sandblasting

conveying

dustextraction

Injector sandblasting cabins and injector sandblasting automations machines

Powerful, flexible, adaptable and adjustable to any application desired by the customer.

In injector sandblasting, the sandblasting grit is sucked by vacuum into the sandblasting nozzle, a sandblasting process that stands in particular for careful treatment of the surfaces.

Through 45 years of continuous development, our company has created a high-quality, mature product.
Its self-supporting sheet-steel construction is the optimum design. The shape and arrangement of operating elements rely on the knowledge gained over long years of experience regarding the most ergonomic, light and physically compatible operation
Not least, many customer requests have contributed to this. The technical concept of the basic construction and available accessories allows flexible adjustment of the injector sandblasting cabins to varied customer desires.

Our injector blasting cabins from the ISK 800 – ISK 1100 can also be supplied as pressure blasting cabins.

FRITZ
GmbH & Co. KG

We are the better solution

Injector sandblasting cabin

ISK 650

The injector sandblasting cabin ISK 650 is the smallest standard cabin in our range and is intended for the processing of smaller components.

Nevertheless, it has all the same technical details and potential extensions as the big ones.

Manual rotary tables as an installation or additional unit can be provided to a diameter of 400 mm and with a load-bearing capacity of 50 to 100 kg.

The viewing window consists of a sheet of safety glass with an easily and inexpensively exchangeable wear panel of ordinary glass set in front of it.

Instead of the multi-layer rubber gauntlets with star-shaped slits, if desired, integral 5-finger rubber gloves can be supplied.

Injector sandblasting cabins from Fritz Maschinenbau GmbH are deployable for operation with all ordinary marketed sandblasting grit suitable for injector sandblasting.

We will advise you on the selection of the sandblasting grit and supply you with it upon request.

In our factory, we have numerous test sandblasting facilities at our disposal. Here, we can carry out sandblasting tests under realistic conditions with your original workpieces to determine the best procedure in each case.

The basic equipment of the injector sandblasting cabins

With the corresponding exhaust filter, this always represents the simplest unit ready for operation, which can be extended with a series of additional and accessory systems and adjusted to customer desires.

The following basic construction is shared by all sandblasting cabins:

- Thick-walled cabin housing with collection trough and base frame in sheet steel.
- Depending on cabin size, a front door operated by springs, gas shock absorber or fully pneumatic, with ergonomically designed viewing window and manual handling openings.
- Fully illuminated interior space.
- Foot pedal to activate the blasting nozzle.
- Completely fitted electrical control cabinet and pressurised air systems ready for connection, with input and working pressure manometers, pressure reducing valve and pressure regulator.

The possibility of separating sandblasting cabin and ventilation filter allows adjustment on set-up to local conditions on site.

The filter quality is so high that it corresponds to all modern legal and official requirements. The extracted air can be evacuated outside via a ventilation pipe to be built on site or released into the factory hall via a subsequent airborne particle filter. The latter is particularly cost-effective, energy-saving and environmentally friendly. If central dust extraction is present on site, the filter can be left out.

ISK 650	Width mm	Length mm	Height mm
Working space	700	710	595
Exterior measurements incl. control cabinet etc.	985	970	1400
Air consumption	Depends on air pressure and nozzle; see separate table		
Standard nozzle D=	6 mm		
Suitable filter types	TFP 15 with 15m³/min or 900m³/h air throughput		
Energy requirement approx.	0.75 kWh		

Injector sandblasting cabin

ISK 800 / 801 and 802

The manageable but roomy standard injector sandblasting cabin for light to medium-weight workpieces.

The gas shock absorber-driven door opens to completely unblock the front side, thus allowing the loading of heavy workpieces by forklift or hoist.
The viewing window consists of a sheet of safety glass with an easily and inexpensively exchangeable wear panel of ordinary glass set in front of it.

Instead of the multi-layer rubber gauntlets with star-shaped slits, if desired, integral 5-finger rubber gloves can be supplied.

Manual rotary tables up to 600 mm diameter and 200 kg load-bearing capacity can be let into the work level. Insertion shafts in the side walls for blasting of longitudinal profiles can also be provided, as can rotary baskets of various sizes for the blasting of small, pourable mass-produced parts.

By freestanding nozzle, there is a possibility of carrying out a partially automatic sandblasting process in connection with a time relay controller for sandblasting time.
The basic variant, ISK 800, is widened to produce cabin types ISK 801 and ISK 802. The principles of construction and housing side profile remain unchanged by this.
Because of their dimensions and design, the 800 series offers the ideal universal cabin for workshops and industrial manufacturing.

