



An ITW Company

WORLDWIDE LEADERS
IN STATIC CONTROL



STATIC NEUTRALIZING • STATIC CHARGING • WEB & SHEET CLEANING

INDUSTRIAL PRODUCT CATALOG



Why Is Static Control Important?

Managing static electricity is important for several reasons. The most notable being contamination control, operator safety, and minimizing process equipment issues that can occur due to high static charges. Contamination control is a significant issue in many manufacturing environments, especially in critical applications such as food, medical or pharmaceutical packaging.

Operator safety is also a critical concern because high static charges can cause significant electrostatic shocks to unsuspecting personnel, or worse, an electrostatic discharge in a solvent coating application could cause a fire hazard. The biggest issue for most manufacturers is that all of these problems resulting from static electricity impact their bottom-line.

Static electricity is best controlled by using active electrical ionizers to neutralize the charges. The most effective devices for eliminating static are strategically located in the process to manage the problems identified above.

The equipment available ranges from basic static control to fully integrated systems that monitor the performance of the ionizer as well as provide real-time static level management, alarm signals to the PLC for critical process control or data logging capabilities for quality assurance requirements.

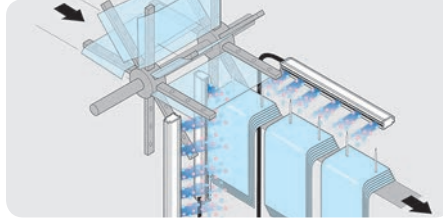
With Static Control

Without Static Control

Catheter manufacturing after thirty (30) minutes of exposure.

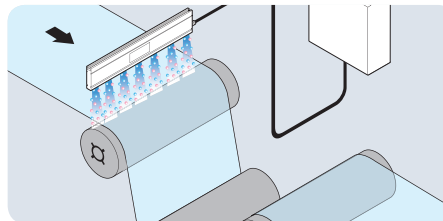
Converting

Simco-Ion's products provide solutions in critical converting processes that can be affected by static including bag-making, sheeting and slitting, laminating and coating, gravure printing, rewinding, trim collection, web cleaning and roll-to-roll changeover.



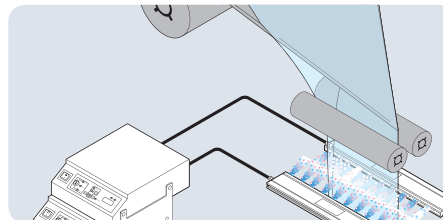
Plastic

Simco-Ion solves problems for a variety of plastics applications including film extrusion, injection molding, thermoforming, trim collection coating, laminating, chill roller pinning, blow molding and in-mold labeling.



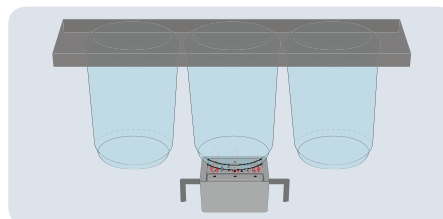
Printing

Today's print customers demand high quality printed material at competitive prices. Simco-Ion's static control products, cleaning systems and static bonding equipment guarantees that your customers will get higher quality printed materials. At the same time your production cost are lowered and throughput increased.



Packaging

Static charges can cause problems in many areas of packaging processes. Simco-Ion's products can eliminate these problems in a variety of applications including package printing, bottling, labeling, thermoforming, over-wrapping, trim collection, and form, fill and seal operations.



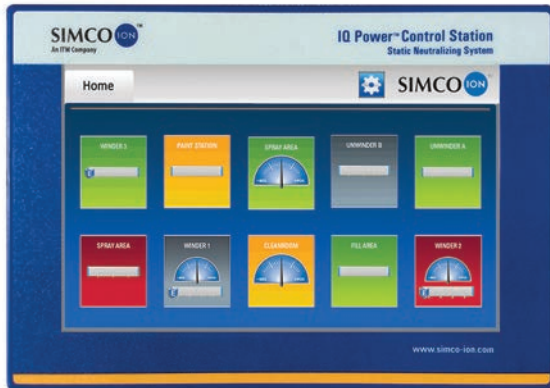
IQ Power™ HL Static Neutralizing System

Specialized components of the IQ Power HL Static Neutralizing System are approved for Class 1 Div 1 hazardous location installations, (Class 1, Div 1, Group D). These HL components leverage all the benefits of the standard system and are specifically designed and approved for HL applications.

The IQ Power HL System provides high voltage output power and processes all system intelligence to maintain and communicate complete static control with the Control Station.

These power units work with IQ Power HL Static Neutralizing Bars which are available in Speed and Hybrid configurations.

