

Oil Reservoir Rollers – Electrostatic Printing

Oil Reservoir Rollers hold and deliver precise amounts of silicone oil to the fuser for toner release and clean any remaining toner / paper dust from the fuser.

The reservoir is a wound nonwoven textile. Nonwoven textiles are fabrics that are produced by mechanically, chemically, or thermally interlocking layers of fibers, filaments, or yarns. The nonwoven reservoir may be hydroentangled, spunbond, or thermal bonded.

Depending upon your specific requirements BMP will design a roller utilizing various fiber chemistries, fiber sizes, and oil viscosities.

Typical product design considerations:

Operating Temperatures:	100 to 500 °F (38 to 260 °C)
Desired Oil Delivery:	0.05 to 25 mg/page
Oil Characteristics:	10 to 100,000 cs Viscosity
Desired Product Life:	5,000 to 500,000 Prints
Toner Cleaning Requirements:	Light to Heavy
Available Machine Space:	10 to 100+ mm Outer Diameter
Fuser Materials:	Silicone Rubber to PTFE
Machine Speed:	5 to 150 cpm

Typical product characteristics:

Void Volume:	20 to 95 %
Density:	0.05 to 1.00 g/cm ³
Fiber Chemistry:	Nomex®, Polyester, Nylon, Polyimide, PPS, & Rayon

BMP is the only fuser oil reservoir roller supplier vertically integrated into the production of thermal bonded nonwoven textiles in the Western World.



Fluid Delivery



Filtration



Media Transport



Heat Resistance



Abrasion



Sealing



Absorption



Cleaning