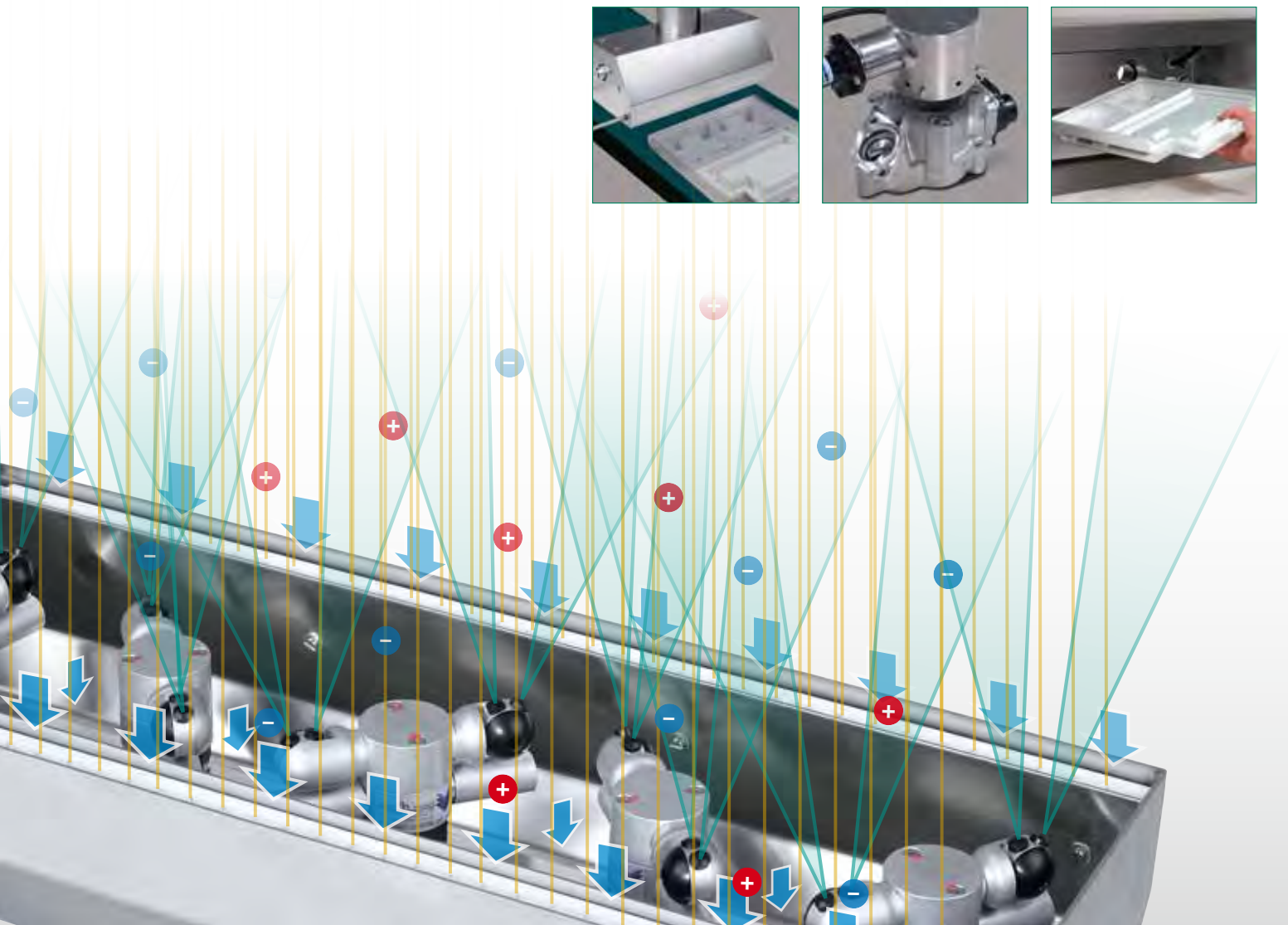




IONCLEAN Cleaning technology

Flexible cleaning technology with ionisation

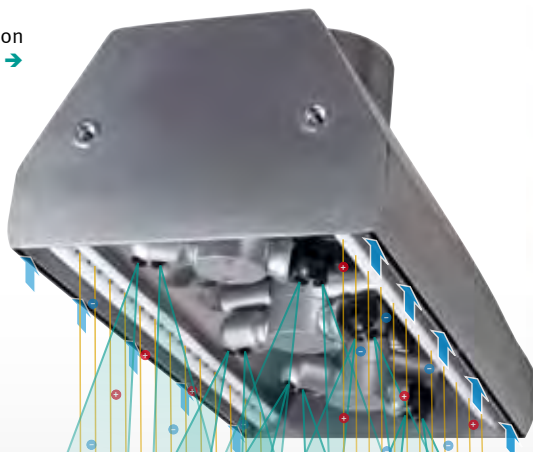


Cleaning hood

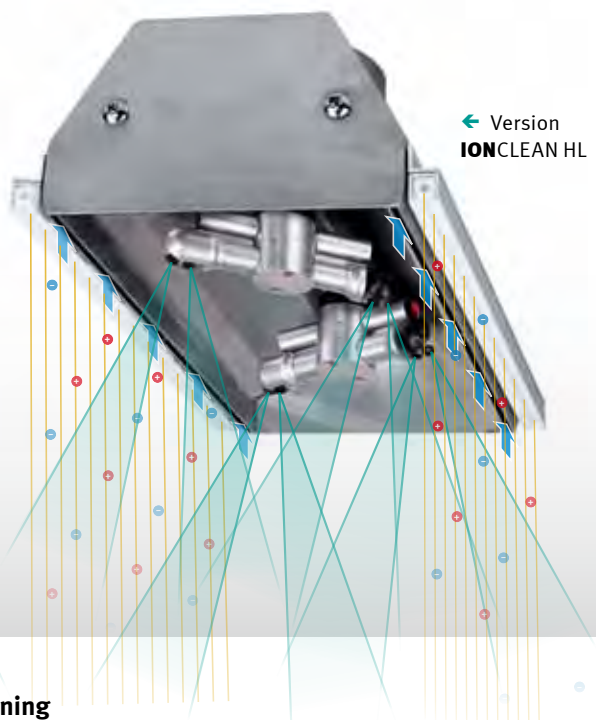
IONCLEAN HL

- Contactless cleaning with rotary nozzles
- Optimal cleaning results through an ionization and vacuum aspiration of the dirt particles

Version
IONCLEAN HL ➔



← Version
IONCLEAN HL

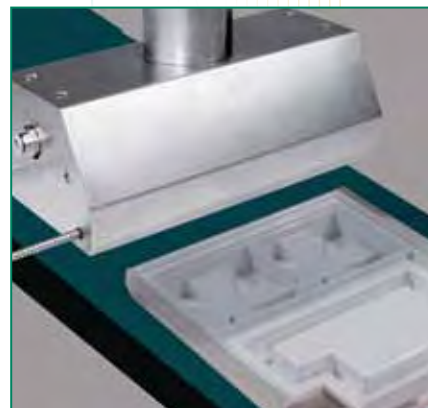


Highly effective and economical solution for non-contact cleaning of product surfaces by ionisation.

A problem regarding the installation situation within different workflows often arises. **IONCLEAN HL** was developed to specifically target this issue: high performance in a very compact design. It is therefore perfectly suited for use in hard-to-reach and confined spaces.



Cleaning (e.g. PCBs) with ionized air and rotating nozzles with a simultaneous vacuum aspiration ➔



Technical Data **IONCLEAN HL**

Housing:	
Material:	V2A 1.4301
Active width:	From 100 mm
Grid width:	50 mm
Overall width:	Active width + 4mm
Depth:	180 mm (+ rod 35 mm)
Height:	160 mm
Rotary nozzles:	Variable subj. to application
Vacuum aspiration:	Dust collectors D = 80 mm Special „Jacob“ pipe option
Voltage:	2 x 4.0 kV or 2 x 5.0 kV
Pressurized air:	Rotary nozzles 1 x 10 mm or 1 x 12 mm
Acoustic noise:	72 dB (A)

