

Oil Supply and Cleaning Webs – Electrostatic Printing

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

The web is a nonwoven textile, most typically of a thermal bonded construction.

Nonwoven textiles are fabrics that are produced by mechanically, chemically, or thermally interlocking layers of fibres, filaments, or yarns.

Thermal bonding is a technique for bonding fibres of a web using a conductive or convective heating method. For special cases the nonwoven may be hydroentangled, spunbond, or membrane composite.

Depending upon your specific requirements BMP will design a web utilizing various fibre chemistries, fibre 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:	100 to 60,000 cs Viscosity
Desired Product Life:	5000 to 3,000,000 Prints
Toner Cleaning Requirements:	Light to Heavy
Available Machine Space:	10 to 100+ mm Outer Diameter
Fuser Materials:	Silicone Rubber to PTFE
Machine Speed:	10 to 150 cpm

Typical product characteristics:

Thickness:	0.0005" to 0.0100"
Density:	0.20 to 0.60 g/cm ³
Tensile Strength:	> 500 N/M
Fibre Chemistry:	Nomex®, Polyester, Polyimide, PPS, & Rayon

BMP is the only fuser cleaning web 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