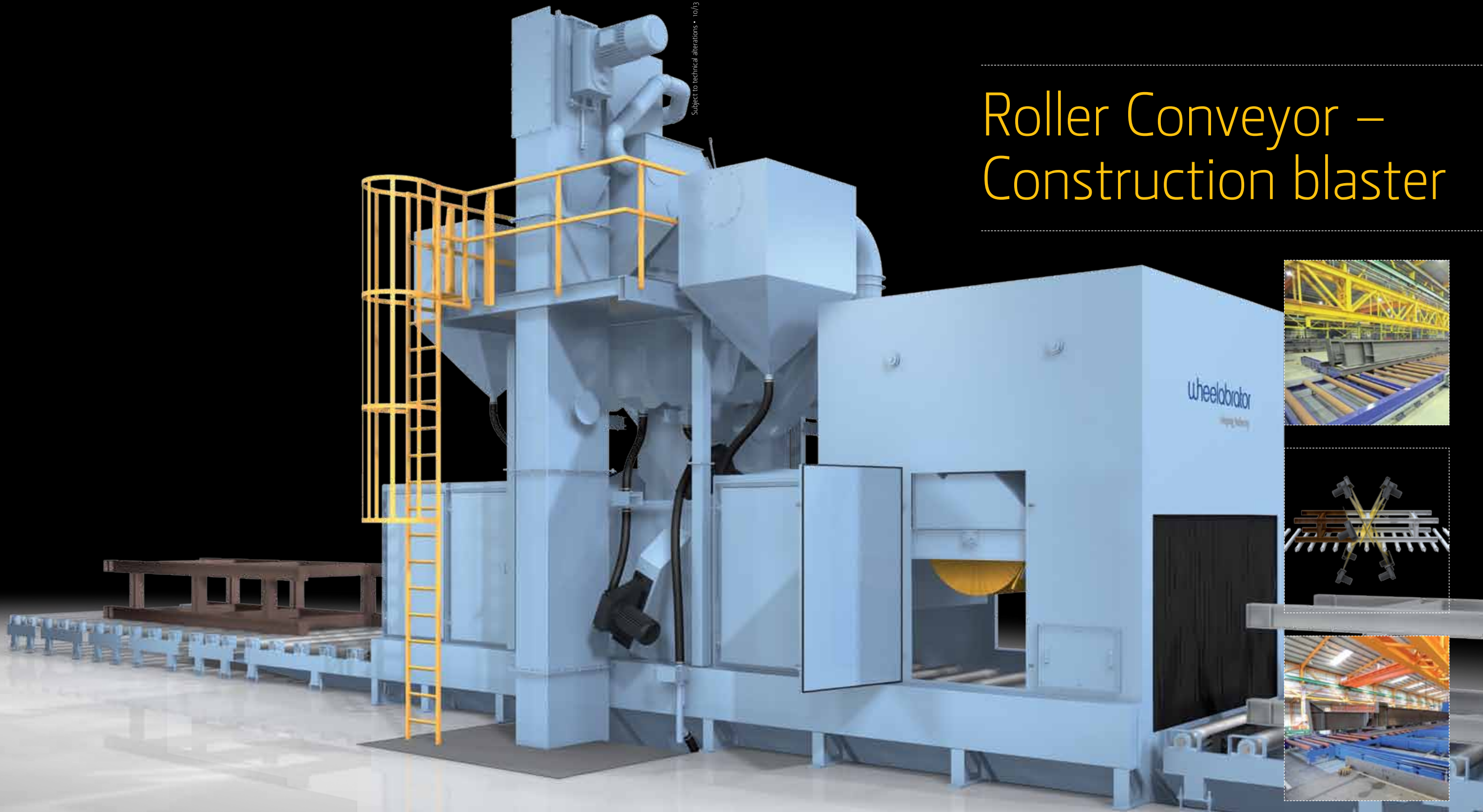


# Roller Conveyor – Construction blaster

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Noricor Group is the parent company of DISA and Wheelabrator.