Cleaning on both sides

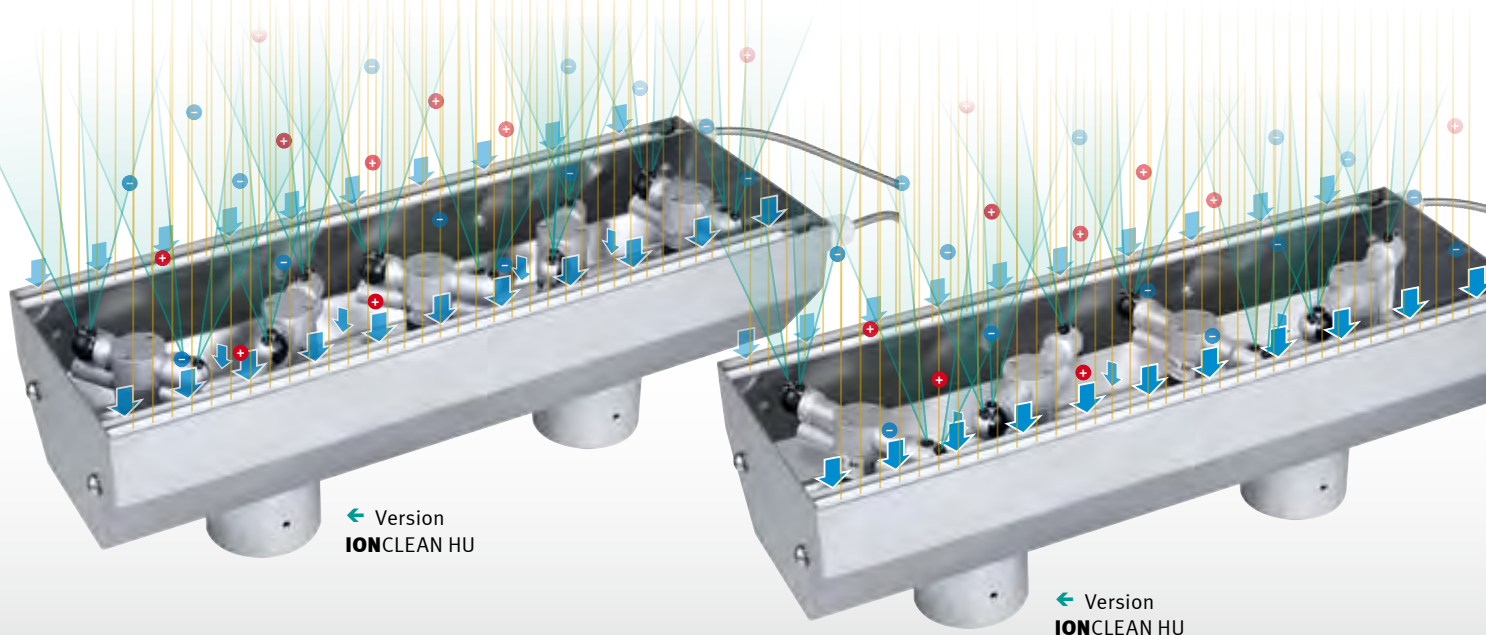
We offer an efficient solution to thoroughly clean a product on both sides: our **IONCLEAN HL** cleaning hood can be combined with the **IONCLEAN HU**. It is additionally mounted below the product to achieve a complete and comprehensive removal of all dirt particles.



Cleaning hood

IONCLEAN HU

- Effective cleaning of the underside of a product
- Compatible with **IONCLEAN HL** cleaning hood
- Optimal cleaning results through ionization, rotary nozzles and simultaneous vacuum aspiration



Cleaning products from below.

It can be easily installed easily under an open-top conveyor belt. We offer an efficient solution to thoroughly clean a product on both sides: our **IONCLEAN HL** cleaning hood can be combined with the **IONCLEAN HU**. It is additionally mounted below the product to achieve a complete and comprehensive removal of all dirt particles.