ISK 802 with special accessories

	ISK 800			ISK 801			ISK 802		
	Width mm	Length mm	Height mm	Width mm	Length mm	Height mm	Width mm	Length mm	Height mm
Working space	850	880	745	1000	880	745	1200	880	745
Exterior measurements incl. control cabinet etc.	1135	1140	1600	1285	1140	1600	1485	1140	1600
Air consumption	Depends on air pressure and nozzle; see separate table								
Standard nozzle D=	6 mm								
Suitable filter types	TFP 15 with 15m³/min or 900m³/h air throughput								
Energy requirement approx.	0.75 kWh								

Injector sandblasting cabin

ISK 1100 / 1101 + 1102

The injector sandblasting cabins in the 1100 series are the most spacious in size and are at the same time, because of their design, the standard versions with the most possible variations.

The viewing window consists of a sheet of safety glass with an easily and inexpensively exchangeable wear panel of ordinary glass set in front of it.
Instead of the multi-layer rubber gauntlets with star-shaped slits, if desired, integral 5-finger rubber gloves can be supplied.

The efficient design and size of the 1100 series cabins make these standard types the basic model for automatic injector sandblasting systems thanks to their varied installation options for technical accessories, the incorporation of several and, if needed, oscillating blasting nozzles and the ability to be integrated in on-site conveyor systems.

The injector sandblasting cabins in the 1100 series are the most spacious in size and are at the same time, because of their design, the standard versions with the most possible variations.

Ask our specialists for the best solution for you.

ISK 1100 with special accessories

	ISK 1100			ISK 1101			ISK 1102		
	Width mm	Length mm	Height mm	Width mm	Length mm	Height mm	Width mm	Length mm	Height mm
Working space	1200	935	955	1500	935	955	1500	1235	955
Exterior measurements including control cabinet etc.	1440	1450	1930 *2630 Doors*	1740	1450	2010 *2700 Doors*	1740	1750	2010 *2700 Doors*
Air consumption	Depends on air pressure and nozzle; see separate table								
Standard nozzle D=	10 mm								
Suitable filter types	TFP 15 with 15m³/min or 900m³/h air throughput								
Energy requirement approx.	1.0 kWh								

Accessories

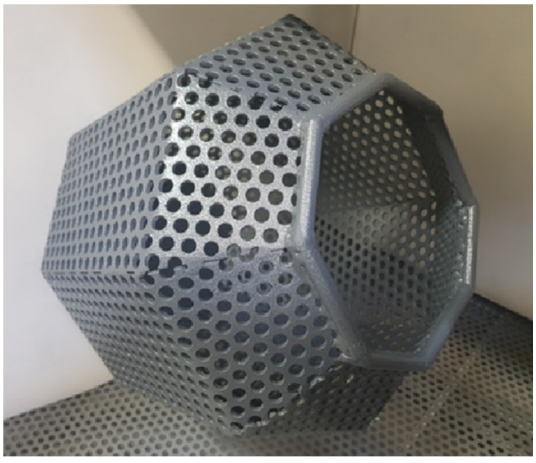
A selection of accessories is available to supplement the basic models of our sandblasting cabins.

Rotary tables

can be set into the working level of the cabins or conceived as a removable unit. Depending on the cabin model, electrical rotary table operation and side retraction may be possible. In this way, heavy workpieces can be placed and removed outside the cabin using on-site lifting equipment (forklift or crane).

Insertion shafts

can be built in for the processing of long-format workpieces on one or both sides with suitable slatted gates. Roller tracks can also be added.



Rotary baskets

are for the sandblasting of pourable mass-produced parts. Various rotary basket sizes are available. The drives can be designed with a fixed or variable rotary speed.

Automatic extraction filter cleaning.

The installation of this additional electronic system ensures the regular and obligatory cleaning of the filter when shut down and before the sandblasting cabin is started up. This ensures filters are always clean and markedly lengthens the lifespan of the installed filter cartridge.

The extraction filters are fitted with extra-fine filter cartridges made of polyester fibre fleece. The filtration grade of the air is so high that the filtered air can be extracted outside without a problem. This, however, requires a suitable pipe. As this may be problematic, depending on the location of the cabin, the installation of an airborne particulate filter can be suggested. This re-filters the air and cleans it to a residual dust content of < 1 mg/Nm^3. In this quality, the cabin exhaust can as a rule be dissipated into the air of the factory hall.

The installation of an airborne particulate filter offers the following advantages:

- Construction cost savings on an extraction pipe.
- Retention of the heat present in the exhaust air.
- No emissions of air or dust into the environment.
- Free choice of set-up location.

We recommend fitting the sandblasting cabin with a boron carbide sandblasting nozzle. This material is characterised by extreme hardness and – when properly handled – considerably higher service life than ordinary carbide nozzles.

