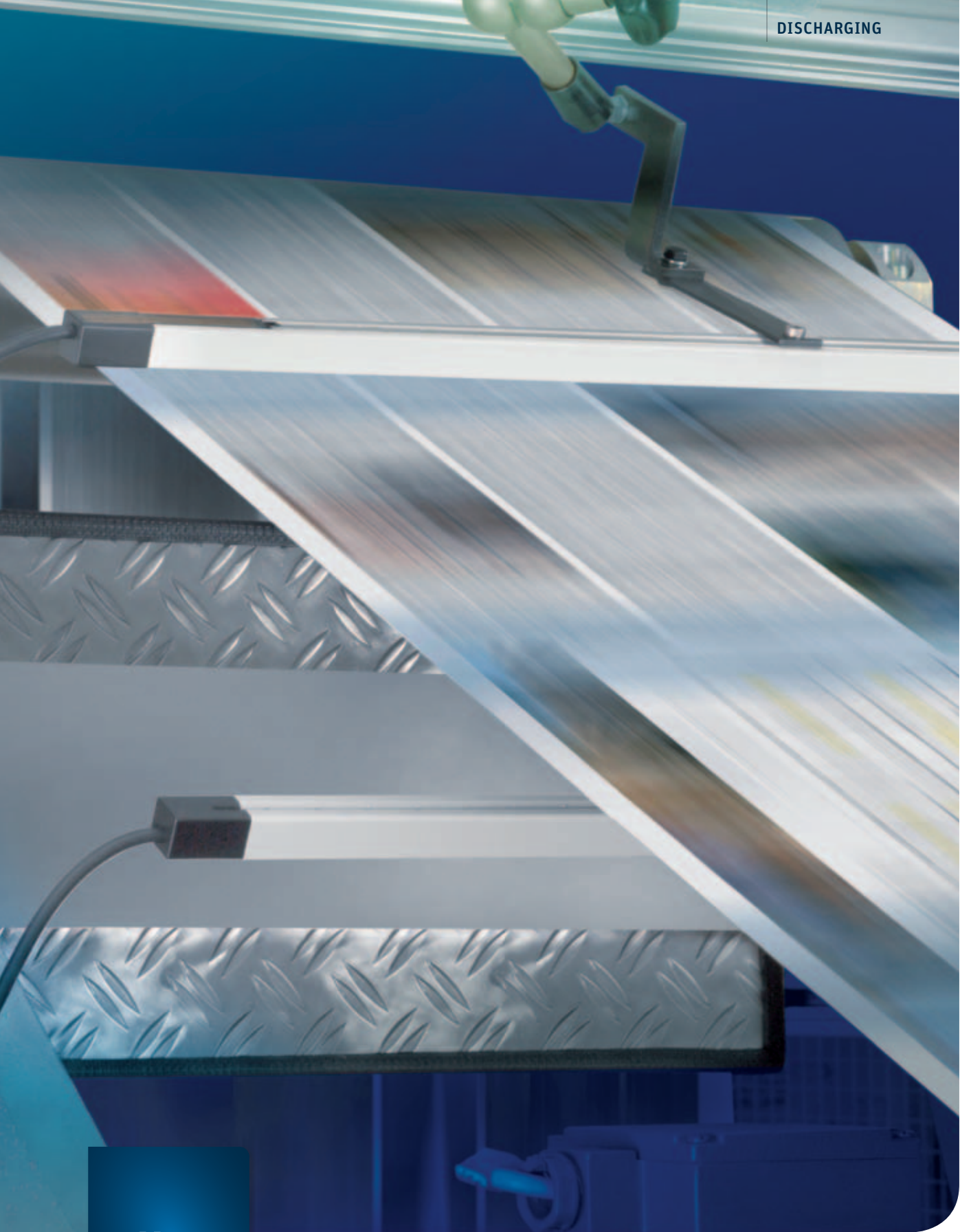


DISCHARGING



**el**tex

electrostatic  
innovations



**Top-Class Discharging**



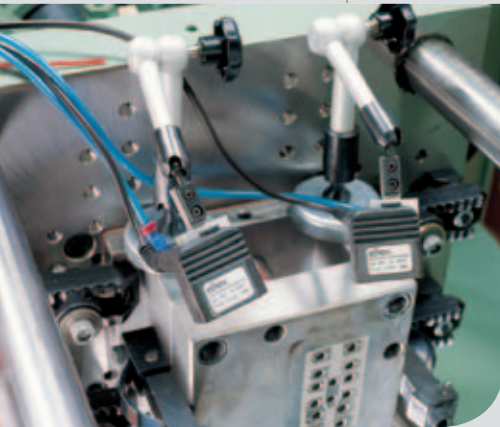
## The optimum choice for many applications

### Top-Class Discharging

Ever faster manufacturing cycles and industrial processes require the highest possible accuracy. Discharging static electricity plays a key function in meeting today's productivity and safety demands.

High process speeds and a growing machine complexity intensify the challenges faced by discharging systems. Conventional solutions soon meet their capacity limits. Complex machine geometries, in particular, rarely allow the discharging equipment to be installed at the desired location. For this reason discharging must also be effective across greater distances and in high-speed applications.