Cleaning (e.g. plastic shells) with ionized air and rotating nozzles with a simultaneous vacuum aspiration ➔

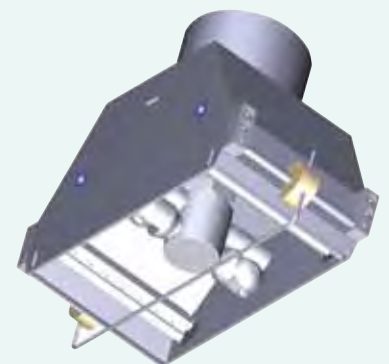


Technical Data **IONCLEAN HU**

Housing:	
Material:	V2A 1.4301
Active width:	From 100 mm
Grid width:	50 mm
Overall width:	Active width + 4mm
Depth:	180 mm
Height:	160 mm
Rotary nozzles:	Variable subj. to application
Vacuum aspiration:	Dust collectors D = 80 mm Special „Jacob“ pipe option
Voltage:	2 x 4.0 kV or 2 x 5.0 kV
Pressurized air:	Rotary nozzles 1 x 10 mm or 1 x 12 mm
Acoustic noise:	72 dB (A)

Hold-down bar for added reliability

Ziegner+Frick has developed a hold-down bar for particularly light-weight products. This secures the products from above to ensure that they are not sucked or blown out of the carrier during cleaning. In the **IONCLEAN HU** the hold-down bar acts as a guide rail, thereby preventing the product from accidentally entering the cleaning hood.