IQ Power Control Station



IQ Power HL Bar

HAZARDOUS
LOCATION
CLASS 1 DIV 1
APPROVED

Power Supplies

There are two power supply choices available:

- The **HL Power Supply** is approved for mounting **outside** the hazardous area.
- The **HLC Power Supply** is approved for mounting **inside** classified hazardous locations. The HLC Power Supply requires a **Remote Display Monitor** which is used to display all critical indicators such as service status and fault conditions.



HL Power Supply



HLC Power Supply



Remote Display Monitor



IQ Power HL Sensor

The **IQ Power HL Sensor** allows the power units to operate in closed-loop feedback mode or can be used as a stand-alone monitoring system. It connects to the system through the **IQ Power Sensor Interface**. The Sensor Interface provides status indicators for up to 8 connected sensors.

- Digital, not analog, technology offers higher accuracy and is impervious to noise.
- Sensor is intrinsically safe allowing for easy installation **without** the use of conduit.
- Communications cannot be corrupted due to data verifying algorithm.

IQ Power™ Static Neutralizing System

Simco-Ion's **IQ Power Static Neutralizing System** is an unparalleled lineup engineered with the technology that brings complete monitoring intelligence within a user friendly interface. Designed for use in rugged industrial applications and leveraging many patented features, IQ Power provides superior ionization performance.

This fully integrated system is simple to install. With our "smart addressing" technology, devices can be added in a snap.

- Full PLC integration
- User controlled alarms
- Patented Auto-Tune technology
- Patented Dual Axis control
- Patented CLFB with charge sense technology
- Complete system monitoring for up to 10 devices



IQ Power Control Station

The **IQ Power Control Station** is equipped with a full color touch panel interface. The Control Station combines data logging capabilities with user selectable time interval data points in addition to event logging capabilities. It works with both standard and HL systems.

It also provides four Output Modes of operation:

- Fixed Mode for system optimization based on average web conditions.
- Manual Mode for user adjusted output settings.
- Auto-Tune Mode for consistent live web reading and optimization based on current conditions.
- Closed-loop Feedback (CLFB) Mode allows the IQ Easy Sensor bar to directly control output by pairing with sensor bar.

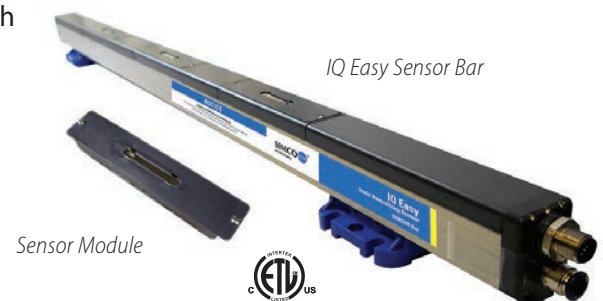


IQ Easy Sensor Bar

Simco-Ion's **IQ Easy Sensor Bar** measures the field intensity of a charged web/target. Our unique design allows for various sensor configurations, positioning sensors across the web for a complete picture of your electrostatic charge issues.

