

# Chargemaster®

STATIC CHARGING SYSTEMS

Industrial Static Control

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**SIMCO ION™**  
An ITW Company



Chargemaster systems utilize high frequency switching technology, which offers three major advantages. First, it ensures that the voltage output from the power supply is equal to the voltage requested via the controls. Second, fluctuations on the AC input line will not affect the voltage output. Finally, variances in load, up to the recommended maximum, do not affect the voltage output.

Additional circuitry controls the duty cycle of an arcing condition, ensuring that little energy is created during arcing to prevent injury and equipment damage.

## Chargemaster Power Supply Models



### VCM

Programmable for either voltage or current control mode. This static charging system is available with negative or positive output voltages, and also available with both positive and negative (dual mount).

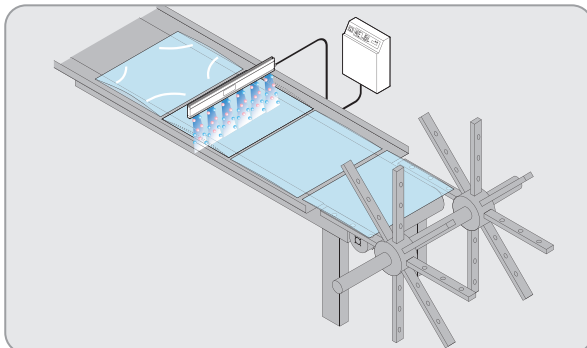
Specifications	
Input Voltage	85-260 VAC @ 47-63 Hz
Output Voltage	0-30 kV @ 5 mA & 0-60 kV @ 2.5 mA
Output Ports	4
Voltage Rise Time	Under 70 msec
Remote Output Adjust	Analog signals, 0-24/4-20 mADC or 0-5/0-10 VCD
Dimensions	30 kV, 10.5"W x 4.25"H x 13.5"D; 60 kV, 10.5"W x 4.25"H x 15"D
Weight	16.5 lbs



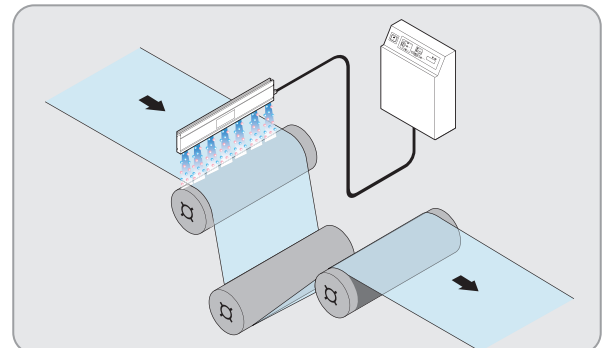
### CM 20

Provides either two positive or two negative outputs. This small footprint static charging system can supply up to 20 kV of power

Specifications	
Input Voltage	90-130 VAC @ 50-60 Hz or 180-260 VAC @ 50/60 Hz
Output Voltage	0-20 kV @ 0-0.7 mA
Output Ports	4
Voltage Rise Time	Under 60 msec
Remote Output Adjust	Analog signals, 0-10 VAC, D/sub connector
Dimensions	6"W x 4.25"H x 11.25"D
Weight	11.5 lbs



**Plastic Bagmaking:** When manufacturing bags, use an electrostatic charging system to prevent the bags from lifting and to help the bags continue along the conveyor line.



**Chill Tack Systems:** In heatset offset printing, an electrostatic charging system pins the web to the chill roll to prevent slipping and eliminate streaking.

# Chargemaster Power Supply and Bars

Each Chargemaster system consists of a DC power supply and one or more of the following charging bars.



## MCM 30

- Ultra-compact and lightweight
- Input powered 24 VDC
- Maximum output 30 kV @ 1 mA



## Pinner Arc Resistant Bar

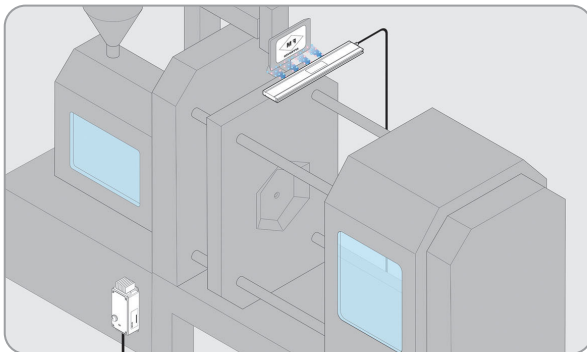
- Current limited for operator safety
- Replaceable pins for continuous performance
- Available with non-replaceable pins

## Pinner Super Bar

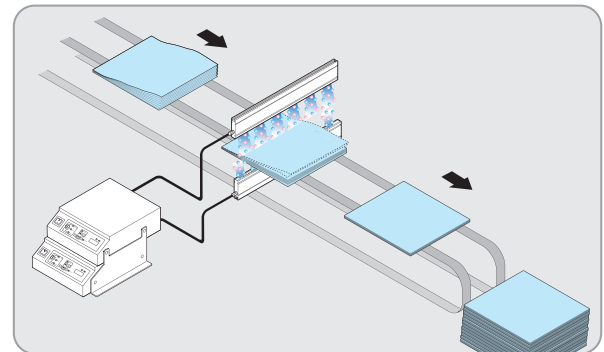
- Maximum voltage and current output
- Replaceable pins for continuous performance
- Removable high voltage cable for cleaning

Specifications	
<b>Input Voltage</b>	24 VDC, 3A, 75W max
<b>Output Voltage</b>	3-30 kVDC
<b>Output Current</b>	0.1-1 mA (single output)
<b>Dimensions</b>	7.75" L x 3.00" W x 2.62" D (197 mm L x 76 mm W x 67 mm D)
<b>Weight</b>	1.7 lbs (0.77 kg)

