

wheelabrator

shaping industry

Roller Conveyor Type G



Roller conveyors are predominantly used to clean metal plates and profiles in a continuous through feed process. Wheelabrator offers a variety of roller conveyors for different uses and work speeds. The Type G range is mainly designed for the treatment of metal plates or profiles in the steel construction or steel preparation industries. The machines can be delivered as standalone units or integrated into an automatic transportation or sawmill/bore line.

The Type G range is offered with through feed widths from 600mm to 3000mm.

The blasting wheels are positioned vertically to the flow direction of the roller conveyor.

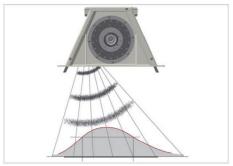
RB 600, RB 1000 and RB 1500 are fitted with 4 shot blast wheels. The RB 2000 can be fitted with either 4 or 6 wheels. The bigger machines RB 2500 and RB 3000 can be fitted with either 6 or 8 shot blast wheels. The 6 wheel version is used for treating plates or smaller profiles, whereas the 8 wheel version is mainly recommended for blasting profiles.

Type G:

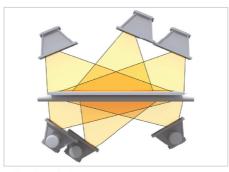
- 1 Light barrier
- Shot blast wheel
- 3 Abrasive control unit
- 4 Abrasive silo
- 5 Abrasive reclaimer
- 6 Impact separator
- Bucket elevator
- 8 Fan for Air-Shoc Filter
- 9 Pre-separator
- 10 Safety filter
- 11 Dust bag
- 12 Abrasive removal unit



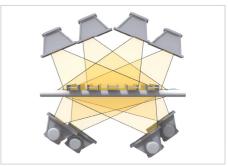
Technical Data











8 Shot Blast Wheels

Type G		RB 600G	RB 1000G	RB 1500G	RB 2000G	RB 2500G	RB 3000G
Machine Entrance							
Width	mm	700	1100	1600	2200	2600	3300
Height	mm	550	550	550	550	550	550
Work speed to achieve a cleaning grade of B Sa 2,5 ISO 8501	m/min	1.0 – 2.3	1.4 – 2.4	1.0-2.3	0.8 – 2.5	1.0 – 3.0	0.8 – 2.5
Number of wheels x power	kW	4 x5.5/7.5	4 x 11	4 x 11/15	4 x 11/15	6 x 11/15/18.5	6 x 11/15/18.5
Wheel options	kW	-	_	-	6 x 11	8 x 15	8 x 15
Roller pitch	mm	800	650	650	800	800	800
Alternative pitch	mm	400	400	400	400	400	400
Upper edge roller conveyor (variable)	mm	1000	1100	950	900	900	900
Height of the machine	mm	4350	5300	5400	6300	6700	6850
Foundation pit		No	No	YES	YES	YES	Yes

Features







Shot blast wheel

The blast wheel is the "heart of the blasting machine", as the choice of blast wheel determines the power output and the economics of the roller conveyor.

The highly proven Type 5.x blast wheels are fitted as standard on the Type G range. These wheels offer excellent blasting performance and unbeatable service life due to the main blast components being made of hardened tool steel.

An ETA wheel can be fitted, in particular for special plates where a high grade of technical blasting is required, or as an option a TITAN wheel can also be fitted. An easy exchange from short to long throwing blades means the wheel blast diameter can be increased from 325mm up to 380mm. Longer throwing blades achieve a higher throwing rate (which is necessary for tough scale removal). Short throwing blades enable a higher media throughput using the same power and therefore deliver a quicker cover over the work surface which easily removes the contamination.

Shot blast cabinet

As with all Wheelabrator roller conveyors the shot blasting cabinet is manufactured **completely from manganese**. Manganese has a property which is hard enough to deal with the shot blasting from 35HRC to more than 50HRC.

Therefore manganese has extremely good blasting properties. In the so-called "hot spot" area of the blasting cabinet, additional nomm thick manganese plates are added. They are attached from the outside and can be easily replaced. When aggressive shot is used, additional lining of manganese-, tool steel or cast material can be provided.

To avoid shot leakage, several rubber layers or Vulkolancurtains are fitted in areas of heavy wear. These are mounted in a V-Track and can be easily replaced.

Abrasive removal unit

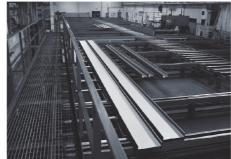
After the blasting process, the work piece may still be covered in a lot of blast media, which must be cleaned off. This task is carried out by a **rotating brush**, which is fitted with securely attached brush segments, which are interchangeable.

