hildebrand TECHNOLOGY
a Gema division

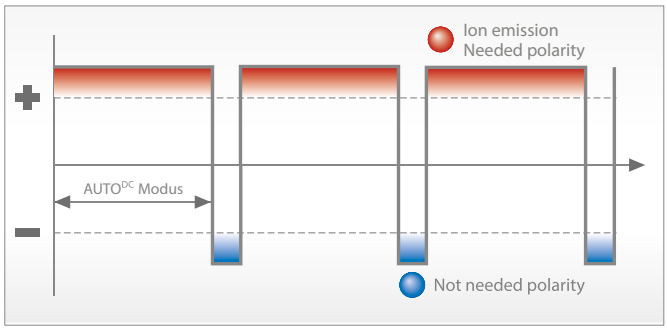
iONstream 4.0

6 kV / 12 kV / 18 kV **AUTO DC** Technology®

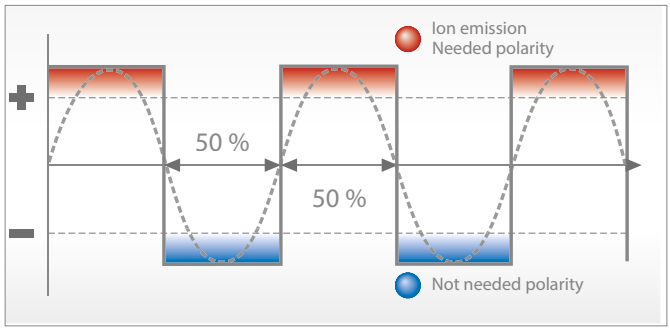
Industry 4.0

AUTO DC Technology®

By applying alternate positive and negative high voltage current to the emitter pins, ions of both polarities are generated. iONstream 4.0`s special AUTO DC Technology® generates substantially more ions due to its perfect control of the pulse/pause relationship and therefore provides a much more homogenous electrostatic field when compared to any other conventional AC - and PULSE^{DC} method neutralising systems. The tip material itself consists of a special tungsten alloy, which allows conical wear of the tips and prolongs the service life many times over at almost full efficiency.
Our revolutionary design of the static neutralising bar is constructed with a special glass fibre re-enforced extrusion incorporating non-metallic shields which work in harmony with the electrostatic field of the emitter pins.



AUTO DC Technology®



Conventional PULSE^{DC} or AC Technology

The result of this revolutionary technology and intelligence is an effective neutralising range of up to 1500 mm in certain applications. The expert DOE software, in combination with its real time micro-controller functionality, allows easy integration into to days industrial fieldbus as well as Ethernet networks. Our experienced specialists can assess your machine and advise on how to effectively install the iONstream 4.0 into your production process to 'eliminate' your static issues.

iONstream 4.0 System advantages

Application:

- AUTO DC Technology®
- 24V DC supply, all electronic components integrated in neutralising bar profile
- Extremely high remote real power
- Network compatible through CAN-Bus
- Plug & Play
- Data visualisation via App
- Data transfer via Bluetooth, WLAN, OPC and any field bus
- Ex Electrode and field strength meter integrated in the same network

Safety:

- Shock proof according EN norm
- ATEX certification for zone 1 Ⓔx II 2G IIB T6
- ATEX certification for zone 21 Ⓔx II 2D IIIB T85°

Economical:

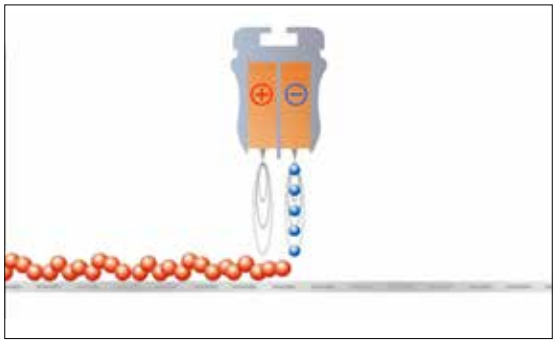
- 100% process control with log book of system parameters
- TQM Sensor option to detect and protocol residual charge

Intelligent electrostatic neutralising system

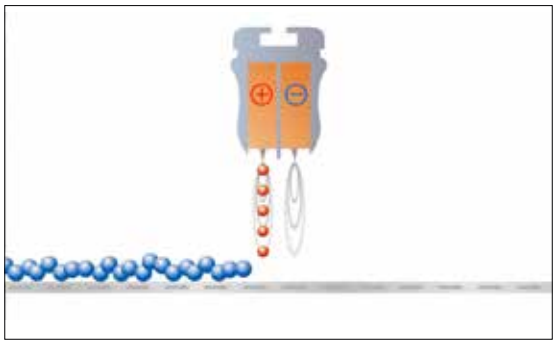
Product Highlights

iONstream 4.0 is a high performance AUTO DC Technology® static neutralising system. It incorporates the latest 24V DC technological developments and is microcontroller operated with local embedded intelligence. Electrode contamination and emitter pin status, as well as neutralising efficiency, are continuously monitored and visualised. Each neutralising bar is accessible via App or customer connectivity via Gateway.