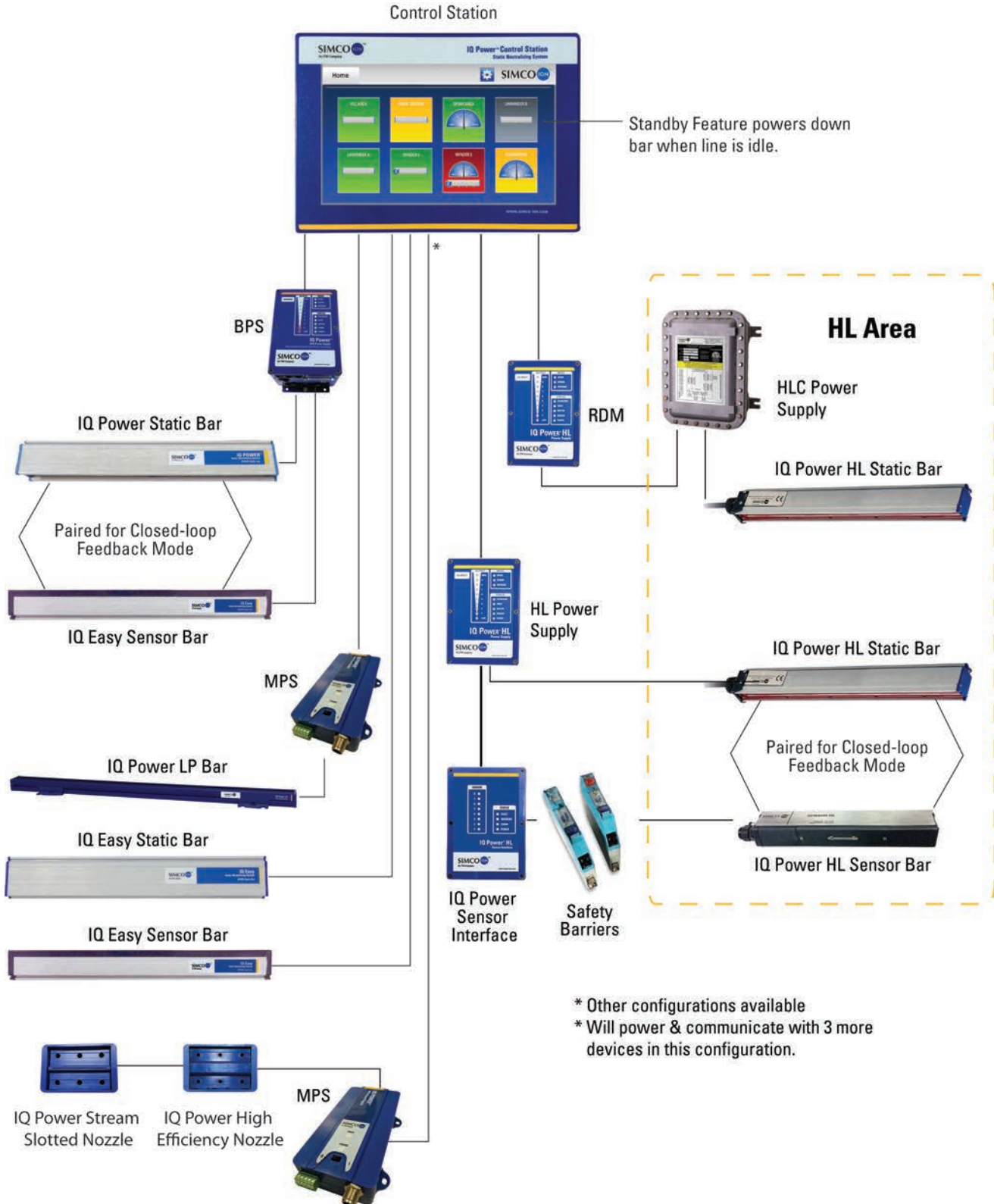
Integrated with the Control Station, IQ Easy Sensor bars can be used with the static neutralizing bars using our propriety closed-loop feedback system minimizing the static charge level in real-time.

- Full web width charge monitoring
- Over 40 bar lengths available
- Bars offer a variety of sensor locations
- Flexible mounting options
- Can be used for stand-alone diagnostics



IQ Power System Network

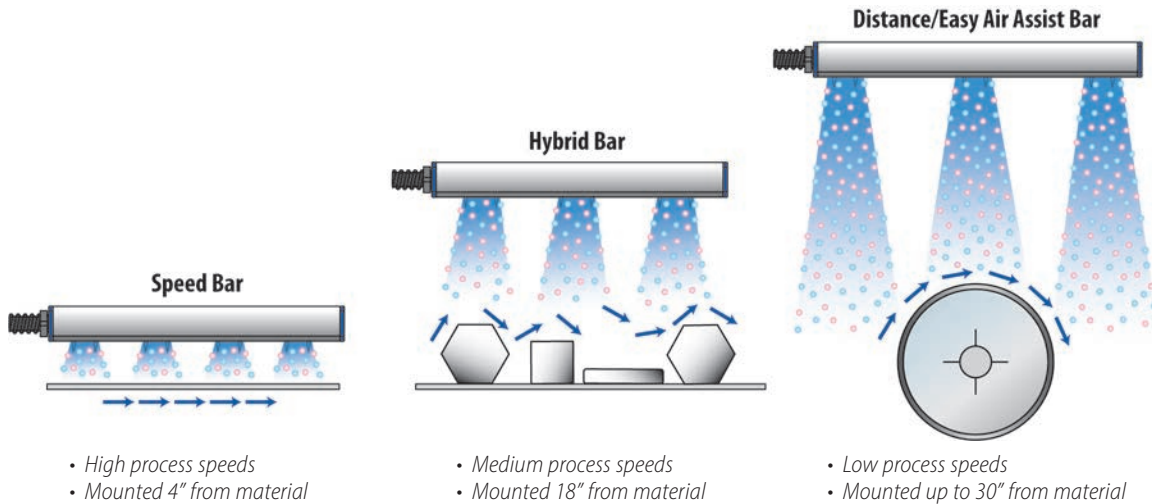
The IQ Power System can power and monitor up to ten devices in one complete network through the Control Station. Devices are powered through the control station at 24 VDC input power. When used in stand-alone mode, devices are powered using an AC adapter.



IQ Power™ & IQ Easy™ Static Neutralizing Bars

Unlike older technology bars, the **IQ Power** and **IQ Easy** Static Neutralizing Bars are highly efficient with 100% effective length. Our neutralizing bars are shockless, DC powered and built for long lasting durability and low maintenance.

