

Oil Supply Rollers – Electrostatic Printing

Oil Supply and Cleaning Rollers 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 porous tube wrapped with nonwoven textiles which are impregnated with silicone oil.

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

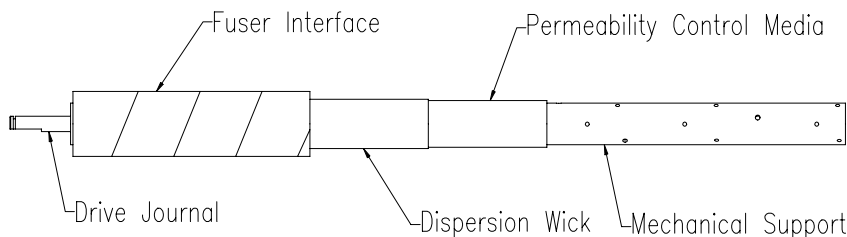
Depending upon your specific requirements BMP will design a roller utilizing various fiber types, textile types, construction designs, and oil viscosities.

Typical product design considerations:

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|------------------------------|-----------------------------|
| Operating Temperature: | 68 to 500 °F (20 to 260 °C) |
| Desired Oil Delivery: | 0.05 to 50 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, PTFE Coated Felt, or Pile Fabric |
| Textile Chemistry: | Nomex, PTFE, Imide, or PPS |
| Dispersion Wick: | Low Density Thermal Bonded Nonwovens |
| Permeability Control Media: | High Density Nonwovens |
| Mechanical Support / Reservoir: | Perforated Aluminum Core |
| Lubricating Fluid: | Silicone Oil |



Fluid Delivery



Filtration



Media Transport



Heat Resistance



Abrasion



Sealing



Absorption



Cleaning