

PTFE Coatings



Fort Wayne Metals provides PTFE¹ based coatings and coating compositions on wires for a variety of medical applications. LubriSkin™ and DuraSkin™² PTFE dispersion coatings are applied to medical wires to increase lubricity and chemical

resistance. The proprietary spool-to-spool process employed delivers a lower coefficient of friction than spray coating techniques. LubriSkin is the preferred coating for coiling wire applications and mandrels. DuraSkin is recommended for coating SLT[®] wire, Fort Wayne Metals' straight linear one-to-one torque wire, which is used for PTCA guidewires and stylets.

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	DuraSkin	LubriSkin
Coating thickness	Standard: 4 - 10 µm (0.00016 - 0.00039")	Standard: 4 - 10 µm (0.00016 - 0.00039")
Colors	Green, Gray, Blue, Black, White, Clear	Green, other colors on request
Primary Uses	Corewires, (PTCA) Extrusion Mandrel Wire	Coiling Wire, Bonding Mandrels, Release Mandrels
Supplied	Straightened & Cut Lengths, Spooled	Straightened & Cut Lengths, Spooled
Gamma Stable	Yes	No
ETO sterilization	Yes	Yes
Biocompatibility	For invasive techniques, but not for permanent human implants	For invasive techniques, but not for permanent human implants
Heat Stability	Up to 195° C (390° F).	Up to 205° C (400° F).
Chemical Resistance	Sensitive to some solvents like NMP, acetone, MEK etc.	Good - excellent
Relative friction (uncoated SS = 1)	0.45	0.40
Dielectric Strength	Not intended for electrical insulation	Not intended for electrical insulation

¹PTFE, Polytetrafluoroethylene is a synthetic fluoropolymer

²LubriSkin and DuraSkin are trademarks of Merit Medical® - OEM.

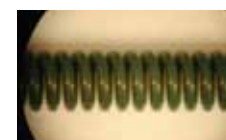
LubriSkin

This proprietary coating process produces a smooth, uniform coated wire for the production of guidewires. This process is unique in that the wire is coated before it is coiled. The resulting precoated guidewire has a consistent LubriSkin coating, unlike conventional spray coated guidewires that often encounter cracking and flaking of the coating.

LubriSkin coating is available in a variety of colors and on round or flat wire.



Competition spray coated coil



LubriSkin precoated coil

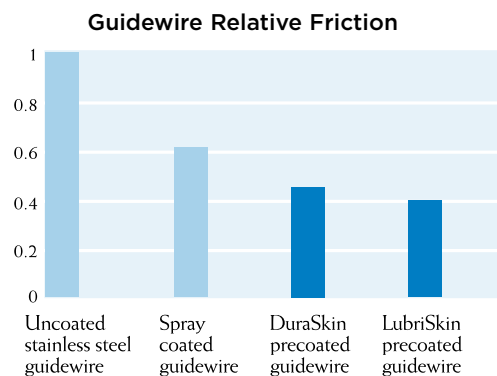
DuraSkin

Our proprietary spool-to-spool process provides extremely uniform coating for medical device components. With excellent control over the coating thickness, we are able to guarantee tight tolerances.

Typical products include dead-straight stylets for PTCA guidewires, guidewire cores and catheter stylets using our SLT wire. This wire provides excellent one-to-one torque properties.

These PTFE based coatings can be applied to our stainless steel range of alloys, our super alloys and to our Nitinol wires without compromising their elastic properties.

Please note our proprietary coating process increases the tensile strength of non-aged 304V by approximately 20ksi (140 MPa).



The graph above shows relative physical resistance of coated wire passing through human tissue according to coating type.