



STATIC NEUTRALIZING . STATIC CHARGING . WEB & SHEET CLEANING

### INDUSTRIAL PRODUCT CATALOG

### **Table of Contents**

Static Neutralization	2
IQ Power HL	2
IQ Power	3-4
IQ Power & Easy Bars MEB Bar	5 6
Power Supplies	6
Ionizing Air Nozzles	7
IQ Power Nozzles	7
loncell	7
lonizing Air Guns	8
TopGun	8
Cobra	8
Ionizing Air Knives	9
Curtain Transvector	9
Magnum Force	9
Ionizing Air Blowers	10
Aerostat XP-20F Sentry	10 10
Aerostat PC	10
IQ Power Fantom	11
Phoenix	11
Electrostatic Charging	12
	'-
Chargemaster VCM	12
Chargemaster VCM MCM 30	12 12
Chargemaster VCM MCM 30 Pinner T	12 12 13
Chargemaster VCM MCM 30 Pinner T Pinner LP	12 12 13 13
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems Teknek	12 12 13 13 13 13
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac	12 12 13 13 13 13 14
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems Teknek	12 12 13 13 13 13
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I	12 12 13 13 13 14 14-15 16 16
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30	12 12 13 13 13 14 14-15 16 16 17
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV	12 12 13 13 13 14 14-15 16 16 17
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV  In-Line Ionizers	12 12 13 13 13 14 14-15 16 16 17 17
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV  In-Line Ionizers  Conveyostat	12 12 13 13 13 14 14-15 16 16 17 17
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV  In-Line Ionizers Conveyostat  Medical Tray/Parts Cleaning	12 12 13 13 13 14 14-15 16 16 17 17 17
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV  In-Line Ionizers Conveyostat  Medical Tray/Parts Cleaning RPT  Static Basics	12 12 13 13 13 14 14-15 16 16 17 17 17 18 18 19 19
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV  In-Line Ionizers Conveyostat  Medical Tray/Parts Cleaning RPT  Static Basics  Instrumentation & Sensor Bars	12 12 13 13 13 14 14-15 16 16 17 17 17 18 18 19 19
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV  In-Line Ionizers Conveyostat  Medical Tray/Parts Cleaning RPT  Static Basics	12 12 13 13 13 14 14-15 16 16 17 17 17 18 18 19 19
Chargemaster VCM MCM 30 Pinner T Pinner LP Charging Applicators  Web & Sheet Cleaning Systems  Teknek Neutro-Vac Ion-O-VAC Mark I V-Force 30 Ion-O-VAC Mark IV  In-Line Ionizers  Conveyostat  Medical Tray/Parts Cleaning RPT  Static Basics  Instrumentation & Sensor Bars IQ Power & IQ Easy Sensor Bars	12 12 13 13 13 13 14 14-15 16 16 17 17 18 18 19 19 20 21 21









### **About Simco-Ion**

Simco-lon is the unsurpassed leader in solving static control problems in a wide range of industries. Since 1936, Simco-lon has distinguished itself by manufacturing innovative, high quality static control products and providing outstanding customer service and application expertise.

### **Simco-Ion U.S. Headquarters**



**Other Manufacturing Locations** 



Holland

Japan



China



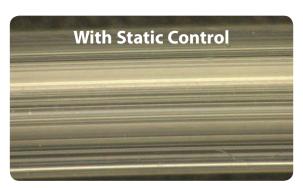
### Why Is Static Control Important?

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.





Catheter manufacturing after thirty (30) minutes of exposure.

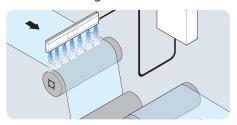
### **Converting**

Simco-lon'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.



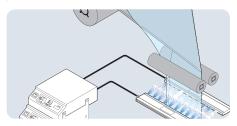
### **Plastic**

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.



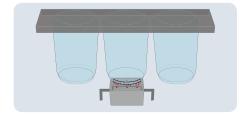
### **Printing**

Today's print customers demand high quality printed material at competitive prices. Simco-lon'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-lon'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.







### **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



### **IO 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
- 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-lon'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.
- <u>Auto-Tune Mode</u> for consistent live web reading and optimization based on current conditions.
- <u>Closed-loop Feedback (CLFB) Mode</u> allows the IQ Easy Sensor bar to directly control output by pairing with sensor bar.

