeguard for gate opening and closing area	o	o	o	o	o	o	o	o	o	o
Lifting/lowering device for carrier hook	o	o	o	o	o	o	o	o	o	o
Installation in foundation pit	o	o	o	o	o	•	o	•	•	•
10 mm thick wear plates on the ceiling and opposite of the turbines	•	•	•	•	•	•	•	•	•	•
25 mm thick wear plates on the ceiling and opposite of the turbines	o	o	o	o	o	o	o	o	o	o
Wall thickness of the manganese steel blast chamber (mm)	8	8	8	8	8	8	8	8	8	8
Complete wear lining with 10 -12 mm thick manganese steel plates	o	o	o	o	o	o	o	o	o	o
Capacity dust collector (m³/h)	3,000	4,000	5,000	10,000	15,000	20,000	15,000	15,000	20,000	20,000

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

Specifications RHBE-F:

Model	RHBE 13/18-F	RHBE 17/22-F	RHBE 22/27-F	RHBE 22/32-F	RHBE 27/27-F	RHBE 27/32-F
Max. hook load, standard (kg)	1,000 each	1,000 each	1,000 each	2,000 each	2,000 each	5,000 each
Blast chamber door width (mm)	1,300	1,700	2,200	2,200	2,700	2,700
Blast chamber door height (mm)	1,800	2,200	2,700	3,200	2,700	3,200
Recommended diameter of the work piece carrier (mm)	1,100	1,500	2,000	2,000	2,500	2,500
Recommended length of the work piece carrier (mm)	1,600	2,000	2,500	3,000	2,500	3,000
Turbines, standard	2 x Gamma 400G	3 x Gamma 400G	4 x Gamma 400G	4 x Gamma 400G	4 x Gamma 400G	4 x Gamma 400G
Turbine power, standard (kW)	11	11	11	11	15	22
Magnetic separator	•	•	•	•	•	•
Linear rail	o	o	o	o	o	o
Y rail, open	o	o	o	o	o	o
Y rail, closed	o	o	o	o	o	o
Power & Free transport system	o	o	o	o	o	o
Pneumatic door movement	•	•	•	•	•	•
Number of door wings	2	2	2	2	2	2
Safeguard for gate opening and closing area	o	o	o	o	o	o
Lifting/lowering device for carrier hook	o	o	o	o	o	o
Vibratory conveyor	•	•	•	•	•	•
Installation in foundation pit	o	o	o	o	•	•
10 mm thick wear plates on the ceiling and opposite of the turbines	•	•	•	•	•	•
25 mm thick wear plates on the ceiling and opposite of the turbines	•	•	•	•	•	•
Manganese steel wall thickness of the blast chamber (mm)	10	10	10	10	10	10
Complete wear lining with 10 -12 mm thick manganese steel	o	o	o	o	o	o
Capacity dust collector (m³/h)	5,000	7,500	15,000	15,000	15,000	15,000

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

Specifications RHBD-T:

Model	RHBD 11/15-T	RHBD 13/18-T	RHBD 17/22-T	RHBD 22/27-T	RHBD 22/32-T	RHBD 22/42-T
Hook load, standard (kg)	500 each	1,000 each	1,000 each	1,000 each	2,000 each	2,000 each
Blast chamber door width (mm)	1,100	1,300	1,700	2,200	2,200	2,200
Blast chamber door height (mm)	1,500	1,800	2,200	2,700	3,200	3,200
Recommended diameter of the work piece carrier (mm)	900	1,100	1,500	2,000	2,000	2,000
Recommended length of the work piece carrier (mm)	1,300	1,600	2,000	2,500	3,000	3,000
Turbines, standard / 2 x Gamma 300G	2 x Gamma 300G	3 x Gamma 300G	3 x Gamma 300G	4 x Gamma 300G	4 x Gamma 400G	6 x Gamma 400G
Turbine power, standard (kW)	5,5	7,5	11	11	11	15
Transport system adaptable to customer requirements	•	•	•	•	•	•
Pneumatic door movement	•	•	•	•	•	•
Number of door wings	4	4	4	4	4	4
Safeguard for gate opening and closing area	•	•	•	•	•	•
Lifting/lowering device for carrier hook	o	o	o	o	o	o
Installation in foundation pit	o	o	o	o	o	•
10 mm thick wear plates on the ceiling and opposite of the turbines	•	•	•	•	•	•
25 mm thick wear plates on the ceiling and opposite of the turbines	o	o	o	o	o	o
Wall thickness of the manganese steel blast chamber (mm)	8	8	8	8	8	8
Complete wear lining with 10 -12 mm thick manganese steel plates	o	o	o	o	o	o
Capacity dust collector (m³/h)	3,000	4,000	5,000	10,000	15,000	20,000