# Roller Conveyor Type X – Construction blaster



Construction Blaster Type X differentiate themselves from the Type G and Type HD roller conveyors, by the shot blast wheels being installed at an angle to the direction of movement through the machine.

The angled positioning of the shot blast wheels ensures that the blasting operation is perfect, especially on parts such as welded constructions, flame cut parts or other complex formed prefabricated parts with base ends.

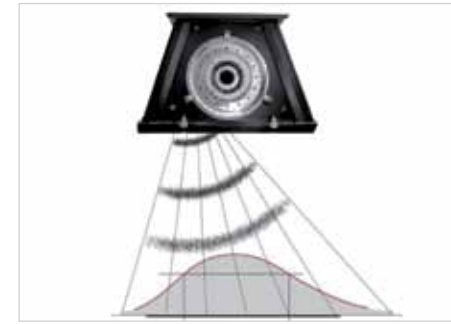
The smaller RB 7.5/ 2.5 - RB 15/10 machines deliver excellent results for smaller construction parts and especially flame cut parts, even with just 4 angled shot blast wheels. The bigger machines are fitted fundamentally with a minimum of 8 wheels and up to a maximum of 16 wheels. The construction blaster roller conveyor is generally used to blast welded constructions that have been manufactured out of pre-blasted materials.

By adding an optionally available abrasive removal station the construction blaster can be used as a "Universal Blasting Machine" for sheet metal, profiles and welded constructions.

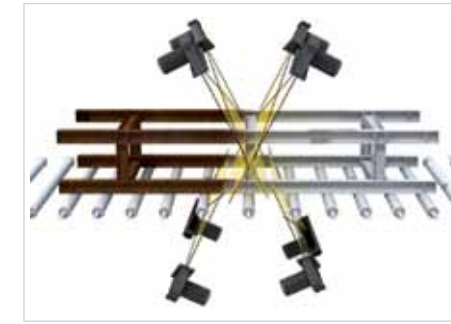
## Type X

- 1 Shot blast wheel
- 2 Abrasive control unit
- 3 Abrasive silo
- 4 Abrasive reclaimer
- 5 Impact separator
- 6 Bucket elevator
- 7 Fan for Air-Shoc filter
- 8 Pre-separator
- 9 Safety filter
- 10 Dust bag