Static neutralizing bars all feature durable Tungsten emitters and are offered in over 85 different lengths and three varieties to suit your application based on the web speeds or operating distance. All bars include rugged mounting hardware.



IQ Power Static Neutralizing Bar

The **IQ Power** Static Bar connects into the BPS or MPS power supplies. Plug and play operation. Available in Speed, Hybrid and Distance configurations.



IQ Easy Static Neutralizing Bar

The **IQ Easy** Static Bar has an integrated high voltage power supply that requires only a low voltage input of 24 VDC, for a safe and clean install. IP-66 rated. Available in Speed and Hybrid configurations.



IQ Easy Air Assist

The **IQ Easy Air Assist** Bar features a shatterproof air tube to improve discharge performance at a longer range of distance plus all the benefits of IQ Easy Static Bar with light duty cleaning.



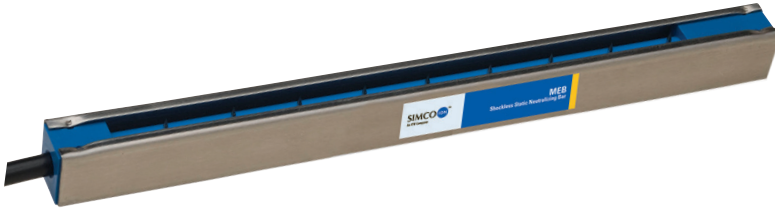
IQ Power LP

The low-profile **IQ Power LP** Static Bar is less than one inch high with 100% effective length. It connects into the BPS and MPS power supplies and provides outstanding performance in space restrictive applications. Available in Speed configuration.



MEB Bar

Simco-Ion's **Shockless MEB Static Bar** is a very efficient and versatile static eliminator used in a wide variety of applications. Its small size and ability to fit in tight spaces makes it a favorite of machine builders. The MEB bar is also available with mounting studs and right angle cable exit for ease of installation.



Specifications

Speed	1200 fpm (max)
Emitters	Stainless Steel
Power Supply	F Units, D Units
Mounting	1-3" from target surface
Enclosure	Stainless Steel and PVC
Dimensions	8.5-144" (215-3657 mm) overall length
Certifications	CE cULus SP FM

IQ Power™ MPS

The **IQ Power MPS** power supply features a streamlined design in a rugged enclosure and weighs less than one pound. The MPS power supply is compatible with IQ Power LP and Speed Static Bars, and IQ Power Nozzles. Pair with control stations for individual bar monitoring.



IQ Power™ BPS

The **IQ Power BPS** power supply is designed for use with the IQ Power Static Neutralizing bars and nozzles. Its industrial design provides patented one touch calibration, full ionization output readings including clean bar and fault indicators.

The patented connector system automatically senses bar type to adjust frequency and voltage.



IQ Power™ Nozzle

Simco-Ion's **IQ Power Nozzle** is a shockless pulse DC ionizer engineered to operate at 7 kV and is compatible with the IQ Power Static Neutralizing System. Can be used with the IQ Power BPS and MPS power supplies. IQ Power Nozzle users have worry free, continuous active monitoring. Choose between High Efficiency configuration for most applications or Slotted for applications that require a high amount of air.

- Flexible installation allows multiple nozzles to be positioned on a single wire run
- Continuous monitoring of performance and status
- IP-66 rated against particulate and splash
- Communicates with the control station

Specifications

Input Voltage	7 kVDC (IQ Power speed mode) using specified HV cable
Air Input	80 psi (max)
Air Input Connection	1/8 NPT straight of right angle for use with 1/4" O.D. tubing
Air Consumption	10 scfm @ 30 psi; high efficiency 1.5 scfm @ 30 psi
Temperature	60°C (140°F) max
Dimensions	2.1"L x 2.1"W x 1.3"H (individual nozzle)
IP Rating	IP-66



IP66 RATED

High voltage cables sold separately in 10, 20, 30 ft. lengths, which can be cut to the exact requirements of your application.

GREAT FOR MOST APPLICATIONS



High Efficiency Configuration

GREAT FOR AIR RINSING



Slotted Configuration

Ioncell™

Simco-Ion's **Ioncell In-line Ionizer** enables stunning performance in longer-length delivery lines by overcoming traditional ion recombination limitations; enabling focused ionized air to be delivered to previously inaccessible locations.

