

Oil Supply Belts – Electrostatic Printing

Oil Supply and Cleaning belts deliver precise amounts of silicone oil to the fuser for toner release and clean any remaining toner / paper dust from the fuser.

Typical construction incorporates a supply and take-up side tube with nonwoven textiles which are impregnated with silicone oil.

Nonwovens are textiles that are produced by mechanically, chemically, or thermally interlocking layers of fibres, filaments, or yarns. Needlefelts are nonwovens produced by mechanically interlocking fibres in a process called needle punching on a needle loom machine.

Depending upon your specific requirements BMP will design a belt utilizing various fibre types, textile types, construction designs, and oil viscosities.

Typical product design considerations:

| | |
|------------------------------|-----------------------------|
| Operating Temperature: | 68 to 500 °F (20 to 260 °C) |
| Desired Oil Delivery: | 0.05 to 25 mg/page |
| Oil Characteristics: | 50 to 100,000 CS Viscosity |
| Desired Product Life: | 10,000 to 2,500,000 prints |
| Toner Cleaning Requirements: | Light to Heavy |

Typical product construction:

| | |
|---------------------|--------------------------------|
| Fuser Interface: | Needlefelt or PTFE Coated Felt |
| Felt Chemistry: | PTFE, Nomex, Imide, or PPS |
| Mechanical Support: | Aluminum or Phenolic Tubes |
| Lubricating Fluid: | Silicone Oil |



Fluid Delivery



Filtration



Media Transport



Heat Resistance



Abrasion



Sealing



Absorption



Cleaning