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### **IQ Easy Sensor Bar**

Simco-lon'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.

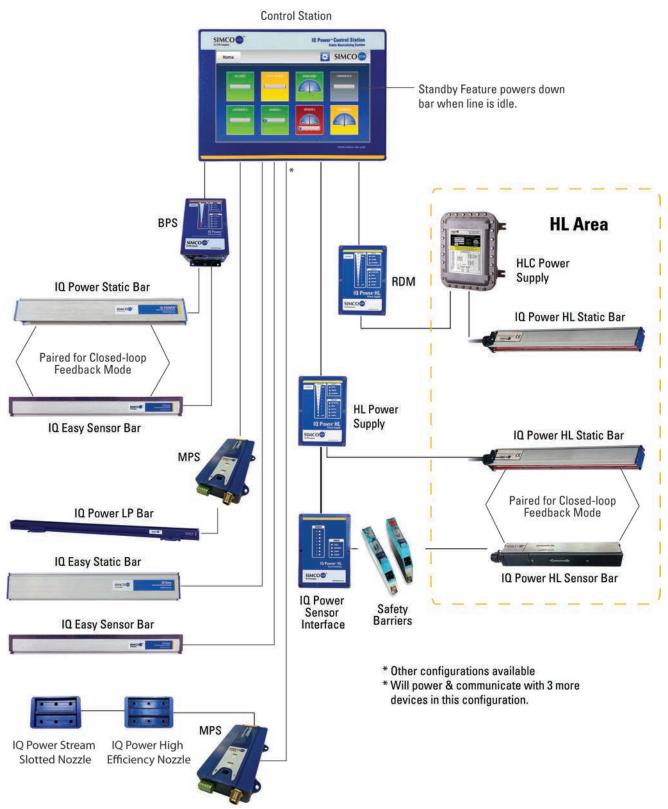
Integrated with the Control Station, IQ Easy Sensor bars can be used with the static neutralizing bars using our propriety closed-loop feedback system minimizing the static charge level in real-time.

- 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**

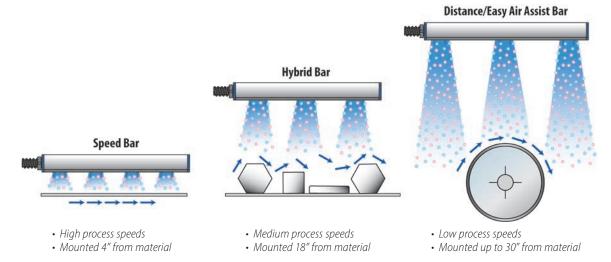
The IQ Power System can power and monitor up to ten devices in one complete network through the Control Station. Devices are powered through the control station at 24 VDC input power. When used in stand-alone mode, devices are powered using an AC adapter.



### **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-lon'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.



Specifica	ations
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	<b>(№)</b> 20 <b>(№)</b>

### **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. It's 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-lon'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



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

### **Specifications**

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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 $\frac{1}{4}$ " 0.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		





High Efficiency Configuration





GREAT FOR AIR RINSING

**Ioncell**<sup>TM</sup>

Simco-lon's **loncell** In-line lonizer 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

## SIMCO Renced

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)





Ring Output Applicator



Air Knife Output Applicator

### **TopGun**<sup>TM</sup>

Simco-lon'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 ±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	C € c ( U) us



Neutralizing Thermoformed Trays

### **Cobra**™

Simco-lon'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.

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	C € c(UL)us



G Unit Power Supply

### **Curtain Transvector**

Simco-lon'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 lonizing Curtain Transvector with Simco-lon'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**

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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

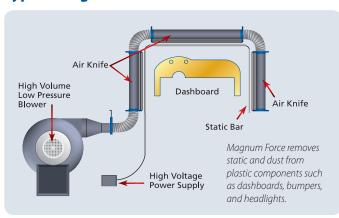
### Magnum Force™

Simco-lon's **Magnum Force** Air Knife Systems are custom-designed to provide superior heavy-duty surface cleaning or drying. When combined with Simco-lon'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



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-lon'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



### **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	c(VL)us

### Sentry™

Simco-lon's **Sentry** lonizing 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	C € c(VL)us

### **Aerostat® PC**

Simco-lon'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

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 lonizing 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





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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	c (VI) us

### **Phoenix**<sup>™</sup>

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





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	c (ŲL) us

### **Chargemaster VCM™**

Simco-lon's **Chargemaster VCM** is programmable for either voltage or current control mode to supply the high voltage for charging bars and various charging applicators used to electrostatically bond materials. The Chargemaster VCM provides a simple and economical solution for a wide range of production processes maximizing the efficiency of the application.