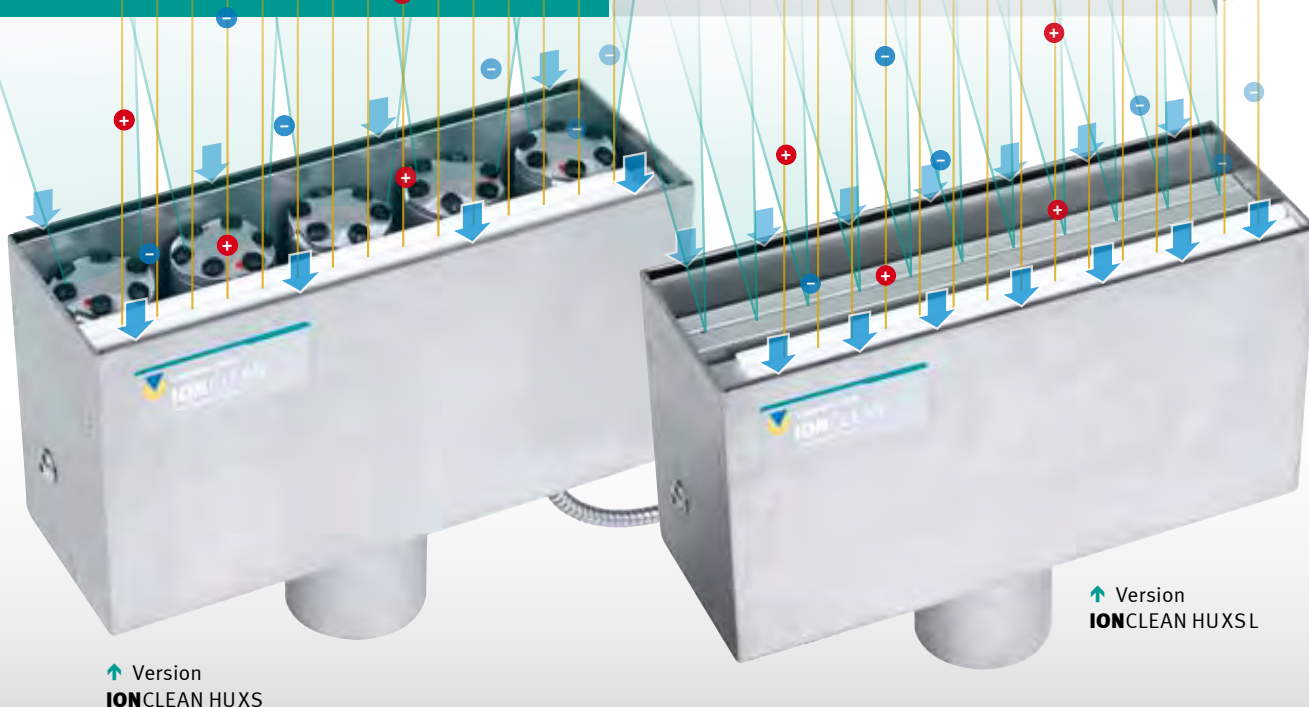


↑ **IONCLEAN** hood HL with hold-down bar

Cleaning hood

IONCLEAN HUXS/HUXSL

- Optimum cleaning results, thanks to ionisation and rotary jets / linear air jet with simultaneous extraction
- Use of left or right hand version enables cleaning on both sides
- Compact design



↑ Version
IONCLEAN HUXS

↑ Version
IONCLEAN HUXSL

NEW: Extremely compact cleaning hood – in two versions!

The compact design of the **IONCLEAN HUXS(L)** (only 75 mm deep) and its various working widths make integration easy. All connections are located at the back. The choice of a left or right hand version means that the connection side can be optimally adapted to on-site conditions, even for cleaning from both sides, making these cleaning hoods ideal for use in tight or awkward spaces. The HUXS is equipped with rotary jets as standard.



Cleaning on both sides possible through the use of left or right hand version ➔



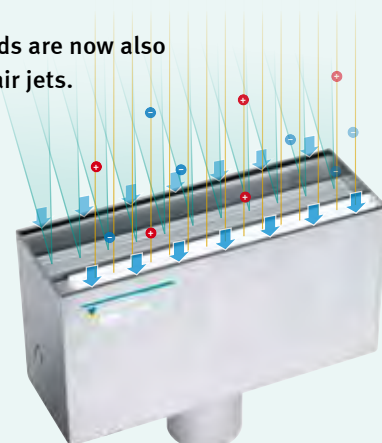
Technical Data **IONCLEAN HUXS(L)**

Housing:	V2A 1.4301		
Material:	V2A 1.4301		
Active width:	From 87 mm		
Grid width:	42.5 mm		
Overall width:	Active width + 4 mm		
Depth:	75 mm		
Height:	165 mm		
Rotary nozzles:	Rotary nozzles or linear air jet		
Vacuum aspiration:	Dust collectors D = 50 mm		
Voltage:	Special „Jacob“ pipe option 1 x 4.0 kV		
Pressurized air:	Rotary nozzles	1 x 10 mm	
	or	1 x 12 mm	
Acoustic noise:	72 dB (A)		

Affordable version

Our HL, HU and HUXS cleaning hoods are now also available with cost-efficient linear air jets.

For more basic requirements, a low-cost version with a linear air jet (instead of rotary jets) has now been developed. The cleaning process remains unchanged, with ionised air and simultaneous extraction.