- Compact design that pipes ions through long tubes
- Various output attachments available
- Powered by low voltage power supply or through 24 VDC input
- Can daisy-chain up to 6 units

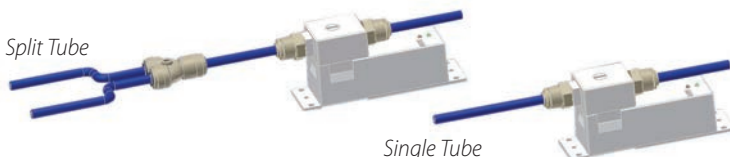


CE cULus

Specifications

Input Voltage	24 VDC
Balance	+/-50V
Air Pressure	50 psi (max)
Emitters	Tungsten
Connectors	4 position modular; DC power IN
Indicators	Green-Power On; Red-fault indicator (TTL level alarm output)
Temperature	32-122°F (0-50°C)
Dimensions	2.5"H x 1.3"W x 4.5"L (64 x 33 x 115 mm)

Split Tube



Single Tube

Output Tube Configuration



Ring Output Applicator



Air Knife Output Applicator

TopGun™

Simco-Ion's **Top Gun** features high blow-off force to provide efficient cleaning and rapid static discharge. All control functions are built into the gun for easy operator use: airflow control and a two-level LED to indicate both power on and ionization.

The Sidekick flexible neck frees the operator's hands during assembly and manufacturing processes. A foot pedal controls both ionization and airflow, and the flexible gun mount allows the operator to focus the ionization airflow where it is needed. It includes a steel bracket for easy benchtop mounting.

- Balance to $\pm 15V$
- Static dissipative lightweight ergonomic handle
- Operates on either compressed air or nitrogen
- Adjustable airflow control in handle

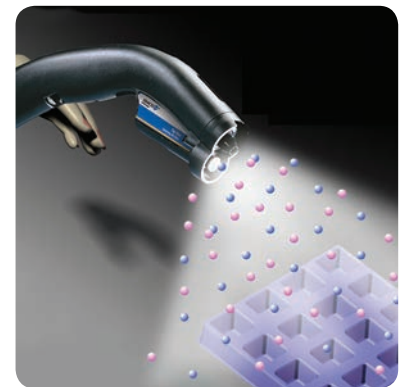


Specifications

Discharge Time	1.0 sec at 6", 30 psi; 0.5 sec at 2", 60 psi
Air Pressure	100 psi (max) clean dry compressed air
Air Flow	2.4 scfm at 30 psi; 4.6 scfm at 60 psi; 7.4 scfm at 100 psi
Cable	10' standard, 20' optional
Weight	1.8 lbs (gun and 10' hose assembly)
Certifications	CE cULus



Sidekick



Neutralizing Thermoformed Trays

Cobra™

Simco-Ion's **Cobra** Static Neutralizing Blow-Off Gun provides a powerful blast of ionized air for cleaning and neutralizing large surfaces in rugged industrial environments. This lightweight, durable gun features an ergonomic handle to regulate blow-off force. An optional nozzle produces a fan-shaped air blast for covering large areas.

Specifications

Discharge Time	0.6 sec at 6" & 100 psi (decay 5000-500V, 20 pf plate)
Air Pressure	100 psi (max) clean dry compressed air
Air Flow	14 scfm at 50 psi, 22 scfm at 100 psi
Cable	20' standard, 40' optional
Power Supply	G Units
Weight	1.5 lbs (gun and 20' cable)
Certifications	CE cULus



G Unit Power Supply

Curtain Transvector

Simco-Ion's **Transvector's** are highly efficient "air knives" or "curtains" of compressed air for superior blow off of dust and dirt. Our patented technology results in significantly less noise and less compressed air usage while outperforming other standard air knives and has greater air amplification and a more uniform airflow. Pair the Ionizing Curtain Transvector with Simco-Ion's IQ Power or IQ Power HL static bars which are approved for Class 1 (Division 1, Group D) hazardous locations.

Typical Use

Label Application: Eliminates dust, dirt and static charges for better label placement and adhesion.

Bottle Filling: Eliminates dust from exterior of bottles.

Injection Molding: Ionized air directed into mold cavity causes parts to release.



Specifications

Air Inlet	0.25" NPT
Air Pressure	10 psi (min) to 100 psi (max) clean dry air, oil free
Air Flow	4.3 scfm per inch at 80 psi
Power Supply	Based on static bar
Cable	10' standard length
Mounting	Transvectors may be mounted directly to air line or static bar mounting studs may be used on selected models
Dimensions	6", 12", 24" bar lengths in stock; 84" available

