

## STATIC DISSIPATORS

SOLUTION TO PASSIVELY REDUCE STATIC BUILD UP

### ABOUT US

Static electricity can be generated wherever two dissimilar materials come in contact. To complicate matters, the potential for static increases as transport speed increases. The impact of static on machine reliability and performance can be severe. In some cases, the electrical charge reaches such high levels that discharges can be painful for machine operators.

SEM Specialty Products' (SEM SP) static dissipators are a reliable, cost effective solution that passively (without power consumption) reduces static electricity levels. As paper, film or other materials pass through critical points of the machine's path, each piece is lightly brushed by the conductant. The brush draws the charge from the object, dissipating it through the machine frame to ground.

SEM SP helped pioneer massive static dissipation nearly 25 years ago. Today, SEM SP components are used as original equipment in a variety of products, including laser printers, copiers, automatic teller machines, impact printers and faxes. They're available in a variety of brush profiles, including small sizes that are easy to install in hard-to-access locations.

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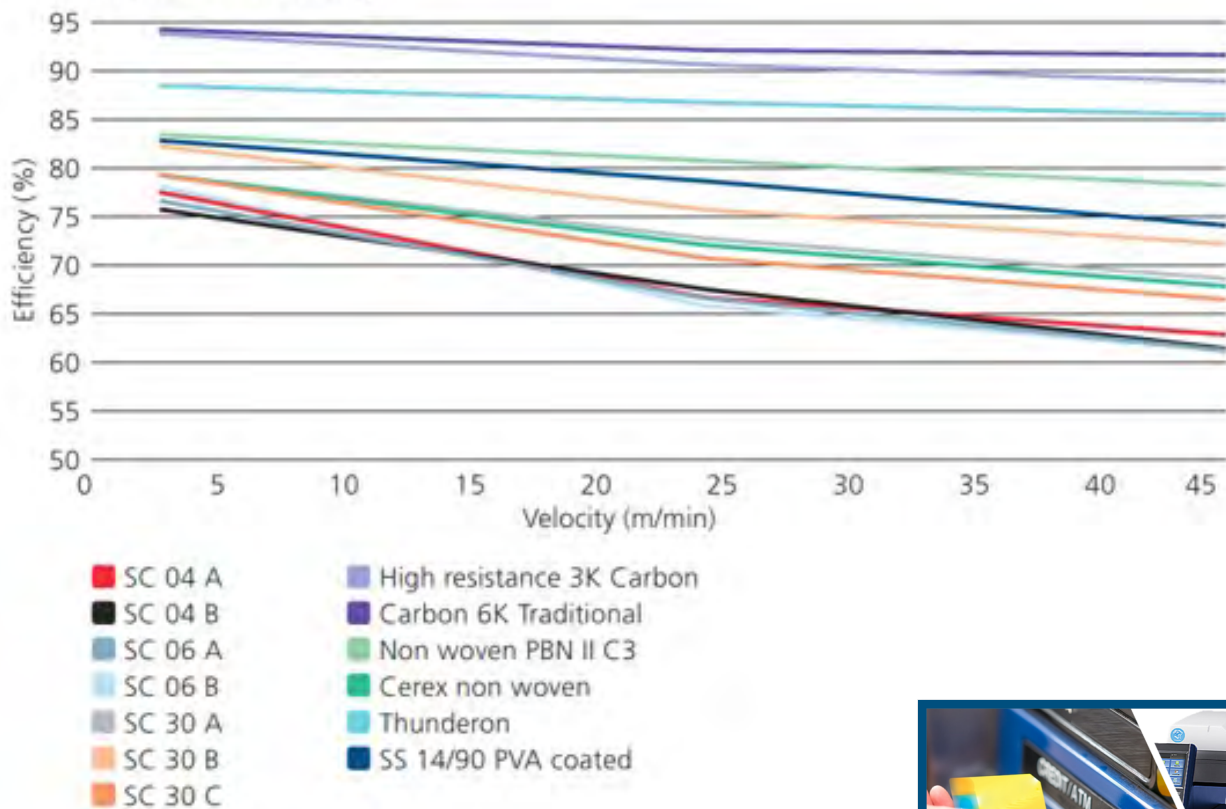
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### Dissipation Efficiency



## APPLICATIONS

**Copiers, Printers, and Fax Machines:** Static Dissipators reduce the static electricity that builds up on the paper, preventing paper jams, improving the reliability and productivity of the equipment.

**Automatic Document Feeders:** These machines include rubber belts that tend to charge quickly, leading to poor handling. Static dissipators enable smooth transportation of the paper.

**Packaging Machines:** SEM SP's static dissipators facilitate shrink-film handling.

## TECHNICAL DETAILS

Passive static dissipators have traditionally been manufactured using conductive carbon filaments or stainless-steel yarns (typically 10 to 14  $\mu\text{m}$  in diameter). A number of special conductive man-made yarns now offer cost-effective alternatives. Newer approaches use electrically conductive plastic films or non-woven materials. Most anti-static devices feature an aluminum or stainless-steel frame to enable simple mechanical assembly techniques. Grounding harness, studs and terminals can be pre-mounted. Self-adhesive versions using electrically conductive, pressure-sensitive adhesives can be used when appropriate.