Air consumption of the most common nozzle sizes

Air nozzle Ø	Blasting nozzle Ø	l/min at 4 bar	l/min at 6 bar	l/min at 8 bar
1.5	4.0	115	150	190
2.0	5.0	190	250	325
2.5	6.0	310	400	520
3.0	7.0+8.0	430	560	730
3.5	9.0	640	830	1080
4.0	10.0	770	1000	1300
4.5	11.0	1000	1300	1600
5.0	12.0	1150	1500	1950
6.0	13.0+14.0	1540	2000	2600

Benefit from our experience

Pressure sandblasting

- Container sandblasting systems
- Sandblasting rooms
- Pressure sandblasting automations machines
- Pressure sandblasting cabins

Injector sandblasting

- Injector sandblasting machines
- Injector sandblasting automations cabins

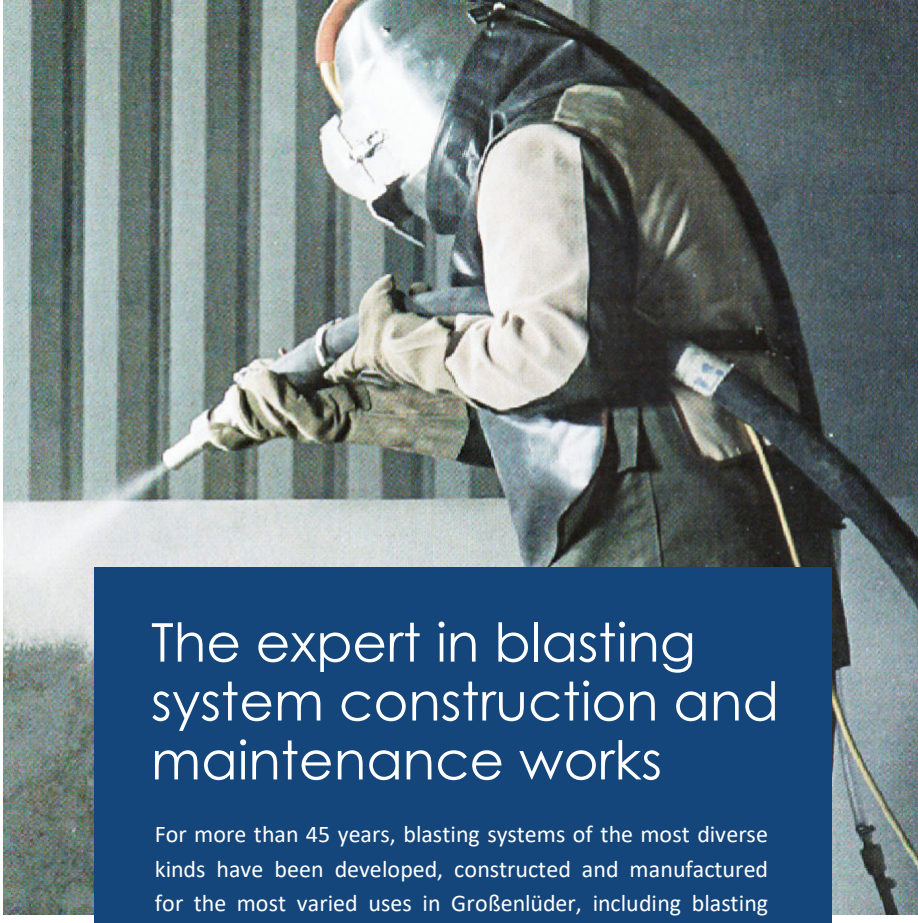
Blower wheel turbine
Shot blasting machines

- Tunnel shot blasting flow-through systems

- Hook Type shot blasting systems

- Troughed belt shot blasting systems
- Steel belt shot blasting systems
- Rotary table shot blasting systems

- Roller conveyor flow-through systems
- Wire mesh flow-through shot blasting systems
- Pipe and gas bottles – flow-through shot blasting systems



The expert in blasting system construction and maintenance works

For more than 45 years, blasting systems of the most diverse kinds have been developed, constructed and manufactured for the most varied uses in Großenlüder, including blasting rooms, containers and cabins for injector blasting or pressurised air blasting.

The experience gained in this period is reflected in our standard products and special constructions. The core of our business is always the high-quality implementation of our customers' requirements.

I, as a associate and managing director, began developing everything to do with blasting during my apprenticeship at the Großenlüder location and later in other companies.

That is why I took over the Großenlüder company and wish to continue its work in the tradition of uniting customer demands and their high-quality implementation.

Yours, Oliver Fritz

Oliver Fritz
Managing Direktor

Jennifer Sickels
Management

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