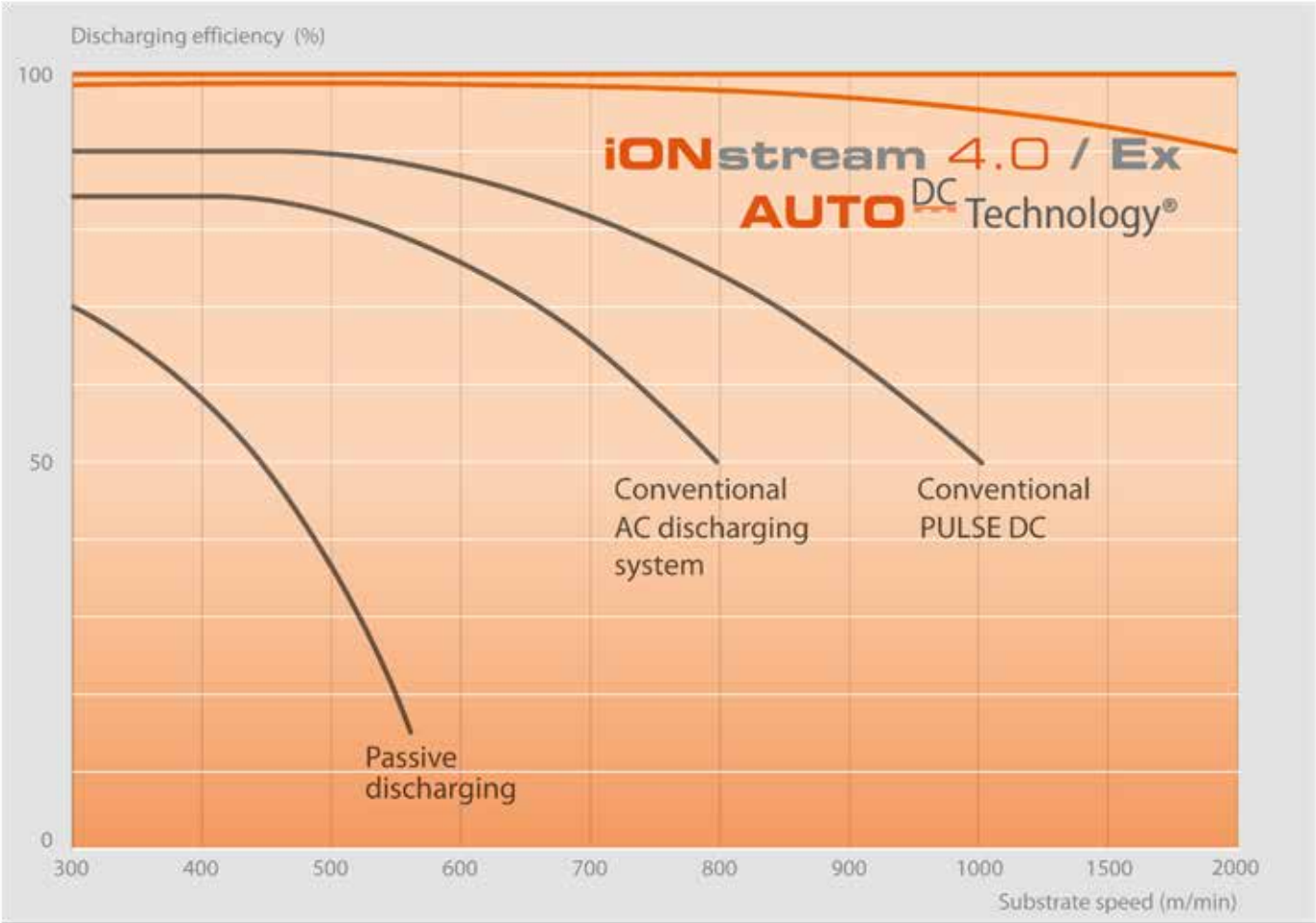
The specially developed AUTO DC Technology® senses the polarity of the charge on the target substrates surface and automatically corrects the pulse/pause relationship towards the dominant polarity surface charge in order to achieve maximum neutralising effect. All electronic and high voltage components are encapsulated within the bar profile. The System is available in three versions (6, 12, 18 kV) for normal, long and very long neutralising range and very high web speed.



Substrate charge positiv = negative ions are emitted



Substrate charge negativ = positive ions are emitted



System discharging efficiency comparison (dynamically)

Monitoring & Communication

Flexible configuration and integration

With the new generation of the iONcontrol you have all functions and parameters under control.