Model	RHBD 27/27-T	RHBD 27/32-T	RHBD 27/42-T	RHBD 32/32-T
Hook load, standard (kg)	2,000 each	3,000 each	3,000 each	3,000 each
Blast chamber door width (mm)	2,700	2,700	2,700	3,200
Blast chamber door height (mm)	2,700	3,200	4,200	3,200
Recommended diameter of the work piece carrier (mm)	2,500	2,500	2,500	3,000
Recommended length of the work piece carrier (mm)	2,500	3,000	4,000	3,000
Turbines, standard / 2 x Gamma 300G	4 x Gamma 400G	4 x Gamma 400G	6 x Gamma 400G	4 x Gamma 400G
Turbine power, standard (kW)	15	15	15	15
Transport system adaptable to customer requirements	•	•	•	•
Pneumatic door movement	•	•	•	•
Number of door wings	4	4	4	4
Safeguard for gate opening and closing area	•	•	•	•
Lifting/lowering device for carrier hook	o	o	o	o
Installation in foundation pit	•	•	•	•
10 mm thick wear plates on the ceiling and opposite of the turbines	•	•	•	•
25 mm thick wear plates on the ceiling and opposite of the turbines	o	o	o	o
Wall thickness of the manganese steel blast chamber (mm)	8	8	8	8
Complete wear lining with 10 -12 mm thick manganese steel plates	o	o	o	o
Capacity dust collector (m³/h)	15,000	15,000	20,000	20,000

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

You will find the available technical options for the special "foundry machine version" on page 24.

WIRE MESH BELT BLAST MACHINE RDGE

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

The Rösler continuous feed wire mesh belt blast machines are ideal for all-around blast cleaning of **relatively flat as well as large and very complex work pieces** in continuous flow mode.

RDGE blast machines are an ideal manufacturing tool:

- ▶ The optimal turbine placement, determined by computer simulation, guarantees excellent shot blasting results
- ▶ The special design of the wire mesh belt keeps the shadowing effect at a minimum



Continuous feed wire mesh belt blast machine with 8 turbines as stand-alone system

- 1 Design and technical features**

 - ▶ Continuous flow shot blasting operation ensures a high work piece throughput
 - ▶ Overlapping, easily exchangeable wear plates minimize maintenance work and guarantee high equipment uptimes
 - ▶ Compact machine design allows easy integration into existing manufacturing lines
 - ▶ Easy maintenance: Large inspection and maintenance doors allow quick access to all critical machine areas. All doors are protected by limit switches.
 - ▶ Optional: Dust collectors for explosive dust in compliance with ATEX standards

2 Work piece transport

 - ▶ The work pieces are passing through the machine on a highly wear resistant wire mesh steel belt. Manganese steel belts are optional.
 - ▶ Variable transport speeds between 0.6 to 6 meters per minute
- 3 Blast media recycling and cleaning**

 - ▶ Consistent high quality of the operating mix: Single stage, extra-wide air wash separator
 - ▶ Blast media flow control to the turbine(s):
 - By hand
 - Automatic
 - Automatic, including monitoring of the media flow
 - ▶ Option: Automatic blast media replenishment