The VCM is available in three versions; negative output voltage, positive output voltage and outputs of both positive and negative polarities (Bi-Polar).

- Run up to four charging bars or applicators
- Capable of voltage or current control mode operation
- · Simple programming and setup
- Remote operation capability
- Short circuit protected output with status indicators
- · Powerful industry leading 5 mA pinning current

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Input Voltage	85-264 VAC @ 47-63 Hz (self adjusting)
Output Voltage	0-30 kV @ 5 mA; 0-60 kV @ 2.5 mA
Voltage Rise Time	Under 70 msec
Output Ports	4
Remote I/O	Analog Signals: 0-20/4-20 mA or 0-5/0-10 VDC via D/sub connector
Remote On/Off	via D/sub connector and programmable menu
Temperature	32-131°F (0-55°C)
Enclosure	Steel
Dimensions	30 kV: 10.5"W x 4.25"H x 13.5"D; 60 kV: 10.5"W x 4.25"H x 15"D
Weight	16.5 lbs
Certifications	CE







Bi-Polar (VCM-BP)

Wall mount

### **MCM 30**<sup>TM</sup>

The **MCM 30** is a powerful high efficiency charging generator that supplies high voltage for charging bars and various charging applicators. The MCM 30 packs a punch in a small size and provides simple and economical solutions for a wide range of production processes.

Input Power	24 VDC, 3A, 75W (max)
Output Power	3-30 kVDC; 0.1-1 mA (single output)
Temperature	32-104°F (0-40°C)
Interface Connections	(12) position Terminal block and multi-purpose interface connector
Mounting	Integrated mounting brackets
Enclosure	ABS Plastic (UL94V-0), color: black
Dimensions	7.75"L x 3.00"W x 2.62"D (197L x 76W x 67D mm)
Weight	1.7 lb (0.77 kg)



### Pinner T<sup>TM</sup>

**Pinner T** Bars are energized by our charging generators to deliver a safe charge to temporarily pin or bond materials together. Quality construction and engineered for performance, the Pinner Series will help you achieve your Electrostatic Pinning goals whether working with IML or lamination. Pinner T is equipped with Tungsten emitter pins for longer life and lower resistance for greater pinning performance. Paired up to 5 mA of pinning from VCM, you get unrivaled pinning performance.

### **Specifications**

Input Voltage	$\pm 30$ kVDC ( $\pm 50$ kVDC with special mounting & insulation precautions)
Output Current	1.5 mA/ft max
Operating Environment	32-200°F (0-90°C); 70% RH (max), no dewing permissible
Operating Distance	1/2" to 3" (application & voltage dependent)
HV Cable	Flexible, abrasion-resistant, silicone outer jacket rated to $\pm 50\ \text{kV}$
Enclosure	Glass filled vinylester (rugged, impact resistant, light grey color)
Weight	2.1 lb/foot



### **Pinner LP™**

With its low profile design, the **Pinner LP** Bar is the smallest in Simco-Ion's Charging series making it easier to fit in tight spaces. A large variety of lengths are available allowing for the perfect fit. The Pinner-LP is engineered to provide stunning pinning performance for multiple applications, especially in roll-to-roll changeover.

### **Specifications**

Input Voltage	±30 kVDC max
Output Current	Continuous Use: 0.75 mA/ft max; Intermittent use: 1.50 mA/ft max
Operating Environment	32-200°F (0-90°C); 70% RH max, no dewing permissible
Operating Distance	1/2" to 3" (application & voltage dependent)
Dimensions	1"W x 1.9"H x (EL+2")L (EL = effective length 3-144" in 3" increment)
Weight	1.4 lb per foot



### **Pinner™ Charging Applicators**

The **Pinner Series** Static Charging Applicators consists of the Linear Pinner, 5-Point and Pinner Claw. Pinner applicators are arc resistant to avoid suspension of static charge and loss of pinning action.