This is precisely the advantage of Eltex' discharging technology compared to others. Eltex discharging systems meet the most stringent requirements and have successfully been in everyday use for several decades, both by machine manufacturers and by users in all industries.



**The Eltex discharging technology is suitable for a wide variety of discharging tasks in many industries, e.g. in printing, plastics, optical and packaging for:**

- separating and fanning paper and film piles
- the production, processing and converting of plastics and textiles
- cleaning moving and non-moving surfaces (e.g. optical lenses)



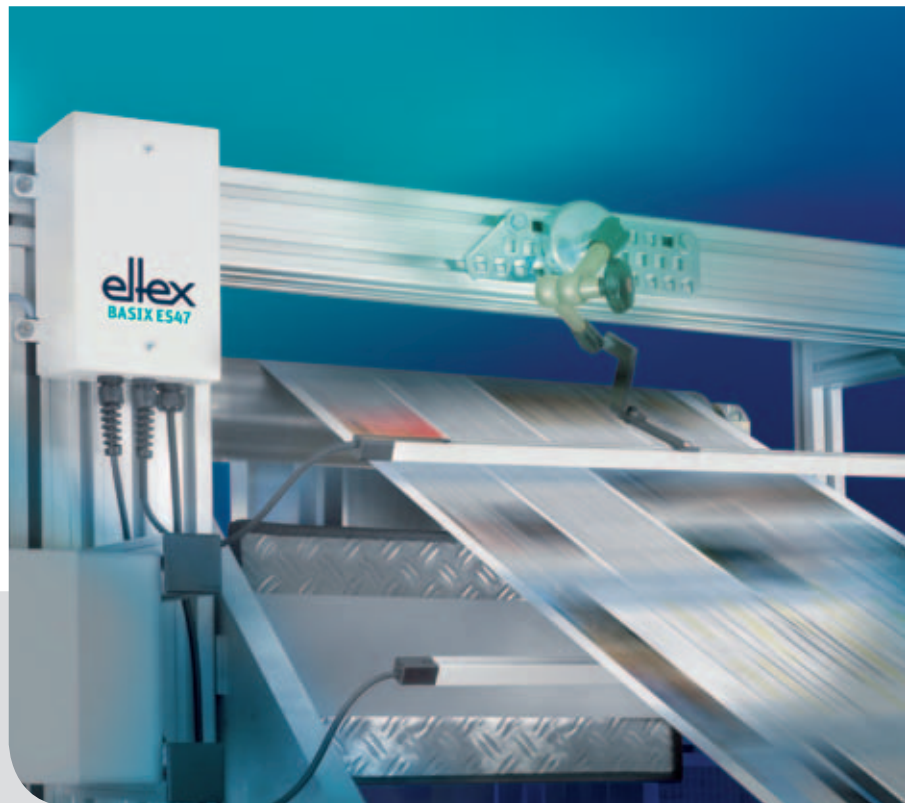


## > The new discharging system Eltex BASIX 100% Eltex – at a low price

### Strong performance at a low price?

Eltex makes it possible.  
The new BASIX discharging unit delivers proven Eltex quality in compact size. The perfect solution whenever static charges cause problems.