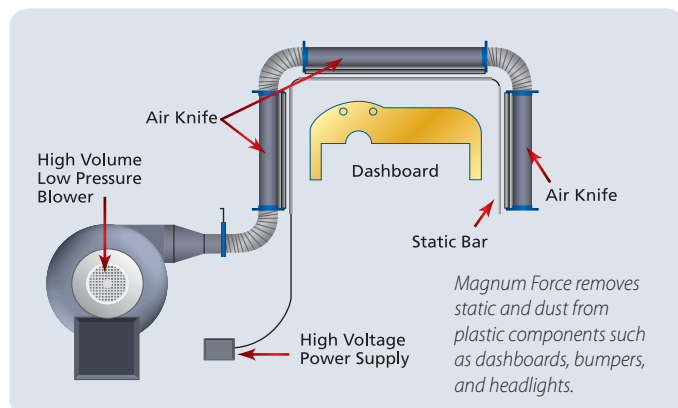
Magnum Force™

Simco-Ion's **Magnum Force** Air Knife Systems are custom-designed to provide superior heavy-duty surface cleaning or drying. When combined with Simco-Ion's static neutralizing bars, Magnum Force becomes a powerful tool for removing dust and dirt from flat or contoured surfaces. Where liquid removal is required, Magnum Force systems are ideal because of their powerful forced air thrust, low operating cost, and efficient operation.

Typical Use

Finishing: Eliminating dust, dirt and static charges from autobody surfaces prior to entering paint booth.

Typical Magnum Force Installation



NO COMPRESSED AIR REQUIRED

Blower

- 208-230V, 460V or 575V, 50/60 Hz; 3-phase
- AMCA certified
- Silencer/Filter: 10 micron replaceable cartridge in coated steel casing
- Compatible with IQ Power, IQ Power HL, IQ Easy, and Static Bars



Specifications

Enclosure	Anodized with powder coated ends
Dimensions	Up to 400" lengths in 6" increments x 4" & 6" dia. (custom lengths available)

Aerostat® XP-20F

Simco-Ion's **Aerostat XP-20F HL** Ionizing Blower is approved for use in Class I, Division 1 and 2, Group D hazardous areas. This is the only blower available on the market with UL approval for use in hazardous areas. The XP-20F Static Control Blower can be powered by either the XP or by the XPM Power Supply. The XP Power Supply is approved for mounting within Class I, Division 1 and 2, Group D hazardous areas. The XPM power supply, which must be mounted outside the hazardous area, is approved for use in electrostatic finishing processes involving spray painting, dipping, coating, and liquid printing processes.

- Designed for use in rugged industrial environments as an intrinsically safe unit
- UL Listed for Class I, Division 1, Group D hazardous locations
- Supplied with air intake filter
- Connection to rigid metal conduit



XP167/XP267



XPM167/XPM267



**HAZARDOUS
LOCATION
APPROVED**

Specifications

Input Voltage	110-119 VAC, 57-63 Hz, 1.3A
Discharge Time	0.9 sec at 1', fan speed high
Air Flow	285 cfm
Coverage	2' x 10' area
Power Supply	XP Units, XPM Units
Dimensions	18.63"W x 9"H x 16.75"D
Certifications	cULus

Sentry™

Simco-Ion's **Sentry** Ionizing Air Blower provides static charge neutralization in industrial assembly and production environments. Its airflow is particularly well suited for neutralizing charges on three-dimensional objects and in areas 3' x 6' wide.

- Integrated power supply
- Point cleaner allows for easy maintenance
- Easily removable air filter for fast maintenance
- Bench stand or optional pedestal mount



Specifications

Input Voltage	120 VAC, 60 Hz, 0.9A (fan speed high)
Discharge Time	1.0 sec at 1'; fan speed high (decay 1000-100V, 20 pf plate)
Air Flow	70 cfm (low), 95 cfm (medium), 120 cfm (high)
Coverage	3' x 6' area
Dimensions	15.38"W x 4.5"H x 8.13"D
Weight	17.8 lbs
Certifications	CE cULus

Aerostat® PC

Simco-Ion's **Aerostat PC** Ionizing Air Blower provides localized coverage with superior charge decay efficiency. The Aerostat PC is designed to provide ionization to a targeted work area.

- Fast, targeted neutralization of static charges
- Lightweight, compact and quiet for unobtrusive use
- Built-in point cleaner simplifies maintenance
- Variable speed fan for airflow control
- Status lamp indicates high voltage is present at the emitter points
- Integrated heater for warm air flow if desired

Specifications

Input Voltage	120 VAC, 60 Hz; 0.1A (fan low heater off), 1.7A (fan high heater on)
Coverage	1' x 5' area
Air Flow	35-70 cfm
Enclosure	Aluminum and Polyester Power Coat
Dimensions	5-1/2"W x 8-5/8"H x 3-1/4"D
Weight	5.7 lbs (2.6 kg)
Certifications	CE cULus



IQ Power Fantom™

The **IQ Power Fantom** Wide-Format Ionizing Blower provides the highest speed and widest coverage for industrial applications. Designed to provide maximum charge neutralization, the Fantom offers four modes of operation and has unique monitoring capabilities when used with the IQ Power Control Station.