- The comfortable touchscreen with its mordern icon user interface enables easy and intuitiv handling for every operator.
- The iONcontrol system is designed to be networked with all components.

Residual charge measurement

Production data acquisition and access

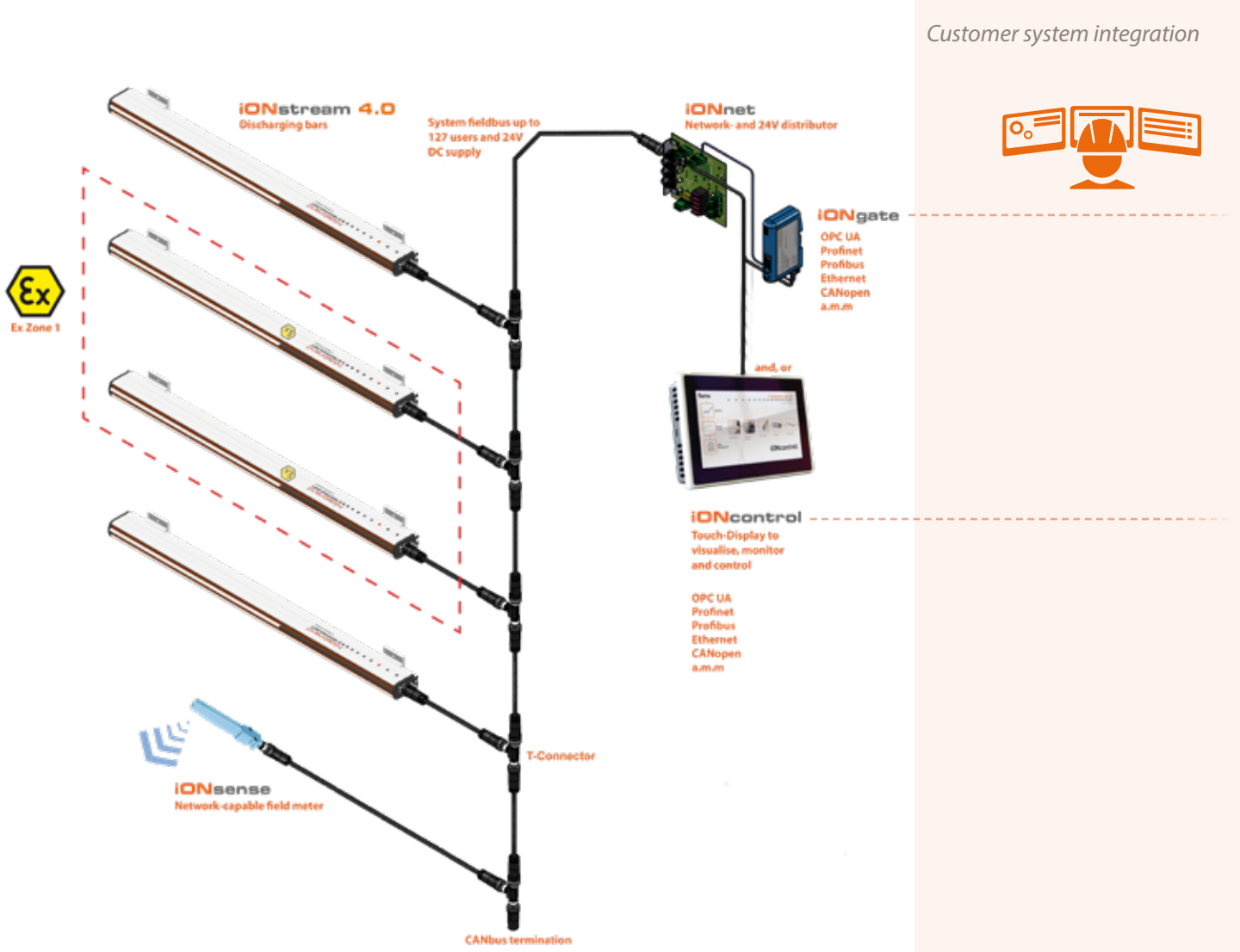
Centralization of all parameters

Fully integrated automation

The extensive functions of the iONcontrol system are used wherever high and reproducible discharging, charging or web cleaning is required. The iONcontrol is also ideal for applications where a fully automatic and process-safe discharge, charging and web cleaning is required. This simplifies the production and maintenance processes and improves overall line management efficiency.

Network Capability

iONstream 4.0 can be quickly and easily integrated into a process control system over an industrial network. Our iONgate interface seamlessly adapts to all common fieldbus systems with plug-and-play functionality.



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Surface Dust Removal • Electrostatic Neutralising • Electrostatic Charging • Measurement Systems

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