With its compact dimensions, BASIX is the perfect choice for many different applications in the plastics, printing, packaging and textile industry as well as in the optical industry. And thanks to its competitive price, it also goes easy on the budget.



### The power supply Eltex BASIX ES47

- > robust steel housing
- > two high-voltage connectors
- > protection class IP40 / IP54
- > bars connected via clamp connection



### The discharging bar Eltex BASIX R47

- > compact design
- > small bar diameter
- > shockproof
- > robust aluminium carrier profile for universal mounting
- > GS-approved
- > UL-approved



## COMPACT POWER ES24

### Efficient, adaptable, smart

Small and compact in size, this unit stands out against conventional transformer solutions both in its small dimensions and low weight. Independent from international variations in line voltages, COMPACT POWER ES24 delivers ultimate flexibility in use. This power supply can be used for all Eltex discharging bars and blower nozzles in non-hazardous areas.

With the CANopen® interface, the discharging system can easily be integrated into higher-ranking machine controls. Via the interface operating parameters can be modified and monitored and the unit can be switched ON/OFF.

Error messages are either visually displayed on the device or output via CANopen® or potential-free contact.

### Ready for action in many industries

This mini power supply is not only extremely powerful but also highly versatile in use: in the plastics industry (e.g. in converting), in printing (flexo and digital printing, print finishing) and in many other production sectors such as the packaging industry, electronics industry, textile industry, etc.



*This powerful mini power supply unit is so small that it can be easily mounted virtually anywhere. Connecting options for more bars or blower nozzles/heads via a high voltage distributor.*



### COMPACT POWER ES24

- 24 VDC supply voltage
- two high voltage connectors
- connecting options for more bars or blower nozzles/heads via distributor ESV61
- compact and robust design
- optical control display
- class IP40 protection
- bus interface CANopen®
- stable 5 kV AC output voltage



## > Static Combi Cleaner SCC

### Unbeatable results – ultimate flexibility in use

Highly efficient ionizing bars attached at the inlet and outlet point neutralize the plastic surfaces. The variable-speed rotary nozzles capture the particles carrying static charges and propel them in the direction of the extraction channel where they are eliminated safely and thoroughly. The integrated variable-speed control of the cleaning nozzles keeps an even and pressure-independent rotary speed that, in turn, guarantees a consistent and excellent cleaning result with its pulsating and highly efficient air cleaning effect. Rotary speed and air velocity can be adapted to optimized cleaning requirements.

The Static Combi Cleaner is made in various installation sizes. The number of nozzles depends on the size and shape of the components to be cleaned. Working width and extraction direction are adjustable depending on customer requirements.

### Static Combi Cleaner SCC

- > contactless surface cleaning, no brushes, no height adjustment
- > no extra dust elimination work
- > enhanced production quality
- > smooth production processes
- > minimized costs, fewer downtimes

## > STATICJET RX21

Micro-components and instrument manufacturing require the smallest of tolerances – that is precisely where electrostatic charges can be particularly vexing and noticeably disrupt the production process. That costs time and money.

### Small solution, big effect

Conventional electrostatic solutions are too large in size and too inflexible to provide relief here – but the STATICJET RX21 solves this problem. With its compact dimensions, low weight, and independence from internationally varying supply voltages, the STATICJET RX21 can easily be used anywhere and thus brings reliable Eltex quality to each production process. The ions generated at the emission tip are carried by the airflow through the nozzle to the object to be discharged and there they provide for a precise and reliable active discharge. This guarantees smooth and more efficient process flows – safely and reliably.