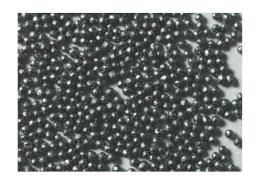
To avoid blast media building up on long parts, the rotation brushes flick the spent abrasive from the work surface into a specially designed trough which has a screw conveyor taking the media back into circulation. To keep the position between the brushes and the **screw conveyor** constant when blasting different sized work pieces, both are built with the same adjustable framework. The framework can be adjusted manually or automatically in intervals of less than 5mm at each required height. Finally any remaining media on the work pieces will be removed by the blow off station, which is mounted on the same framework and uses high pressure ventilators to blow off anything remaining.



Features







Cartridge filter unit

During the work piece blasting process rust and scale along with broken down media dust (so-called fines) will start to develop. The fines are separated in the abrasive cleaner, which is **adjustable** to the different types and sizes of blast media. The cartridge filter that produces the necessary pressure is fitted on top of the machines for the RB 600, RB 1000 and RB 1500 and it is situated next to the blasting machine for the bigger machines from RB 2000 upwards.

The impact separator within the cartridge filter unit not only ensures that the broken down fines are separated (protects the filter cartridge against unnecessary wear) but it is also certified as a spark extinguishing device and is one of the elements that contributes towards the ATEX regulations. The cartridge filters clean the cartridge automatically using an air pressure pulse. The intensity and duration of the pulse can be adjusted according to the type and amount of dust. All elements of the cartridge filter are performed without ignition.

Loading and unloading

In the basic equipment the roller conveyor in- and outlets are powered by the central drive of the blasting machine. To increase the efficiency they can be fitted with a separate drive unit. The affiliated frequency converter is automatically synchronised. If bowed work pieces are being blasted that cannot be cleaned properly by the brush and blow stations, then a longer collection track with a reclamation conveyor is recommended, to help ensure that the blast media goes back into the machine.

Through the installation of a cross feeding system, many efficiencies can be achieved. Also with a cross feeding system incorporated the blasting machine can be integrated into a Sawmill/Bore production line.

Abrasive blast media

For most roller conveyor installations the blast media would normally be round (cast or rounded cut wire shot) The blast media travels around the machine in a circle and is continually cleaned of contamination.

For a **good blasting result** a balanced mix of new & used blast media is imperative. The finer used media in this mixture is important for an equal covering of the surface being blasted and the coarser media is important to break up any scale.

The use of the correct media is of particular importance for the blasting process and ensuring a good blasting result.

The following is a useful guide:

- For coarse work pieces (e.g. heavy plate profiles) a coarse abrasive media mix (steel ball shot size \$390 and over)
- Delicate work pieces (e.g. thin metal plates) a fine abrasive media mix (steel ball shot size \$330 and below)

About Wheelabrator



As the world's leading surface preparation company, Wheelabrator offers a complete range of equipment, services and parts.

Leading companies in the foundry, automotive, aerospace, energy, marine, rail, construction and many other industries have used Wheelabrator Group's products and services to improve productivity and profitability for over 100 years.

With approximately 15,000 active customers in nearly 100 countries and an estimated 50,000 machines in the field, Wheelabrator continues to use the experience of having the largest installed base in the industry to deliver the best solution for the customer.

Wheelabrator's approach to solving customers' operating challenges is unique in the industry.

Using insight gained from thousands of different applications across a variety of different industries, Wheelabrator's technical experts work closely with customers to design specific solutions to meet their operating needs. This approach has been so well received by the market that approximately two-thirds of Wheelabrator's surface preparation equipment sales are custom engineered to the precise specifications of the customer. The remaining third are standard items which incorporate the same level of Wheelabrator quality and reliability, but can be delivered more quickly at a competitive price.

Wheelabrator is part of the Norican Group which includes DISA offering a global service from moulding to shot blasting, airblasting to coating solutions.

5 technology centres, based in Canada, France, Germany, Denmark & Switzerland, 5 manufacturing plants in India, China, USA, Czech Republic and Poland plus a local service support network globally.

- Over 100 years experience in shot blasting equipment
- More than 50,000 machine in the global marketplace
- Broadest range of products available in the marketplace
- Quality products that deliver flexible solutions with consistent performance

All round service from product development through installation to servicing and maintenance from a Wheelabrator dedicated global team: Wheelabrator Plus.