- Current limited design for operator and equipment protection
- Available with replaceable pins to ensure maximum performance
- Minimized EMI and RFI generation, preventing disruption of controls

Power Supply	30 kV/50 kV		
Points	Linear Pinner 5-point Pinner Pinner Claw	4 removable 5 fixed 3 removable	
Temperature	500°F (260°C)		
Dimensions	Linear Pinner 5-point Pinner Pinner Claw	4.75" x 0.75" dia (120 x 19 mm) 7" x 0.75" dia (178 x 19 mm) 8.5" x 0.75" dia (216 x 19 mm)	



### **Teknek Cleaning Core**

**Teknek's Elastomer Rubber Polymers** are engineered to offer the highest contact cleaning performance in the market.

Teknek offers a range of application specific elastomer rollers and matched presheeted adhesive systems.

- ISO6123 Class A manufactured compliance
- Elastomer rollers
  - Panel (most aggressive compound)
  - UTF (ultra-thin)
  - Nanoclean 20 20 (silicone-free)





### **Teknek Adhesives**

**Teknek Adhesive Rolls** are pre-sheeted cleaning rolls matched to the application specific cleaning roller. These rolls are optimized to continuously clean the elastomer rollers and guaranteed to not transfer anything back to the surface of your product.

### Filmic Base - AREF

- · Consists of an acrylic, pressure sensitive adhesive, coated on an oxydegradable base
- Teknek's EcoFilm adhesive roll is a silicone free adhesive roll system designed for use with a range of contact cleaning rollers

### Paper Base - AREP

- · Consists of an acrylic, pressure sensitive adhesive, coated on a paper base
- The paper base has a silicone release coating which allows the product to be presented as a self-wound adhesive roll





### **Cleaners for Narrow Webs**

The narrow web cleaners have been designed to remove contamination from moving web of material.

- Full side access of Teknek's pre-sheeted adhesive rolls for purging
- Flexible mounting in both vertical and horizontal positions based on application
- · Low profile design
- Width range up to 30" web width





### **Cleaners for Wide Webs**

The **Teknek Web Cleaner (TWC)** is engineered for simple installation, continuous operation, ease of use and minimal maintenance. Proven contact cleaning for use with modern high value materials such as PET, polyimide, non-woven, copper, aluminum, BOPP and many others.

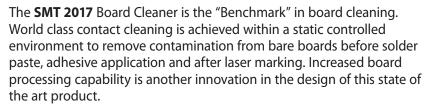
- · Low track, lightweight rollers
- Lightweight carbon fiber sleeve technology
- Standard installation points with brackets on product
- Machined aluminum and stainless steel construction for a small footprint
- Width range from 30" up to 86" web width
- Custom widths available above 87"



### **Sheet Cleaners**

The **ACM55** Sheet Cleaner utilizes Simco-Ion static bars to ensure the material being processed leaves the machine free of static charge. Teknek's integrated 'Class A ISO 6123' light weight cleaning core offers advanced material processing. ACM55's drive system eliminates the need for gears, motors, and chains, delivering a safe, clean, accurate alternative to traditional methods.

- Lightweight composite roller technology processes thick and very thin materials
- User-friendly tablet interface displays machine status and operator instructions/drawings



- Rail design and lightweight roller technology provide low applied pressure
- · Easy to use, multi lingual touchscreen
- · Specifically designed to meet International standard for ESD

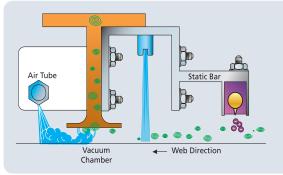




### **Neutro-Vac®**

Simco-lon's **Neutro-Vac** Cleaner combines the power of a compressed air blast, static elimination, brushes and a high exhaust head to agitate the web, remove the static bond and evacuate surface particulate down to 20 microns in size. The Neutro-Vac systems are ideal for installation over unsupported webs from 3" to 300" wide.

- No adjustments required to accommodate a change in web width
- · Single or double sided cleaning
- Contact, non-contact and hazardous location configurations
- · HEPA after-filter available



Neutro-Vac systems are utilized effectively in many applications where static neutralization alone does not provide the total solution:

- Food & medical packaging
- Printing
- Converting
- Extruding
- Laminating





Neutro-Vac Brush Contact Head with Static Bars & Air Tube (available without a brush as a non-contact version)

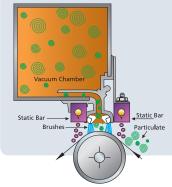
### Ion-O-VAC® Mark I

Simco-lon's **Mark I** uses a high pressure low volume vacuum collector to remove particulate down to 20 microns in size from webs and sheets. Typical models include brushes and static bars before and after the vacuum slot. An lon-O-Vac is normally mounted where material has more than 30 degrees of surface contact with a roller or cylinder. This maximizes the cleaning effect of the high pressure vacuum.

