



The advantage of static electricity

SIMCO offers a variety of charging bars and electrodes, depending on the specific applications and conditions. These bars are connected to a DC high-voltage generator. A strong, ion-saturated electrical field around the single-polarity high-voltage points forces the material to a reference earth. The material is charged by the ions. Being attracted by different polarities, the surfaces temporarily cling together.

There are various methods of temporarily charging materials electrostatically, using a SIMCO Chargemaster system. The most common methods are described on the next page. SIMCO staff shall gladly advise you.

Charging bars



Pinner series

SIMCO offers various electrodes, including the Five-Point and the Pinner Blade, specifically for spot-charging small surfaces. These electrodes are also ideal for edge charging in cast-film extrusion processes. The material applied permits high-temperature use. The electrodes are resistor-protected to avoid spark-over. The points are replaceable.



HDC - HDR

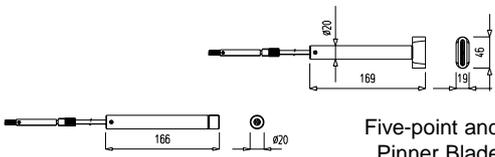
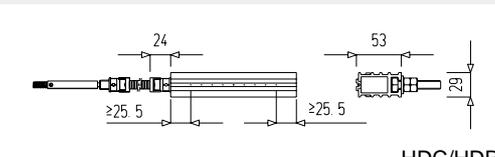
These rugged charging bars are used in a variety of industrial applications. The bars can be fitted anywhere thanks to the slot at the rear. HDC charging bars are provided with a resistor to avoid failures in the machine control system in the event of accidental spark-over. The cable output may be straight or right-angled (90°). The HDR charging bar suits high-velocity applications. Each individual point being fitted with a resistor, there is no spark-over, not even when the bars are installed quite close to earthed parts.



Pinner Arc-Resistant charging bar

These charging bars are fibre-reinforced to make them suited for maximum ambient temperatures of 90°C. They are current-limited by resistors fitted at each individual point. Any spark-over which may cause malfunctioning is thereby avoided. What makes these bars unique is that the high-voltage points are replaceable. The cable may be fitted with an optional plug connection to facilitate installation.

Technical specifications

	Five-Point/ Blade	HDC/ HDR	Arc Resistant
			
Mechanical Range	Five point: approx. 2.5 to 5 cm round Blade : approx. 1.25 x 6 cm to 2.5 x 12 cm elliptical	approx. 40 mm	approx. 40 mm
Cable	3 m of silicone cable	3 m of high-voltage cable	3 m of silicone cable
Material	PFTE Teflon	PVC Teflon	
Weight	300 g	max.1300/ 1800 g/m	3100 g/m
Temperature	200 °C	max.55 °C	max.90 °C max.
			
Electrical High voltage	30 kV DC max. 50 kV DC max. (special provisions)	30 kV DC max. 50 kV DC max. (special provisions)	30 kV DC max. 50 kV DC max. (special provisions)
High-voltage generator	CH-20, CH-30, CH-50, BP-30 and BP-50	CH-30, CH-50, BP-30 and BP-50	CH-30, CH-50, BP-30 and BP-50