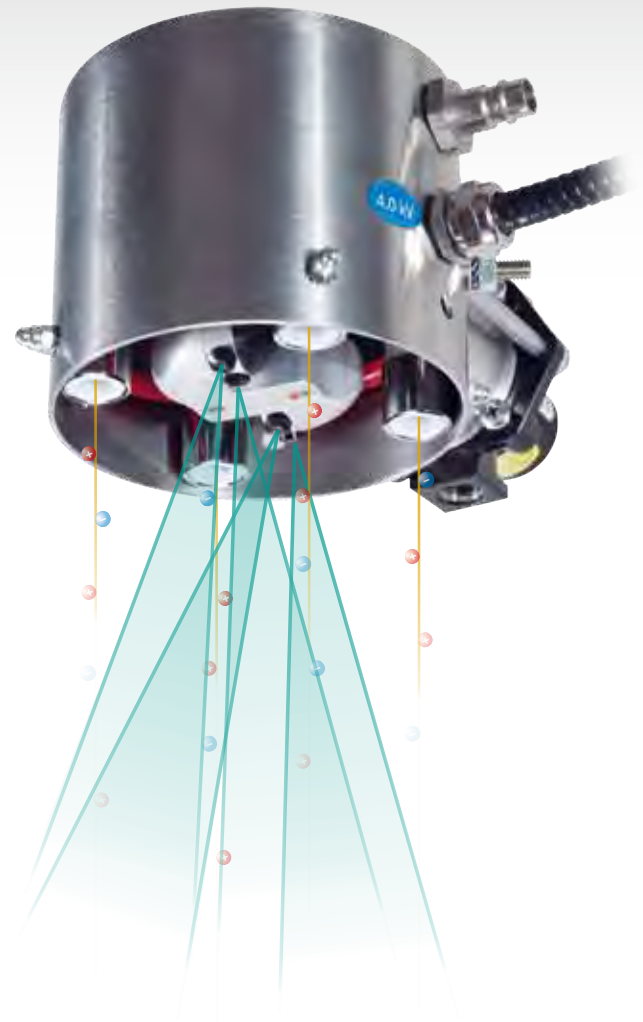
Cleaning hood

IONCLEAN HR

- Small, compact and highly efficient (height 90 mm)
- Flexibly usable thanks to different adapters
- Optimal cleaning results through ionization, rotary nozzles and simultaneous vacuum aspiration

Especially for the effective point-cleaning of products with smaller dimensions.

In practice, it features a holistic and comprehensive vacuum aspiration of the enclosed space. Depending on the application, we offer a variety of adapter sizes. Optionally, there is also the option to perform a cleaning from the top and bottom. For this, a further **IONCLEAN HR** is simply mounted below the product to be cleaned.



Cleaning (e.g. cast parts) with ionized air and rotating nozzles with a simultaneous vacuum aspiration ➔

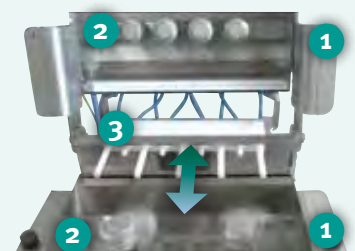


Technical Data **IONCLEAN HR**

Vacuum aspiration direction	on the side	on the top
Housing:		
Material:	V2A 1.4301	V2A 1.4301
Height:	90 mm	130 mm
Width:	148 mm	108 mm
Active diameter:	104 mm	104 mm
Overall diameter:	108 mm	108 mm
Air connection length:	40 mm	40 mm
Rotary nozzles:	1 unit	1 unit
Vacuum aspiration dust collector:	D = 50 mm	D = 50 mm
Vacuum aspiration transvector:	D = 32 mm	D = 32 mm
Voltage:	1 x 4,0 kV	1 x 4,0 kV
Pressurized air rotary nozzles:	1 x 10 mm	1 x 10 mm
Pressurized air transvector:	1 x 10 mm	1 x 10 mm
Acoustic noise:	72 dB (A)	72 dB (A)

IONCLEAN cleaning station for rotary indexing tables

Our **IONCLEAN** cleaning station is comprised of two stainless steel extractor hoods (1). The work pieces to be cleaned are inserted sideways into the hoods by a rotary indexing table. There, the adhering particles are blown off and neutralised by a rotary nozzle (2). At specific points the product is also cleaned with in-line ionisation jets (3), which are moved forward by a tactile cylinder.



Cleaning box

IONCLEAN B

- Contactless cleaning with an air stream
- Protection against dust collection through ionization and integrated suction



Various sizes and simple manual operation.

An interim and final cleaning is usually required. However, since it is often the case that such a system cannot be installed into a work process due to the spatial or production conditions, Ziegner + Frick has developed the **IONCLEAN B** cleaning box. Since it is offered in various sizes and through its simple and manual operation, this unit can be easily integrated into all kinds of manufacturing processes.



Application examples

Food industry

Cleaning of food transport containers, foils and packaging.

Electronic semi-conductor industry

Cleaning of circuit boards and displays.

Medical technology

Cleaning of semifinished products.



Neutralization and cleaning of a workpiece carrier ➔

Technical Data **IONCLEAN B**

Housing:		
Material	V2A 1.4301	
Active width:	100 to 600 mm	
Grid width:	100 mm	
Overall width:	Active width + 40 mm	
Depth:	300 or 400 mm	
Height:	250 mm	
Vacuum aspiration:	Dust collector	D = 76 mm
	Transvector	D = 51 mm
Voltage:	2 x 7.0 kV	
Pressurized air:	Ionization	2 x 10 mm
	Per transvector	1 x 10 mm

Example of bespoke adaptation

We will happily adapt our standard products to meet customer-specific requirements.