- · Single or double sided cleaning
- Contact and non-contact configurations
- · Brackets and ducting included
- Manual or optional pneumatic retraction systems to raise and lower the heads



Typical High Pressure Hood Design/Installations



### Ion-O-Vac Mark I

Sensitive applications–linear brushes extend vacuum slot to the web surface.

- Thin paper
- Plastic film
- · Light materials
- Irregular surfaces

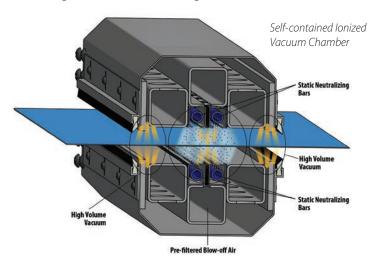
### V-Force 30<sup>™</sup>

Simco-lon's **V-Force 30** Narrow Web Vacuum System is a unique high performing industrial vacuum cleaning system for narrow web machines. The V-Force 30 combines the power of static neutralization with high vacuum, high volume and high velocity allowing for ultimate cleaning.

This powerhouse system includes a non-contact cleaning hood with active static neutralizing bars and a self-contained Air Control System with isolated particle collection in an-all-in-one cabinet.

It can be easily installed onto any area of open web on most major narrow web presses and other narrow web machinery making it ideal for many applications.

- Suitable for thin film applications
- Quiet operation (<70 dB)</li>
- Simple installation w/coaxial hose design
- Rugged stainless steel construction
- Low maintenance easy replaceable filters
- Non-regenerative blower design



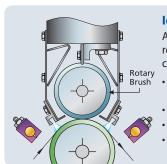


### Ion-O-VAC® Mark IV

Simco-lon's **Mark IV** Systems utilize the power of rotary brush action to scrub the material surface, cleaning down to 15 microns. The scrubbing action of the Mark IV rotary brush system is designed for the toughest of materials that demand the cleanest surfaces.

- · Double surface cleaning available for web presses
- Single or double sided cleaning arrangements
- · Canister collector with cartridge filter
- · Pre-filter and motor starter
- Ion-O-Vac head with rotary brush, drive and speed motor and controls, static eliminator and brackets
- Pneumatic lifts can be added for retraction during web threading





### Ion-O-Vac Mark IV

Aggressive applications–rotary brushes extend cleaning efficiency.

- Heavier embedded particle removal
- Textured surfaces
- · Thicker materials
- · Web based cleaning

### Conveyostat™

Simco-lon's **Conveyostat** Systems are designed to provide in-line ionization for neutralizing static charges on materials in pneumatic conveying systems to prevent them from becoming jammed.

The Conveyostat unit is typically mounted at the input to the cyclone or collection vessel so that trim materials are neutralized as they pass through the unit.

- Neutralizes conveying trim materials including metalized films
- Resistively coupled static bars enhance safety and prevent hard arcs
- · Dual-phase ion generation ensures high neutralization rates
- Units available for indoor and outdoor installations
- Straight, flanged and rolled edges available
- Power supply includes short circuit detection
- · Multiple diameters available

### **Specifications**

Input Voltage	230 VAC, 60 Hz, 0.25A; 120 VAC, 60 Hz, 0.5A
Cables	Cable kits available 25'-100'
Power Supply	Simco-lon's Dual Phase+ Power Supply
Enclosure	Stainless steel
Dimensions	10-48"L x 1.5-24" dia. (larger sizes available)
Connections	K&B Flanges, compression coupling, rolled edge and outdoor weatherproof models available
Certifications	<sub>20</sub> '/ <b>R</b> <sub>2</sub>





Indoor unit with mounting flanges



Indoor unit without flange/straight edge



Indoor unit with quick disconnect edge

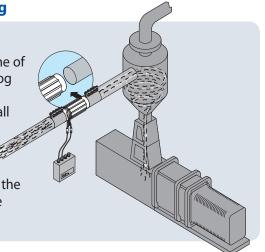


External remote available for Dual Phase+ power supplies mounted in convenient area.