Specifications RDGE

Model	RDGE 600-L	RDGE 1000-4	RDGE 1000-8	RDGE 1250-4	RDGE 1250-8	RDGE 1600-4
Width of wire mesh belt (mm)	600	1,000	1,000	1,250	1,250	1,600
Max. work piece height (mm)	250	500	500	500	500	500
Turbines, standard	4 x Gamma 300G	4 x Gamma 300G	8 x Gamma 300G	4 x Gamma 300G	8 x Gamma 300G	4 x Gamma 400G
Turbine power, standard (kW)	7.5	11	11	15	11	15
Max. belt load per running meter, standard (kg)	50	100	100	150	150	150
Loading height (mm)	< 1,000	< 1,090	< 1,150	< 1,190	< 1,250	< 1,500
Wire mesh belt made from manganese steel	o	o	o	o	o	o
Transport speed, standard (m/min)	0.6 - 6.0	0.6 - 6.0	0.6 - 6.0	0.6 - 6.0	0.6 - 6.0	0.8 - 6.0
Capacity dust collector (m³/h)	2,000	4,000	7,500	5,000	10,000	7,500

o = optional

You will find the available technical options for the special "foundry machine version" on page 24.

ROTARY TABLE BLAST MACHINE RDT

For deburring, cleaning, surface texturing, shot peening and creating homogeneous surface finishes

The RDT rotary table blast machines can be used for many shot blasting applications. They allow the processing of **work pieces with different sizes, shapes and weights** as well as very fragile components. The continuous rotation of the

table ensures highly homogeneous shot blasting results. RDT machines offer the targeted and consistent blast cleaning of single work pieces at economical costs.

RDT blast machines are an ideal manufacturing tool:

- ▶ They allow practically total flexibility in the placement of different work pieces on the table



Rotary table blast machine as stand-alone system

- 1 Design and technical features**
- ▶ Small footprint: Compact, space saving design
 - ▶ Easy and safe operation: Quick access to the load/unload area
 - ▶ Ergonomic: Low loading/unloading height
 - ▶ Sturdy and easy to maintain: Rotary table consists of individual, easily exchangeable steel segments
 - ▶ The blast chamber height can be individually adapted to the shot blasting task
 - ▶ Option: A stepper gear motor allows precise positioning of the satellite stations

- 2 Blast media recycling and cleaning**
- ▶ Consistent high quality of the operating mix: Single stage, extra-wide air wash separator
 - ▶ Blast media flow control to the turbine(s):
 - By hand
 - Automatic
 - Automatic, including monitoring of the media flow
 - ▶ Option: Automatic blast media replenishment

Specifications RDT

Model	RDT 100	RDT 150	RDT 200	RDT 250	RDT 300
Max. load rotary table, standard (kg)	300	500	1,500	2,500	2,500
Work piece dimensions Ø x h, standard (mm)	1,000 x 470	1,500 x 600	2,000 x 800	2,500 x 600	3,000 x 1,300
Increase of blast chamber height	o	o	o	o	o
Turbines, standard	1 x Gamma 300G	1 x Gamma 300G	2 x Gamma 300G	3 x Gamma 300G	3 x Gamma 300G
Turbine power, standard (kW)	5.5	7.5	7.5	7.5	7.5
Magnetic separator	o	o	o	o	o
Capacity dust collector (m³/h)	1,200	2,000	3,000	5,000	5,000

o = optional

You will find the available technical options for the special "foundry machine version" on page 24.

SWING CHAMBER BLAST MACHINE **RWK**

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

The **automatic** swing chamber machines can be easily integrated into all kinds of manufacturing lines. At the heart of the RWK machines is a dual chamber system that allows the **simultaneous loading/unloading** of one set of work pieces, while another set is shot blasted. This, along with a powerful drive system and reliable dust collection, guarantees short cycle times.

RWK blast machines are an ideal manufacturing tool:

- ▶ Targeted shot blasting – in full compliance with customer requirements



Swing chamber blast machine as stand-alone system

<p>1 Design and technical features</p> <ul style="list-style-type: none"> ▶ Wear resistant: Blast chamber made from manganese steel and lined with easily exchangeable manganese wear plates ▶ Small footprint: Compact, space saving design ▶ Flexible use: Easy integration into manufacturing cells ▶ Optimal turbine placement: In line with customer requirements 	<p>2 Work piece handling</p> <ul style="list-style-type: none"> ▶ Process stability: Integrated, pneumatically activated clamping device for the work piece fixtures
<p>3 Integration into manufacturing processes</p> <ul style="list-style-type: none"> ▶ Combined with robotic work piece handling RWK machines can be easily integrated into existing manufacturing lines ▶ Separate loading and unloading areas for increased cost efficiency 	<p>4 Option</p> <ul style="list-style-type: none"> ▶ Compliance with customer specifications: Optimal turbine placement determined by computer simulation