### STATICJET RX21

- > integrated high-voltage generation (external high-voltage wiring is not required)
- > 24 V DC supply voltage
- > short-circuit proof
- > two LEDs for status display
- > compact design, small dimensions and low weight
- > flexible and easy to install
- > three different nozzle forms



## Makes the difference

# The intelligent discharging bar IONSTAR RX3



In all situations where great or changing distances have to be bridged and very high electrostatic charges have to be dissipated, the discharging bar IONSTAR RX3 shows its true strengths.

The intelligent sensors of the IONSTAR RX3 continuously monitor the distance and the charge level of the object to be discharged and automatically adapt the power output to the actual conditions. The system has outstanding efficiency for the removal of electrostatic charges from winding stations.

### **IONSTAR RX3**

- perfect discharge over large distances
- automatic distance measurement with discharge optimization
- non-wearing emission tips
- 24 V DC voltage supply
- no separate high voltage power supply required



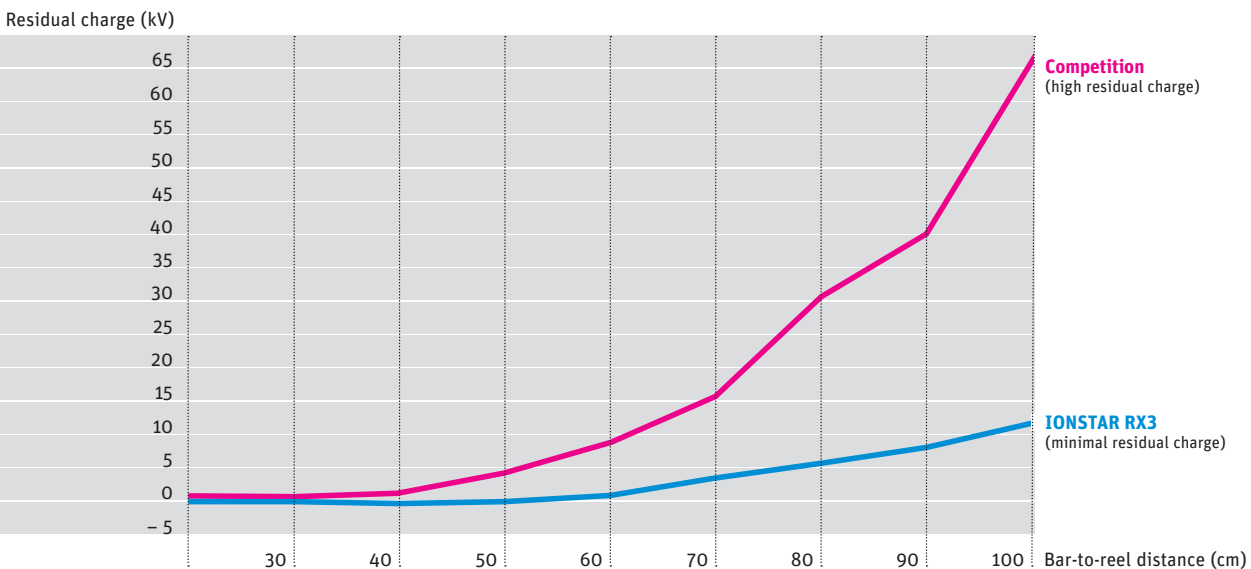
**Long range – intelligent – flexible**

The IONSTAR RX3 optimizes your production process – whether it's winding or unwinding film webs, in the reel slitter or many other demanding applications.

The powerful high voltage generator is integrated in the bar and is capable to neutralize even high charges in almost no time, allowing previously unheard of discharging ranges. No additional air support is needed.

Non-wearing emission tips, robust and an easy-to-clean design ensure that only a minimum of maintenance is needed. An aluminum profile on the rear with sliding nuts makes for easy assembly, even in difficult installation situations.