### **Slitter Trim Collection in Converting**

**Problem**: Highly charged slitter trim materials cling to the sides of the cyclone of the trim collection system, forming a clog across the exit duct. The trim collection system must be shut down—affecting all operations producing slitter trim.

**Solution**: The Conveyostat system neutralizes trim materials prior to entering the cyclone. Once neutralized, the materials flow smoothly throughout the system, eliminating system shutdown.

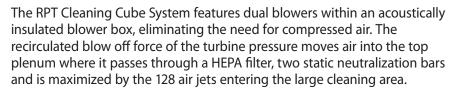


### **RPT Cleaning Cube**<sup>™</sup>

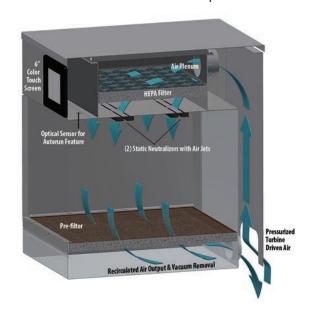
The **RPT** Cleaning Cube removes particle contamination from medical trays and critical parts. The portable, self-contained system combines the power of dual blowers, HEPA filtration and static ionization without the need for compressed air. Installation is simple and adaptable to different workplace setups.

- · No compressed air required
- Optical sensor for automatic operation
- · Large 4.1 cubic ft working area
- · Height adjustable configurations

Specifications	
Input Power	120 VAC, 15A
Decibel Rating	<70 at full operating speed
Turbines	Dual 2-stage, high vacuum, 500 air watts (total max)
Airflow	200 cfm
Filter Rating	HEPA filter 99% efficient at 0.3 μm
Display	6" color touchscreen
Enclosure	Brushed Stainless Steel
Dimensions	Cube: 25.5"W x 21"H x 23"D Stand: 25.5"W x 32-39"H x 23"D



- UV and white lighting to assist in thorough inspection process
- Flexible Air-wand for pinpoint cleaning applications
- User-friendly 6" color touchscreen controls
- Removable side panels if required for larger part cleaning
- Optical sensor for hands-free automatic operation





UV light option included



The height adjustable stand (32"-39") configuration eliminates the need for valuable bench space and adds portability. Alternatively, the cleaning cube can be placed on a bench.

### **How is Static Generated?**

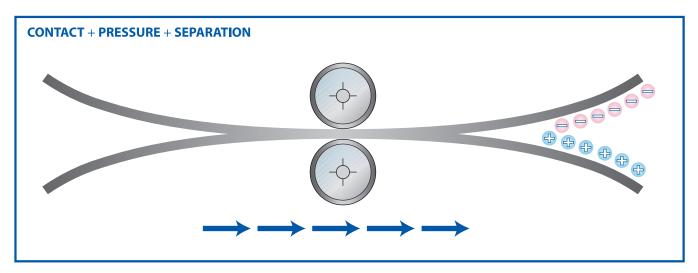
Static electricity is a surface phenomenon and results when two or more surfaces are in intimate contact with each other and then are separated. During contact, surface electrons, which are negative, migrate from one surface to the adjacent surface. When the surfaces separate, the surface that gains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

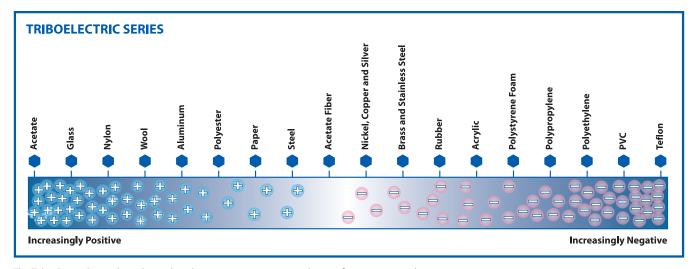
These processes include:

- · 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-lon's **FMX-004** measures both positive and negative polarity charges up to  $\pm 30$  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 $\pm 30$ kV; LOW 0 to $\pm 3$ kV; Ion Balance 0 to $\pm 300 V$
Distance	$1''\pm 1/64''$ (25 mm $\pm$ 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)



### **TensION**

Simco-lon'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

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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







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