



APPLIED
PLASTICS

PTFE Natural[®]

The design engineer's
secret weapon

Serving OEMs, Startups and Contract Manufacturers

Our flagship product and proprietary coating process, PTFE Natural[®], is applied to a variety of metals – including stainless steel, nitinol and silver-plated copper, and used in numerous applications like mandrels, pull wires, core wires, hypotubes, stylets and guidewires. We are committed to providing our customers with market-leading coated mandrels, wire, and lubricious products that enable the manufacturing of innovative life-saving devices.

OUR PROPRIETARY PROCESS DELIVERS BEST IN CLASS

- Lubricity, Durability and Reusability
- Consistent & Repeatable Tolerances
- High Volume Manufacturing



Coated Mandrels & Fine Wire

Our proprietary technology lets us coat fine wire with a thin, smooth coating of PTFE Natural[®] Fluoropolymer to achieve optimum release or slip properties. We meet catheter engineers lubricity and performance characteristics which help to enable development and the manufacturing processes for highly engineered catheter systems.

Applications range from tipping and welding mandrels, reflow mandrels, core wires, and pull wires to lubricious coatings for stylets and guidewires for access, delivery and closure devices.



Coated Hypotubes

Our coating specialists can apply coatings to all variations of stainless steel and nitinol hypotubes including spiral, skived, flared, crimped, ground, and slotted types. We will even source the hypodermic tubing and manage your supply chain.

Our industry-leading, proprietary PTFE Natural[®] coating process applies a highly consistent coating onto stainless steel and nitinol materials that provide optimum lubricity without flaking, cracking, or altering the tubing's physical properties. Featuring the high slip resistance required for medical device manufacturing, these hypotubes are chemically inert and operate up to 550°F.

COATINGS WE CAN APPLY:

- PTFE NATURAL[®]
- PTFE GREEN
- PTFE BLACK
- PTFE BLUE
- TEFLON[®] PTFE
- TEFLON[®] FEP
- TEFLON[®] PFA
- OTHER

MATERIALS WE COAT

- VARIOUS STAINLESS STEELS
302, 304, 316, SLT, M2
- NITINOL
- SILVER PLATED COPPER
- VARIOUS TENSILE
STRENGTHS

Expertise

Founded in 1953, Applied Plastics is the leading supplier of PTFE coated products for use in the design and manufacturing of advanced catheter systems. One of the pioneers in the development of electrostatically applied powder coatings, Applied Plastics have been working with medical OEMs for over 30 years.

Over the years, we have perfected the science and art of producing PTFE Natural® Fluoropolymer coated forming mandrels and fine wire. Our custom, state-of-the-art equipment was developed to meet our customers demand for high-quality coated components held to tight tolerances.



Medical markets supported by our products and coatings:

- Interventional
- Minimally Invasive Surgery
- Robotics

Partnership

At Applied Plastics, we are the design engineer's secret weapon. As increasingly complex interventional procedures demand more and more advanced devices, medical device companies and product designers need a supplier who can hold ever-tighter tolerances by offering the most advanced, lubricious coatings.

We partner with design engineers to understand their device's end-use application in order to manufacture PTFE coated components that meet OD, tolerance and performance requirements - factors that can influence the performance of life-saving devices.

Speed

We understand the medical device market's need for speed and robust coatings while designing and developing products and processes. Applied Plastics holds an extensive inventory of various diameter PTFE coated wire and is prepared to meet your coated OD requirements quickly.

IN-STOCK PRODUCT. FAST SHIPPING.

[SHOP ONLINE](#)

appliedplastics.com

Part No.	Alloy	Coating	OD	OD Tolerance	Length	Length Tolerance	
205948	304 SS	PTFE Natural	0.0070"	+/- 0.0003"	73.00"		ORDER NOW
200627	304 SS	PTFE Natural	0.0080"	+/- 0.0003"	73.00"		ORDER NOW
205364	304 SS	PTFE Natural	0.0090"	+/- 0.0003"	73.00"		ORDER NOW
206533	304 SS	PTFE Natural	0.0100"	+/- 0.0003"	73.00"		ORDER NOW
204497	304 SS	PTFE Natural	0.0110"	+/- 0.0003"	73.00"		ORDER NOW
204906	304 SS	PTFE Natural	0.0120"	+/- 0.0003"	73.00"		ORDER NOW
204597	304 SS	PTFE Natural	0.0130"	+/- 0.0003"	73.00"		ORDER NOW
204345	304 SS	PTFE Natural	0.0140"	+/- 0.0003"	73.00"		ORDER NOW

The PTFE Natural® Difference

PTFE Natural® is a unique process that creates a superior, lubricious and robust coating in the medical device market.

With our unique ability to hold tight OD tolerances, our coated mandrels are used as critical catheter manufacturing aids ranging from tipping and welding mandrels, reflow mandrels, core wires, and pull wires to lubricious coatings for stylets and guidewires for highly engineered catheter systems.

PTFE Natural® is the engineers' lubricious coating of choice when designing, developing and manufacturing advanced access, delivery and closure devices and systems.

Demand a best-in-class experience from your coating solutions partner.



LUBRICITY

Most lubricious, smooth and slippery surface compared to competitors.



RELEASE

Best release properties in the industry.



HIGHEST TOLERANCE

Can achieve the highest tolerances in the industry.



DURABILITY

Longest lasting coatings coupled with ability to withstand high temperatures.



PROPRIETARY PROCESS

Unique PTFE Natural® formulation contains a very high percentage of PTFE.



CUSTOMIZATION

Ability to provide highly customizable solutions to fit the customer's exact needs.



CAPACITY

Ability to process and fulfill large orders quickly.

"PTFE Natural® is a process that will give you the most lubricious, the most durable finish you can get in the industry."

DAVE RING, EXECUTIVE CHAIRMAN



All PTFE coatings are not the same.

Reference guide for comparing PTFE Natural®.

COATING NAME	PTFE NATURAL®
Standard Tolerances We Can Hold	.005" - .039" (+/- .0003") .040" and higher (+/- .0005")
Wire Types & Materials	Various Stainless Steels Nitinol Wire Silver Plated Copper Wire For all other requests, Contact Us
Colors	PTFE Natural® Select colors available upon request
Primary Uses	CATHETER MANUFACTURING AID <ul style="list-style-type: none">• Fine wires• Forming mandrels• Reflow mandrels• Tipping & welding mandrels• Extrusion mandrels PRODUCTS AND COMPONENTS <ul style="list-style-type: none">• Hypotubes• Core wires• Pull wires• Guidewires• Stylets
Supplied	Straightened & Discrete Cut Lengths
Biocompatibility	Customer responsible for biocompatibility of entire finished good
Coefficient of Friction	Exceptional
Heat Stability	Up to 550°F (288°C)
Chemical Resistance	Mild
Abrasion Resistant	Yes

PTFE Natural® and other PTFE coated components are not authorized for use in permanent implants.



APPLIED
P L A S T I C S

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