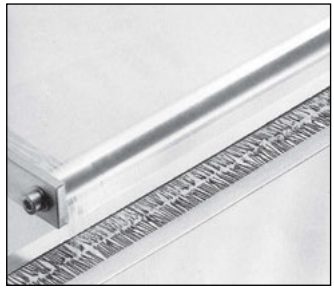
Safe manufacture of plastic films and fabric

Conveyor junctions in plastic film

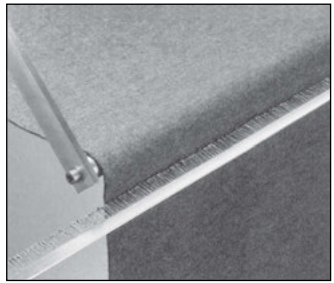
- Antistatic brushes are used on film manufacturing machines at conveyor junctions to eliminate static. They are used on both entry and exit points thus reducing the build-up or transfer of the static charge.



The electrostatic charge is eliminated at the same place it is generated

Automated stacking of cloth

- When cloth or other similar material is being stacked, the build-up of static can cause the cloth to stick and thus disrupt the formation of a tidy stack.
- Antistatic brushes eliminate the electrostatic charge on the stacking arm to ensure a perfectly formed stack



A brush mounted directly on the stacking arm means accurate sheet positioning and tidy stacking

Avoiding the generation of high voltages and uncontrolled discharges

Antistatic brushes: effective protection against electrostatic charges.

Two surfaces rubbing together or being separated quickly can generate an electrostatic charge. It is an annoying secondary phenomenon that can be very dangerous with extremely high voltages being generated. Most often, parts being moved are seen to stick together. Incidents such as this can cause costly disruption to the manufacturing process with accidental discharges causing damage to electronic components, or even the risk of sparks being generated and causing explosions

Antistatic brushes offer a reliable means of protection as they can either prevent a static charge being generated or, if one does exist, by providing a predetermined discharge path.
Antistatic brushes comprise an aluminium spine to which carbon fibres or thin steel bristles are fixed.

How they work

The static charge is collected by the bristles and transmitted to the aluminium spine which is connected by a low impedance cable (Ø 2.5mm² min.) to the electrical control panel or distribution system.
The normal electrical earthing of the machine is not sufficient.

Assembly

Brushes should be fitted directly after the area where static will be generated, both above and below the band if plastic films or similar products are being handled. If the level of static is high, two or more brushed with different spacings might be required at each point. The fibres should only just touch the surface to be discharged, typically a gap or 1 to 2mm has been shown to be the most effective