- Extended range effective up to 20'
- Remote on/off
- Easy remote automatic self-cleaning
- Replaceable ionizer/duct assembly
- Easily replaceable dust filters
- Monitoring capabilities with Control Station
- Fault/warning/power indicators
- Provides balanced ionization



Specifications

Input Voltage	120, 60 Hz, 2.0A; 230V, 50/60 Hz, 1A (fan speed high)
Coverage	2'x20' area
Air Flow	Variable, 600 cfm max
Air Filter	Replaceable polyurethane foam 10 ppi
Audible Noise	64 dBA measured 2' in front of blower at high speed
Mounting	Existing mounting studs or optional tilt bracket
Enclosure	Powder coated steel
Dimensions	12.75"D x 26"W x 8"H
Weight	31 lbs
Certifications	cULus

Phoenix™

Simco-Ion's **Phoenix** Extended Range Ionizing Blower provides optimum static charge neutralization for a wide variety of industrial applications. Designed to efficiently cover a wide area with an inherently balanced ion stream, the Phoenix ionizer is powerful and portable.

- Extended range effective up to 10'
- Variable speed fan control
- Easily replaceable filters
- Point cleaner allows for easy maintenance
- Portable floor stand available
- High voltage indicator



Specifications

Input Voltage	120V, 60 Hz, 2.0A; 230V, 50/60 Hz, 1.25A (fan speed high)
Coverage	2' x 10' area
Air Flow	Variable, approximately 800-2000 fpm
Air Filter	Replaceable foam filter, 25 ppi
Audible Noise	68 dBA measured 2' in front of ionizer operating at high speed
Mounting	Optional floor stand 50-74" in 4" steps
Enclosure	Aluminum
Dimensions	16.38"W x 9.75"H x 13.25"D
Weight	16.1 lbs
Certifications	cULus

How is Static Generated?

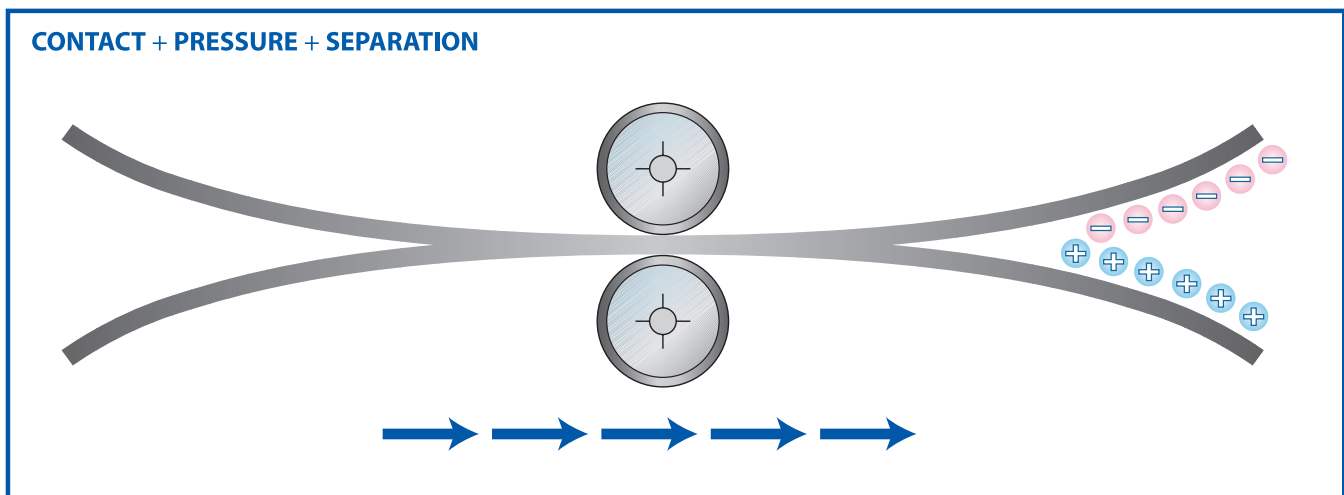
Static electricity is a surface phenomenon and results when two or more surfaces are in intimate contact with each other and then are separated. During contact, surface electrons, which are negative, migrate from one surface to the adjacent surface. When the surfaces separate, the surface that gains the electrons becomes negatively charged, the surface giving them up becomes positively charged.

Many industrial materials are insulators, such as rubber, glass and plastics. Their desirable qualities make them essential to use; however, they are likely to become electrostatically charged during processing.