Specifications RWK

Model	RWK 6/12-2
Max. load per chamber, standard (kg)	300 each
Max. work piece diameter (mm)	up to 600
Max. work piece height (mm)	up to 1,200
Control panel with PLC	o
Screen drum for foundry version	o
Turbines, standard	2 x Gamma 300G
Turbine power, standard (kW)	7.5
Magnetic separator	o
Capacity dust collector (m³/h)	3,500

o = optional

You will find the available technical options for the special "foundry machine version" on page 24.

ENGINE BLOCK BLAST MACHINE **RMBS**

For cleaning, de-sanding, deburring and creating homogeneous surface finishes

At the center of RMBS engine block blast machines is a special manipulator with integrated work piece gripper. This allows the processing of one large component or multiple smaller work pieces in one single blast cycle.

- ▶ Special equipment designs in compliance with customer specifications
- ▶ Compact, space saving design
- ▶ Gripper design guarantees gentle work piece handling
- ▶ Magnetic separator available upon request
- ▶ High degree of automation, easy integration into existing manufacturing lines
- ▶ Can be equipped with explosion protected dry, alternatively, wet dust collectors



ROBOBLASTER **RROB**

For cleaning, creating homogeneous surface finishes, de-sanding and deburring

With its robotic work piece handling and the resulting high degree of automation the RROB roboblaster offers excellent operational efficiency. One of the key features of the roboblaster is the seal system for the blast chamber. This ensures short cycle times, minimal wear and low maintenance costs.

- ▶ Special equipment designs in compliance with customer specifications
- ▶ The robot picking up the work pieces from a staging area also handles them in the blast chamber. This streamlined material handling helps minimize cycle times.
- ▶ The design of the robot gripper guarantees gentle work piece handling
- ▶ High degree of automation, easy integration into existing manufacturing lines
- ▶ Can be equipped with explosion protected dry, alternatively, wet dust collectors



CRANKSHAFT BLAST MACHINE **RKWS**

For cleaning, creating homogeneous surface finishes and descaling

The smart design of the RKWS crankshaft blast machines allows the blast cleaning of a broad range of different work piece sizes and shapes. The operating parameters are easily adapted to the respective work pieces. This also includes the automatic adjustment of the blast pattern.

- ▶ The design of the fixtures is always adapted to the respective work pieces
- ▶ Exchangeable turbine housings allow the optimal adaptation of the machine to different groups of work pieces
- ▶ High degree of automation, easy integration into existing manufacturing lines
- ▶ No foundation pit required
- ▶ Can be equipped with explosion protected dry, alternatively, wet dust collectors



TWO AXIS MANIPULATOR **RZAM**

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

RZAM shot blast machines are equipped with a gripper that was specifically developed by Rösler. It allows the gripping and shot blasting of very complex work pieces in short cycle times. The 360° horizontal and vertical work piece motion ensures that even difficult-to-reach surface areas are perfectly blasted.

- ▶ Compact, space saving design
- ▶ High degree of automation, easy integration into existing manufacturing lines
- ▶ No foundation pit required
- ▶ The gripper design is always adapted to the respective work pieces
- ▶ Magnetic separator available upon request
- ▶ Can be equipped with explosion protected dry, alternatively, wet dust collectors



ACCESSORIES & EQUIPMENT MODERNIZATION

Numerous accessories can be added to further **optimize the shot blasting operations** 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.

Equipment modernization



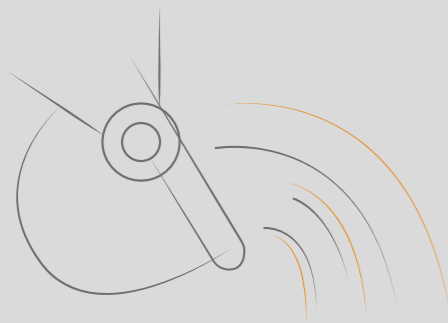
Under our brand name „TuneUp“ we focus specifically on the **modernization of shot blast machines supplied by Rösler or any other equipment manufacturer**. For this purpose we can offer a broad portfolio of different blast turbines and accessories for a broad range of applications. The use of low-maintenance and energy-saving components allows us to adapt your shot blasting equipment to changed market conditions and, at the same time, **save costs**.

