

RB-2000/4 Roller-path type shot-blasting machine



Application

The RB-2000/4 shot-blasting machine is mainly suitable for the de-rusting, de-scaling and cleaning of

- steel plates
- bar and sectional steel, pipes, profiles
- simple welded steel constructions.

Description

The machine is equipped with four pieces of ABR 500 type blasting turbines. Two of these turbines are situated above the roller-path top level and the other two ones are placed under it to ensure the optimal covering of the through-pass cross section. Blasting is done in a perpendicular angle to the direction of advancement.

The turbines are gravity fed with abrasive material, they have eight blasting blades and a pre-accelerator and they allow precise blasting direction adjustment.

The inner surfaces of the machine in the active zone are covered with highly wear-resistant manganese steel, other inner parts are protected by wear-resistant rubber sheet. This rubber cover has noise-reducing effect as well. Rollers in the machine house are also protected from the abrasive media by rubber cover that ensures quiet, slip-free conveying.

The three-layer rubber curtains at the inlet and outlet sluice prevent the high velocity abrasive particles from shooting out.

The closed and continuous circulation of the shot-blasting material is ensured by a screw conveyor, bucket elevator, abrasive cleaning wind-sifter unit and a feeding unit.

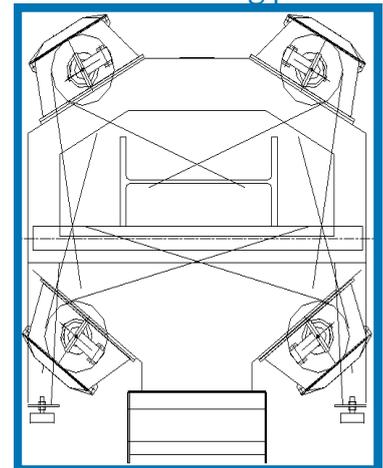
The clean work-piece is de-dusted by a brush cleaning aggregate built on the exit section and a blower fan.

The dust-aspirating and separating system of the equipment consists of galvanized steel air-ducts, form-elements, aspiration fan and filter cartridge inserted dust-separator.

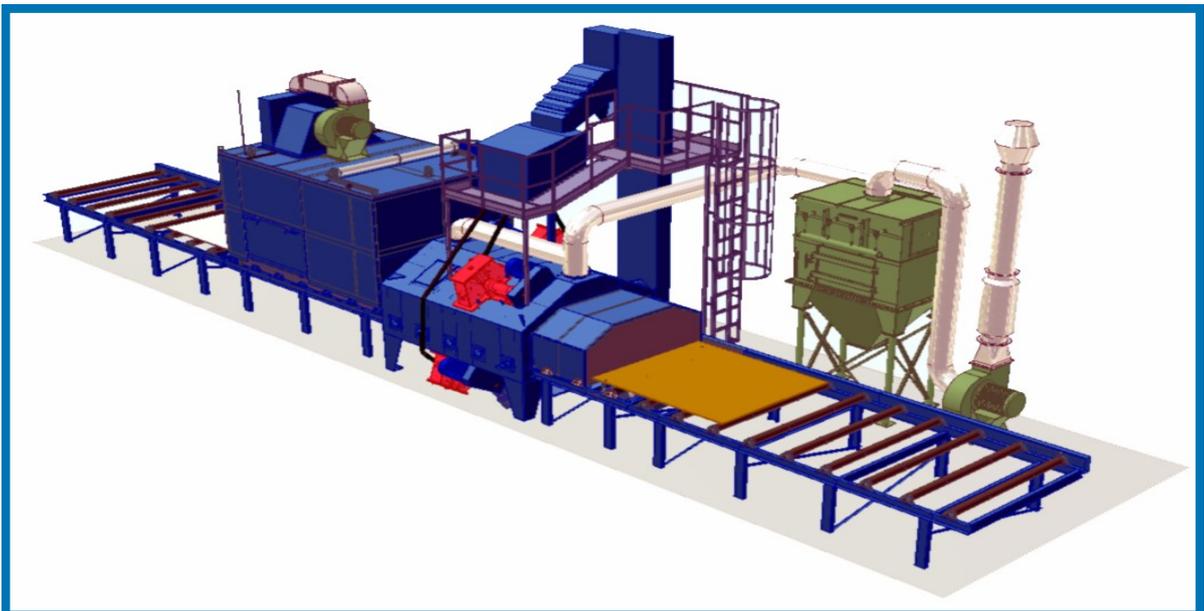
Dust emission after the filter is not more than 3mg/m³.