In the application shown on the right, recesses were integrated on the r.h. and l.h. side and a transparent Perspex pane was fitted into the upper section.



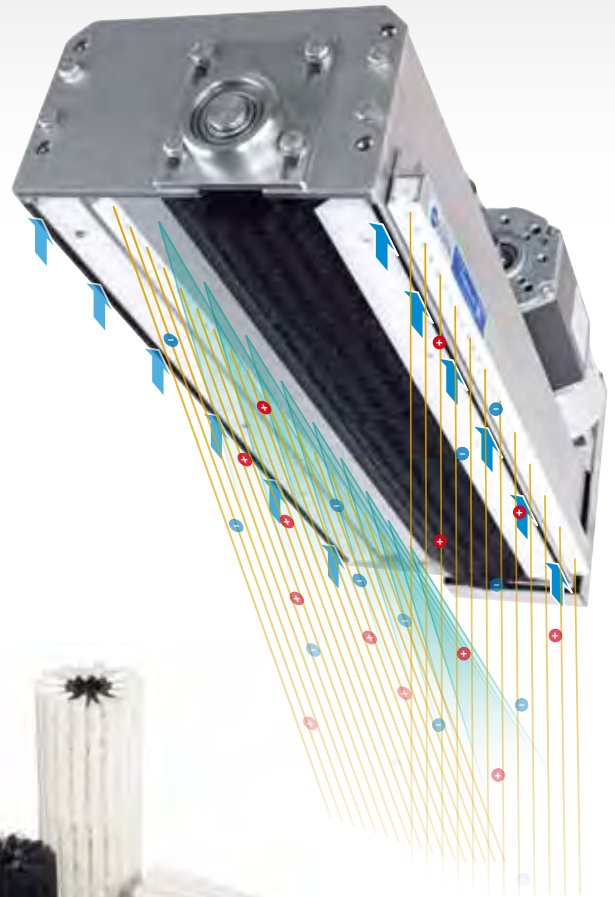
Cleaning hood

IONCLEAN RB

- Product ionisation
- Extraction of dirt particles
- Brush rotates against direction of travel
- Brush is height adjustable and is matched to the individual product
- Integral brush cleaning

Highly effective cleaning technology for stubborn deposits.

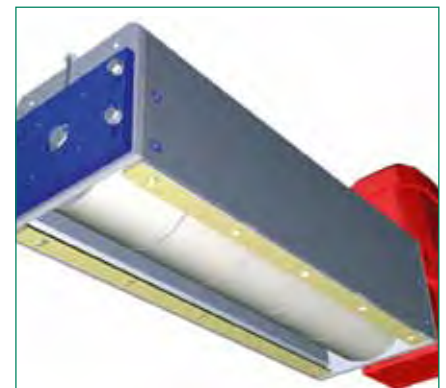
The process relies on a brush rotating against the travel direction of the product to be cleaned and simultaneously treats the product with ionised air. The brush is height adjustable and can therefore be adapted to suit the product to be cleaned. The disturbed dirt particles are efficiently and fully extracted. This also keeps the brush clean.



← Brushes adapted to suit customer requirements



Cleaning (e.g. screen print sheets) with ionised air, rotary brush and simultaneous extraction →



Two models – two brush diameters

IONCLEAN RB 80

The RB 80 has a working width of up to 1200 mm. It features a variable speed motor. The brush – with a diameter of 80 mm – is available in different materials and is suitable for any application.



IONCLEAN RB 120

The RB 120 cleaning hood is also suitable for greater working widths and features a standard industrial motor with a fixed speed. As before, the brush (diameter 120 mm) is available in different materials – suitable for any application. This IONCLEAN product is also available without ionisation for coarse cleaning.





Discover more about these subjects

CLEANING TECHNOLOGY | AIR CONTROL | STATIC CONTROL

at **www.ziegner-frick.de** or simply call us.

We look forward to hearing from you.

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