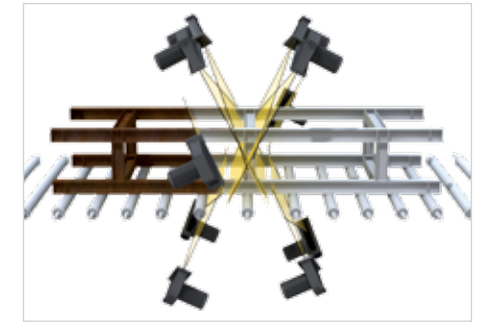
# Technical Data



TITAN blast wheel



8 Shot Blast Wheels



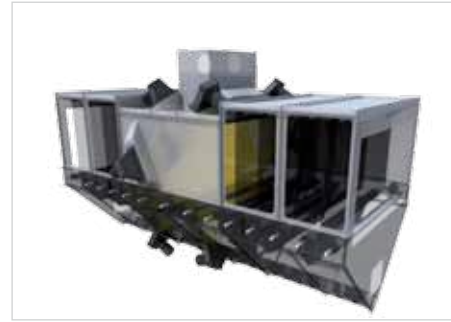
10 Shot Blast Wheels

Construction blaster Type X		RB 7.5/2.5X	RB 7.5/5X	RB 15/5X	RB 15/10X	RB 20/15X	RB 25/15X	RB 30/15X	RB 30/20X
<b>Entrance</b>									
Width	mm	850	850	1600	1600	2100	2600	3100	3100
Height	mm	300	550	550	1050	1550	1300	1600	2100
<b>Max. profile height*</b>	mm	300	300	300	300	300	300	300	300
<b>Work speed to achieve a cleaning grade of B Sa 2,5 ISO8501</b>	m/min	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2
<b>Roller loading (variable)</b>	kg/m	300	300	550	550	750	1000	1150	1150
<b>Number of wheels x output</b>	kW	4 x 4	4 x 4	4 x 11	4 x 11	8 x 11	8 x 11	8 x 11	16 x 11
<b>Wheel options</b>	kW			8 x 11	8 x 15	8 x 15	8 x 15	8 x 15/ 10 x 11	
<b>Roller pitch</b>	mm	800	800	800	800	750	750	750	
<b>Alternative pitch</b>	mm	400	400	400	400	500	500	500	
<b>Alternative pitch</b>	mm					1000	1000	1000	1000
<b>Upper edge roller conveyor (variable)</b>	mm	1150	1150	950	1000	800	300	630	300
<b>Height of machine</b>	mm	4750	5000	5600	6100	7500	6800	7400	8300
<b>Foundation pit required</b>		No	No	Yes	Yes	Yes	Yes	Yes	Yes

\* Maximum height for optimum brush performance



## 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 **X range** is fitted with **TITAN** shot blast wheels as standard, which are a further development from the shot blast Type 5 wheel. The **TITAN** wheel offers excellent blasting performance and **unbeatable service life** for the main blast components, which are made from hardened tool steel. In addition to this, the **TITAN** offers even **more wall strength** through its wear lining, which creates an airtight and completely insulated housing as well as **easing maintenance** and repairs. For the **TITAN** blast wheels, there is a full range of variations available, this ensures the chosen blast wheel is specific to the job in hand.

### 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 35 HRC to more than 50 HRC. Therefore manganese has **extremely good blasting properties**. To achieve the good blasting results on complex construction parts such as front sides, a construction blaster is best used. The shot blast wheels are positioned at angles to the working direction of the machine hence creating the **X-type** blasting pattern and denomination.

In the so-called "hot spot" area of the blasting cabinet, **additional 10mm thick manganese plates** are added so that there is practically an additional internal cabinet added which is easy to replace. The attachment of these manganese plates can be made to your individual requirements; (screws, hung or stapled)

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

### 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.

## Features



### 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 media collection hopper

In machines from the Construction Shot Blaster range, prefabricated construction parts are usually shot blasted, but are not completely cleaned of abrasive automatically. Therefore it is necessary to clean off the remaining abrasive from the work pieces after the shot blasting process. To collect the loose abrasive and return it to the machine an abrasive collection hopper is normally used, which is installed under the exit rollers. This hopper collects the abrasive and through an integral screw conveyor transports it back to the machine. When turning over large work pieces there is often large amounts of abrasive which will fall into the hopper in a short amount of time. To protect the screw conveyor from over filling, a shedder plate cover regulates the flow of abrasive into the screw conveyor hopper.

For bigger machines the intermediate area between the load rolls is fitted with a grid.

### 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 S390 and over)
- Delicate work pieces (e.g. thin metal plates) a fine abrasive media mix (steel ball shot size S330 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, together we offer a global service of parts forming (moulding), preparation (shot blast) and coating solutions.

We have:

- 5 technology centres, based in Canada, France, Germany, Denmark and Switzerland,
- 5 manufacturing plants in India, China, USA, Czech Republic and Poland
- A local service support network globally.
- Over 100 years experience in both moulding and shot blasting equipment
- More than 35,000 machines in the global marketplace
- Broadest range of surface preparation 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 your costs down.

To meet product specifications within agreed timescales and budget requirements is key for a successful relationship with you. The **Wheelabrator Plus service and maintenance programme** enables you to increase machine performance and to minimise 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 recommendations 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 your needs worldwide and thus guarantees best possible performance in surface preparation technology. Wheelabrator Plus offers its service in different modules:

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

**Premium services:** Weekly, monthly, bi-monthly 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 according 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.