All components marked with the „TuneUp“ symbol are fully suitable for the modernization of shot blast equipment supplied by different manufacturers. Please find more information on the subject of equipment modernization under www.rosler.com.

Accessories for the foundry industry

For shot blast equipment working under the harsh operating conditions in foundries the following accessories are available:

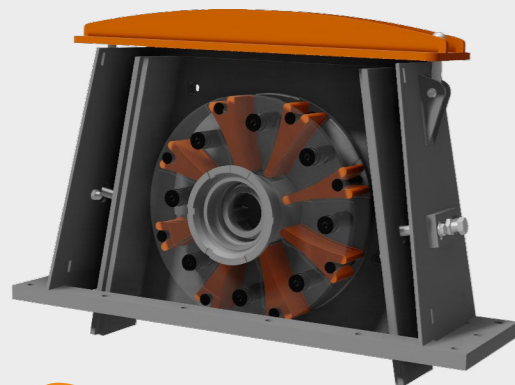
- ▶ Magnetic separator
- ▶ Vibratory screen conveyor
- ▶ Blast media cleaning in bypass mode
- ▶ De-sanding filter cartridges
- ▶ Wear-resistant air ducts for foundry operations



Turbines

The low-maintenance high-performance turbine „Gamma G-8“ was specifically developed for shot blasting operations in foundries. Equipped with 8 throwing blades and a special wear lining of the turbine housing, this turbine offers excellent protection against abrasive wear.

- ▶ Compared to conventional turbines, the throwing blades have 3x higher uptime
- ▶ Their special design allows the use of both sides of the throwing blades
- ▶ Opening of the top lid of the turbine housing allows easy access for throwing blade changes
- ▶ Highly precise blast pattern
- ▶ Easy change of the rotational direction of the turbines



Blast media transport and cleaning systems

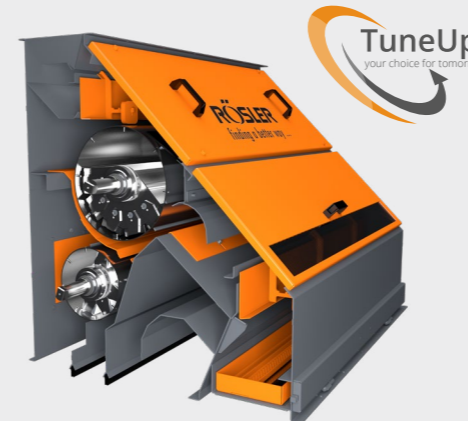
Modern blast media recycling systems ensure the optimal transport of the blast media through the entire machine. This guarantees a stable operating mix and excellent blast results. Various safety devices quickly discharge foreign objects from the recycling system. The components of the media recycling system like augers, elevator units, air wash and magnetic separators, are specially adapted to your shot blast equipment.



Magnetic separators

Magnetic separators are used for separating non-ferrous particles like core and molding sand from ferromagnetic steel blast media. The proven Rösler magnetic separators reduce the amount of sand in the blast media by up to 99.7 %. This allows to return the blast media into the recycling system and safely re-use it for the shot blasting operation.

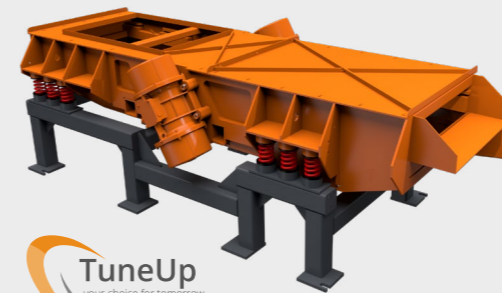
For sand casting applications

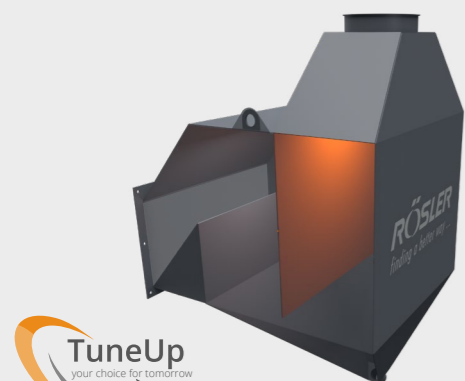


Vibratory screen conveyor

Specially developed for discharging core and molding sand as well metal debris and flashes in sand casting operations.