Specifications	
<b>Operating Voltage</b>	Pinner Bar & Super Bar: Rated $\pm 30$ kV, can be used to $\pm 60$ kV with special provisions
<b>Ionizing Pins</b>	Pinner Bar: Stainless Steel Pinner-T Bar: Tungsten Super Bar: Stainless Steel, removable/replaceable
<b>Connector</b>	Pinner Bar & Super Bar: 30 kV spring loaded standard with optional 60 kV
<b>Effective Length</b>	Pinner Bar: 5-147" in 3" increments Super Bar: 10.5"
<b>Dimensions</b>	Pinner Bar: 3.25" H x .75" W Super Bar: 14.25" L x 6.5" W
<b>Weight</b>	Pinner Bar: 2 lbs 2 oz per foot Super Bar: 5 lbs 5 oz



**In Mold Labeling:** An electrostatic charging system is used to hold a label flush against the inside of the mold during injection molding to improve finished product quality.

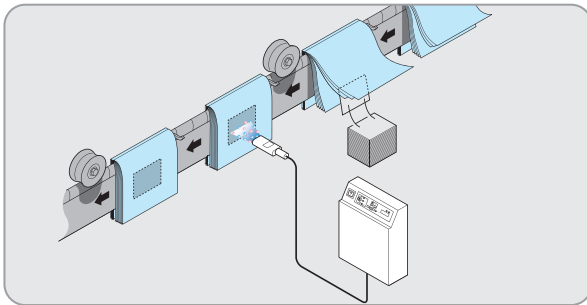
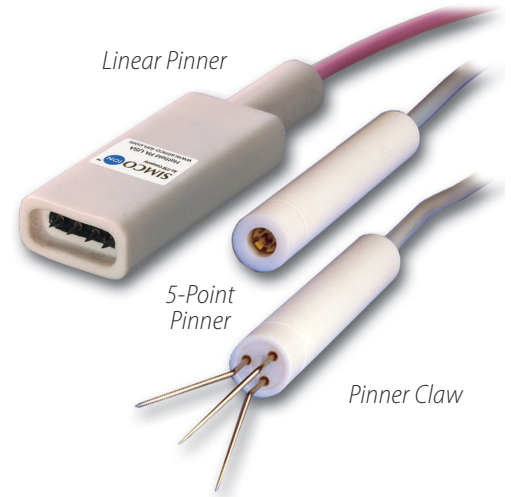


**Catalogue Stacking:** Using a static charging system to charge catalogs before stacking adheres the catalogs together while reducing edge damage, improving transportation and increasing production.

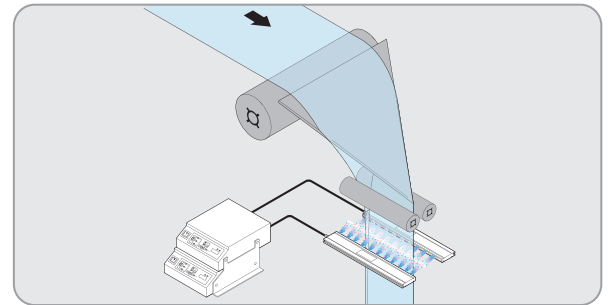
# Charging Applicators

- Current limited design for operator and equipment protection
- Arc condition sensing and intervention for uninterrupted pinning
- Minimized EMI and RFI generation

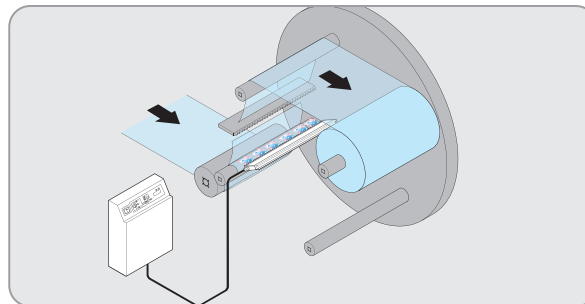
Specifications	
<b>Operating Voltage</b>	30 kV max
<b>Operating Distance</b>	0.5" min
<b>Ionizing Pins</b>	Linear: 4 fixed; 5-Point: 5 fixed; Claw: 3 removeable
<b>Dimensions</b>	Linear: 4.75" x .75" dia; 5-Point: 7" x .75" dia; Claw: 8.5" x .75" dia
<b>Weight</b>	0.65 lbs



**Card Inserts—Saddle Stitch:** On a saddle stitcher, place a charging applicator over the signature just as the catalogs close to trap the card in place and prevent fall outs.



**Ribbon Tacking:** A charging system used for ribbon tacking bonds the ribbons together so that they move easily, preventing creases and 'dog ears' in the finished product.



**Roll to Roll Transfer:** Applying a temporary charge to a roll with a charging system adheres the leading edge to the core without tape or adhesives while eliminating creases.



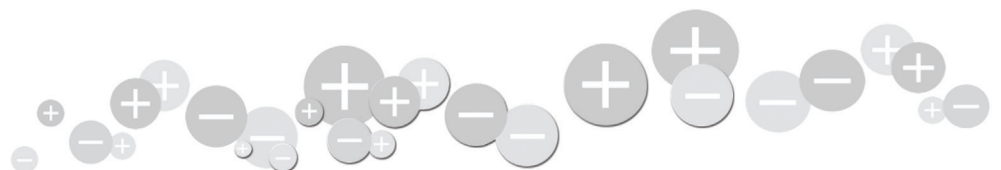
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