All functions of the machine can be controlled from the central control box. Besides the normal mode of operation (automatic mode) manual mode is also available for maintenance purposes.

Blasting pattern

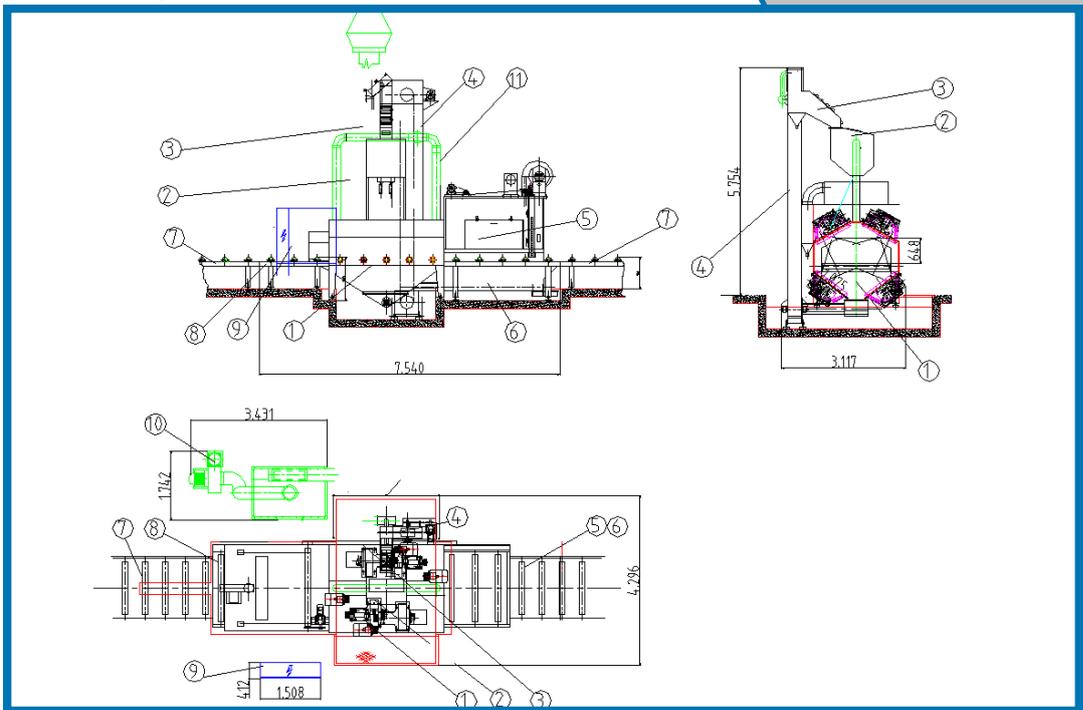


RB-2000/4





Measure print /RB-2000/4/



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| 1. Machine house | 8. Pulse generator swing-roller |
| 2. Abrasive feeder tank | 9. Electrical motor control cabinet |
| 3. Windsifter / abrasive cleaner | 10. Air fan |
| 4. Bucket elevator | 11. Air duct and regulating butterfly valves |
| 5. Brush cleaning aggregate | 12. Cartridge dust filter |
| 6. Collecting hopper & screw transporter | |
| 7. Rollerpath | |

Technical data

Through-pass width	mm	2000
Min. work-piece length (shorter pieces can be cleaned by means of a so-called auxiliary frame)	mm	about 1500
Max. height of work-piece	mm	650
Turbines		
Number	piece	4
Type		ABR-500
Diameter	mm	500
Wheel speed	1/min	2600
Abrasive capacity / per turbine	kg/min	130-150
Rollerpath		
Loadability	kg/m	1500
Speed range	m/min	0-4
Energy demand		
Electrical		
Basic machine	kW	59/103
Dust aspiration	kW	15
Compressed air		
Pressure	bar	min.6
Quantity (filter)	m ³ /h	15
Abrasive charge	kg	2500
Proposed abrasive particle size	mm	0,4-1,2
Air to be aspirated	m ³ /h	12000
Electrical data		
Mains voltage	V	3 x 400
Control voltage	V	230
Frequency	Hz	50