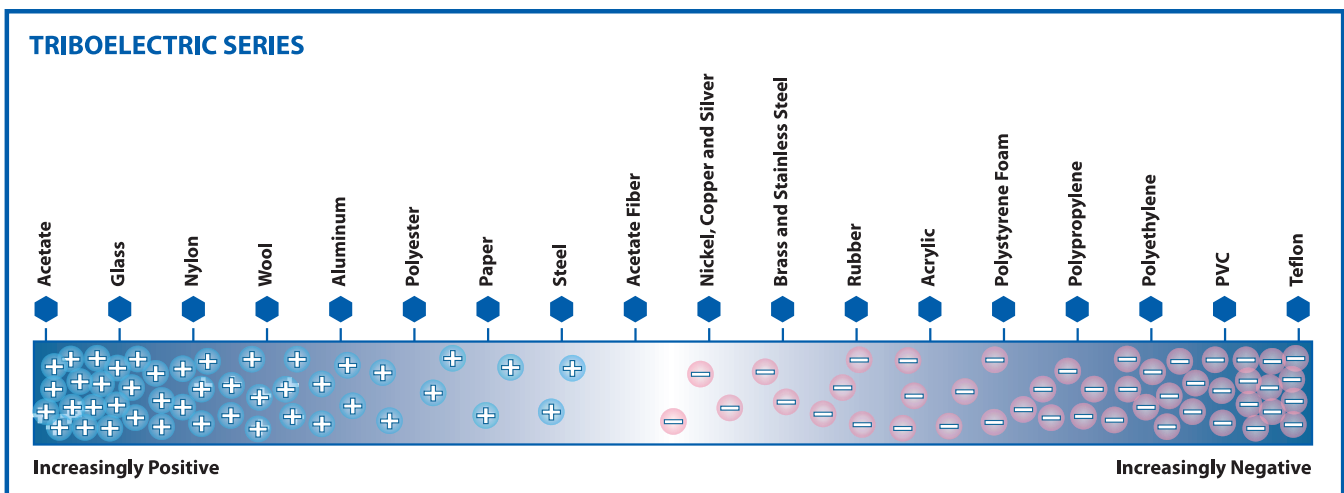
These processes include:

- Peeling laminate
- Unwinding a roll
- Separating surfaces
- Wind-up operations
- Collecting products in bins

Production jams, quality problems, dirt attraction and rejects are all consequences of uncontrolled static.



Friction, pressure and separation are the major causes of static electricity.



The Triboelectric Series chart shows the relative positive or negative charge of various materials.

IQ Power™ & IQ Easy™ Sensor Bars

The **IQ Power HL** and **IQ Easy Sensor Bars** work with the IQ Power Control Station to provide the following features:

- In-Process static level measurement
- User-settable alarm outputs
- Closed-loop feedback
- Data and event logging
- Easy convenient data storage and retrieval via anybus or USB

Data storage is valuable as a diagnostic tool for R&D and process improvement. Historical data can be used to investigate a fire/safety incident or customer complaints and quality issues.



FMX-004

Simco-Ion's **FMX-004** measures both positive and negative polarity charges up to ± 30 kV (30,000V) at a distance of 1". Results are simultaneously shown numerically and in bar graph format on the unique multi-colored display that also displays battery charge status. Power on/off, zero adjustment, Ion Balance (MODE) and hold are all push button operation. The hold button allows the display to retain the static charge reading. This is especially useful where the display is difficult to see during measurement.

- Lightweight, compact design
- Range light assures accurate and repeatable measurements
- Automatic power off without activity

Specifications

Power	9V battery
Display Features	Push button POWER, HOLD, ZERO, MODE (Ion Balance operation)
Read Out	Bar graph: Red LCD for positive polarity voltage; Blue LCD for negative; battery capacity & error display
Measurement	Auto Ranging: HI 0 to ± 30 kV; LOW 0 to ± 3 kV; Ion Balance 0 to ± 300 V
Distance	1" $\pm 1/64$ " (25 mm ± 0.5 mm); LEDs guide for correct distance
Dimensions	4-7/8" L x 2-7/8" W x 1" D (123 x 73 x 25 mm)



Optional Analog Output

TensION

Simco-Ion's **TensION** Voltage Detector enables you to check both AC & DC neutralizing and charging equipment. Without making contact with the actual equipment it gives you an easy and safe way to check if a high voltage is present. The tip of the TensION illuminates when a voltage is detected, providing an immediate indication the equipment is energized.

- No contact required
- Safe operation

Specifications

Power	Two AAA size replaceable batteries 1.5V (included)
Temperature	-10°C to +50°C
Enclosure	Radilon-S HS(a), BE 170MO IP64
Dimensions	148L x 17 dia. mm (5.8" x 0.7")
Certifications	CE





★ U.S. Headquarters
● Manufacturing & Sales Locations

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PAKTEC


Tel: (803) 831-2099
www.pak-tecn.com
ptinfo@pak-tec.com


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