*To achieve the optimum discharge effect while the reel is increasing in diameter, both frequency and duty cycle have to be continuously adapted. The IONSTAR RX3 is the only system that does this fully automatically using ultrasonic distance measurement. Competitive systems always have to be readjusted.*





## Most efficient in handy size The Ion Blower Pistol EXPR50



*Using the EXPR50 blowing off a plastic part before painting*

### **Ion Blower Pistol EXPR50**

- high active discharging through patented insulated earth conductors
- safety through function and pollution monitoring in connection with the ES53 power supply
- shockproof
- flow-optimized air nozzle
- ultimate safety in Ex-areas through passive discharging when power supplies are off
- air supply, optionally from top or bottom
- approved in Ex-zones 1 and 2

### **Discharging and cleaning simultaneously**

Electrostatic charges in production processes often cause disruptions and reduce both the process speed and the product quality. The powerful Ion Blower Pistol EXPR50 can now be used for active discharging, also in the hazardous area. The pistol is most effective in zones where charged surfaces attract and bind dust particles – in other words, where surfaces need to be discharged and cleaned effectively at the same time. A perfect preparation particularly for painting and coating processes where dust-free parts are critical for gloss and quality.

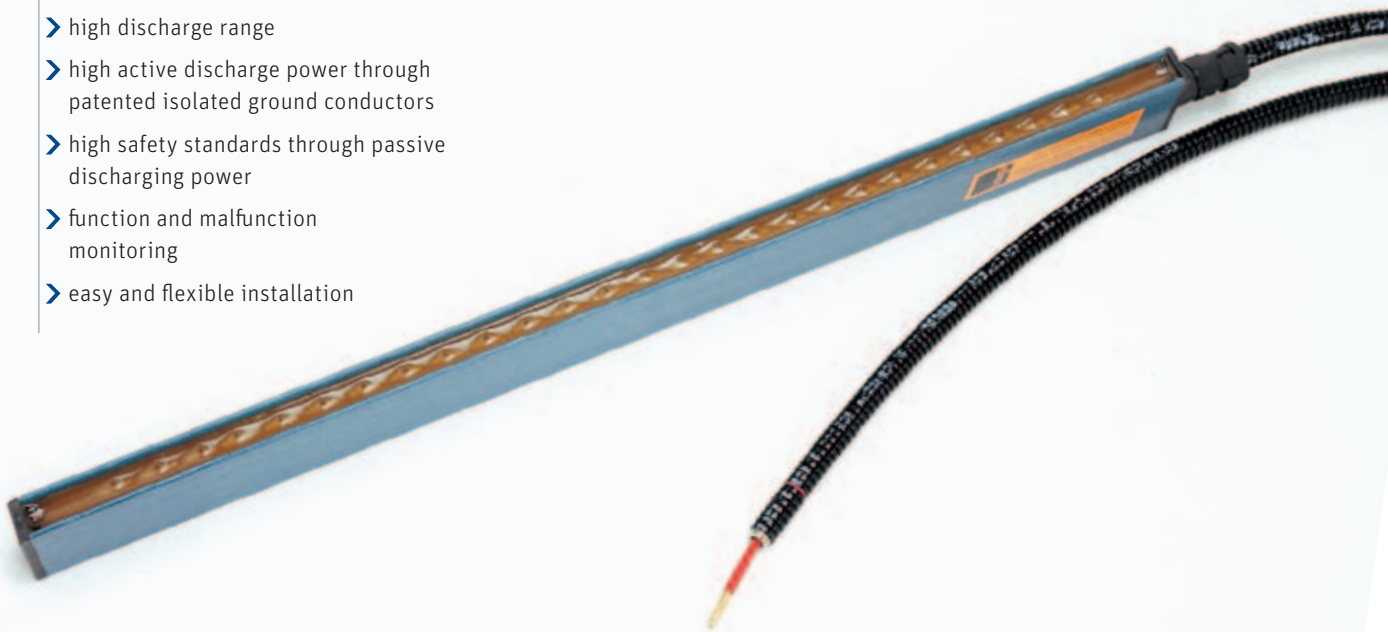
### **Effective and intense – the EXPR50 does a thorough job**

The long discharging range supported by a powerful blast of air creates a special depth effect – discharging and blowing off static dust at the same time.