Wheelabrator Plus



Wheelabrator Plus is the after-market service, support and supply division of Wheelabrator Group.

With its Equipment Modernisation Programmes, Wheelabrator Plus is focussed on using the latest surface preparation technology to ensure maximum performance of blast machines to drive for maximum profit whilst keeping costs down.

To meet product specifications within agreed timescales and budget requirements is key for a successful relationship with our customers. The Wheelabrator Plus service and maintenance programme enables our customers to increase their machine performance and to minimise their costs by reducing downtimes. Wheelabrator Plus offers varying levels of maintenance contracts which are exactly customised to your needs. The contract is dependent on your production requirements and the effect of machine downtimes. From periodic inspections with status reports including maintenance recommendation up to the

complete service package - Wheelabrator Plus always has the right solution for you.

The international presence of Wheelabrator Plus ensures the provision of a tailored service to meet customer's needs worldwide and thus guarantees best possible performance in the surface preparation technology. Wheelabrator Plus offers its service in different modules:

Standard: Bi-monthly, quarterly or sixmonthly visits with full inspection of machinery.

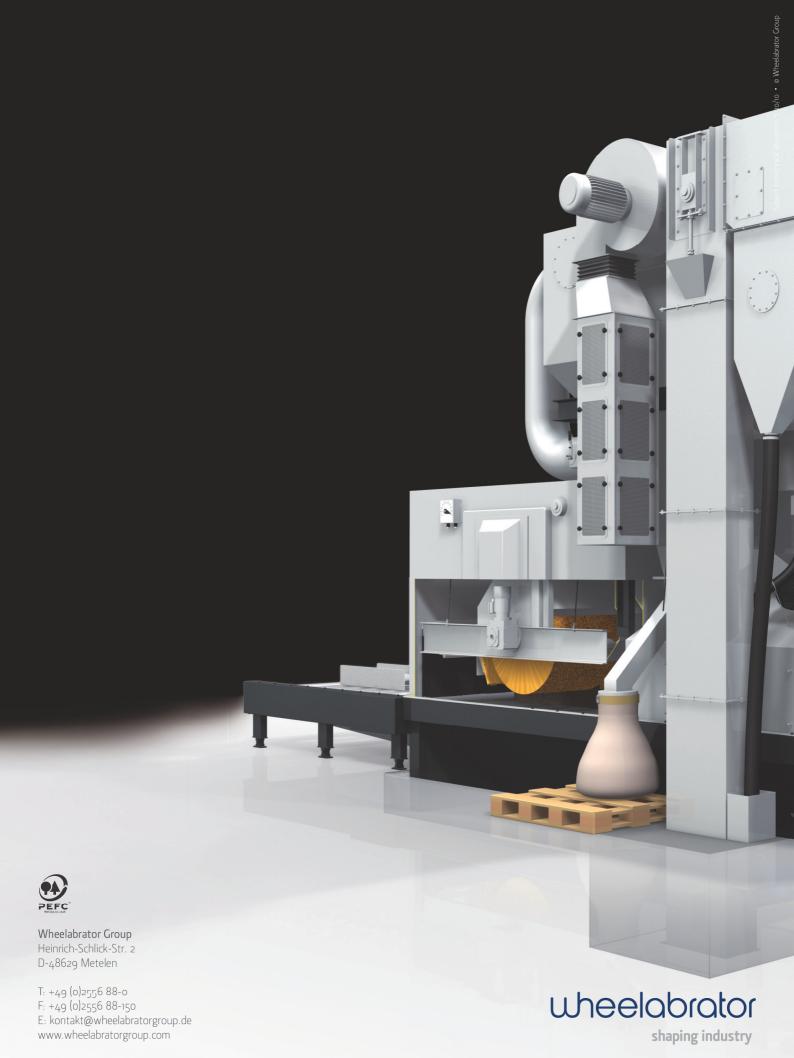
Premium services: Weekly, monthly, bimonthly or quarterly visits, full inspection of machinery, adjustment and same day parts fitting with a detailed follow-up report.

Machine check/inspection: Flexible visits as and when necessary, full inspection of machinery and LEV checks followed by a detailed report and quotation for recommended maintenance works.

Safety and environment check: Visits acc. to individual agreement, to include LEV checks to ensure machinery complies with the current legislation.

All inclusive: Wheelabrator Plus engineers produce and review maintenance schedules tailored to the individual company, with a fixed price contract inclusive of all parts and labour.





Norican Group is the parent company of DISA and Wheelabrator.