For sand casting and die-casting applications





Dropout box

Installed in the air duct to the dust collectors, the dropout box discharges undersized blast media from the exhaust air by slowing down the airflow. The exhaust air enters the dropout box equipped with an impact plate. As the air loaded with dust and undersized media hits the impact plate, the air flow is drastically slowed down. As gravity overcomes the energy of the air flow, heavier particles are dropping to the ground through a rubber hose.

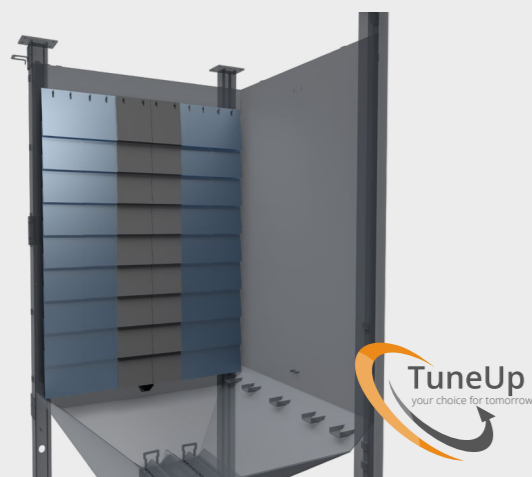
For applications with small blast media



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 $<1\text{mg}/\text{Nm}^3$, considerably lower than what is mandated by the German regulations, which stipulate 3 – 5 mg/Nm^3 . The air flow capacities of the Rösler collectors range from 1,000 bis 25,000 m^3 per hour. Special de-sanding filter cartridges offer additional benefits for foundry applications. For example, a special coating makes the filter cartridges more resistant against abrasion by the residual sand still present in the exhaust air. Moreover, the coating prevents binding material from the casting molds from clinging to the filter cartridges.

For sand casting applications and applications with aluminum blast media



Special wear linings

Whenever blast media with larger pellet sizes is utilized in de-sanding and descaling blast operations, the area in the blast chamber directly exposed to the blast stream must be lined with wear plates made from wear resistant cast steel instead of manganese steel.

For forge and foundry applications

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, lean management
- ▶ 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



Over 1,000

Ø Rating



9.6 out of 10 possible points¹

Ø Recommendation rate



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 SMART SOLUTIONS

A digital added value to meet your challenges



Now is the time to promote **the digital transformation** and develop innovative digitization solutions for the shot blasting technology! Under our new brand **Rösler Smart Solutions** we have developed comprehensive digitization modules that will allow you to make **your shot blasting processes** and **their**

parameters more transparent and to define the potential for substantial cost savings. Our software package helps taking advantage of the **potential for optimization** and **significant reduction of operating costs**.



Transparency of processes and costs



Realtime process monitoring and recording of data



Quick correction of deviations and faults



Intelligent equipment operation with uptime projections



Optimized utilization of resources and cost reduction

The **digitization portfolio for shot blasting equipment** was developed for our entire equipment range. It contains soft- and hardware packages that can be utilized for the following topics:



WORK PIECE QUALITY

- ▶ Combination of all shot blasting parameters into one common metric called "shot blast performance"
- ▶ Recording of all process data that influence the work piece quality
- ▶ Individual evaluation of the achieved production volume



OPERATING PARAMETERS

- ▶ Realtime monitoring of all consumption values
- ▶ Digital archiving of all recorded data. This allows the identification of operating patterns and trends
- ▶ Visualization of individually defined time periods



MAINTENANCE

- ▶ Collection of the uptime history for each turbine facilitates preventive maintenance
- ▶ Operating times and equipment availability are displayed in a simple, easy-to-understand format
- ▶ Spare part orders prepared in advance, including mail-to-function



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