 > Active discharging for the Ex-zone

**Discharging Bar EXR5C**

- > high discharge range
- > high active discharge power through patented isolated ground conductors
- > high safety standards through passive discharging power
- > function and malfunction monitoring
- > easy and flexible installation


**Series ES53 Power Supply**

Power supply for the AC powered Eltex discharge components for the Ex-zone.

- > plug-type high voltage outputs
- > stable 5 kV AC output voltage
- > function and pollution monitoring
- > IP 54
- > easy installation



**All Eltex systems for Ex-zones are Ex-approved in compliance with Directive 94/9/EC (ATEX 95) and therefore comply with the latest European regulations.**

## Higher power and greater range The Ion Blower Technology

### Unsurpassed effect – compact design

Compared with similar products, the ion blower technology delivers higher ionization power and a larger ionizing range.

While the ion blower nozzles and the ion blower nozzle bar are fixed in place, the ion blower pistols show their true strength in hand-held use.

The compact design and the high effectiveness of the unit allow a variety of different uses and applications.



### Ion Blower Nozzle Bar LR36

- one high voltage connection and air supply for several ionization nozzles
- flexible ball-joint hoses for accurate alignment
- single nozzles with individual flow profile
- easy installation of the support profile using a mounting channel

### Ion Blower Pistols PR36 and PR55

Ion blowers for discharging and dedusting highly sensitive components. The emission tips generate an ion-enriched discharging cloud.



### Ion Blower Nozzles and Heads

For large surface areas and point-to-point discharging and dedusting. Air support guaranteeing a high degree of efficiency even across large distances.





electrostatic innovations



## Safe, precise, perfect The Blue-Bar Technology



### Effective discharging at highest machine speeds

The discharging bar R50/R51A generates a much higher active discharging power than previous technologies: the insulated array of ground conductors enhances the electric field at the active tips and so improves the production and speed of charge carriers, providing substantially more positive ions and free negative electrons than conventional bars. Simultaneously, the bars have a high passive discharging performance. The decoupled emission tips guarantee excellent discharging efficiency and make the bars absolutely short-circuit- and shock-proof.

### Discharging Bars R50/R51A with fixed or plug-type connection for alternating current (AC)

Both bar designs are available in active lengths of up to 3,915 mm. They are operated with 5 kV alternating current at 50 – 60 Hz.



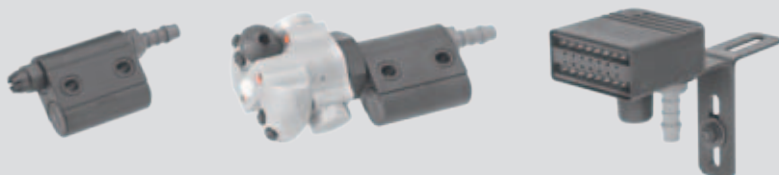
### Air Profile L50

The air profiles which can be combined in any array substantially help to increase the discharging range and therefore the depth effect.



### Series ES51 Power Supply

Power supply for AC discharging devices.





Eltex is in permanent and close contact with users. The open exchange of information results in custom-made and specific solutions. Each of our projects is accompanied by joint problem analyses, outline and detail planning, product manufacture and integration into existing plants and equipment, start-up, maintenance and service, creating innovative and client-oriented solutions.

Are you interested in Eltex discharging systems or in any other Eltex electrostatic innovation? We will be happy to inform you about using Eltex technology in your application and about our range of services. Please contact us.



[www.eltex.com](http://www.eltex.com)