



Food and Pharmaceutical Processing



- ✓ Non-stick
- ✓ FDA/USDA compliant
- ✓ Temperatures up to 500°F
- ✓ Full vacuum rating

SermaShield™ Magna coatings deliver unmatched non-stick protection in extreme temperatures
Outperform conventional non-stick coatings



SermaShield Magna non-stick, abrasio

Gentle release, tough wear resistance

SermaShield Magna coatings are especially suited to the unique needs of the food and pharmaceutical processing industry. The proprietary coating system delivers unmatched wear resistance in processing equipment.

- Cost-effective solution for applications that require non-stick protection
- Fusion-bonded non-stick surface
- Proprietary intermediate layer
- Superior wear resistance, even in extreme temperatures

OUTPERFORM, OUTWEAR, OUTLAST

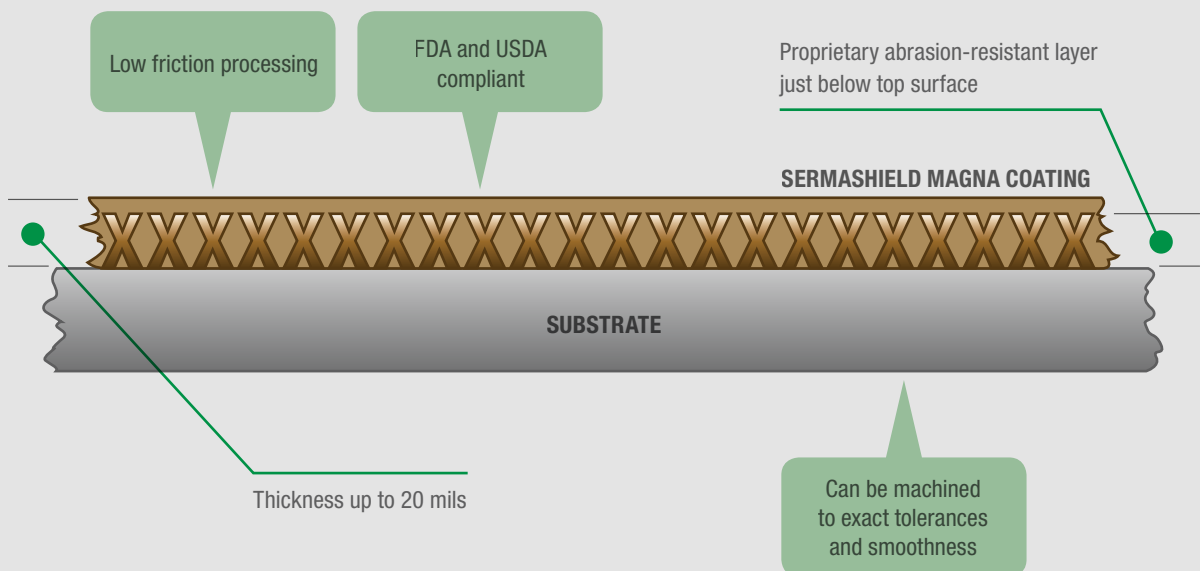
SermaShield Magna coatings outperform, outwear and outlast conventional non-stick coatings.



Choose SermaShield Magna coatings for applications that require non-stick protection that can perform at high temperatures.

SermaShield Magna coatings are an exclusive, proprietary system

The secret behind the SermaShield Magna coating system is the proprietary intermediate layer, which provides unparalleled protection against wear.



n-resistant coatings you can count on

Get more from SermaShield Magna coatings

Easy release

The fusion-bonded non-stick surface ensures that almost all substances release easily.

Extreme temperatures

May be used for applications where temperatures reach up to 500°F without loss of physical properties.

Reduced friction

Depending on the load, sliding speed and particular finish used, the coefficient of friction ranges from 0.05–0.20.

Simplified cleanup

The special oil- and water-resistant surface is not easily wet, allowing for self-cleaning or making cleanup easier and more efficient.

Nonconductive

High dielectric strength, low dissipation factor and very high surface resistivity over a wide range of frequencies.

Chemical resistance

Normally unaffected by chemical environments (with the exception of alkali metals and highly reactive fluorinating agents).

Physical properties of SermaShield Magna coatings

Property	ASTM	Units	SermaShield
Combustibility	-	-	Non-combustible
Density	-	°F	-310 to +500
Linear coefficient of thermal expansion	D-696	X10-5°F	5.4
Operating temperature	-	°F	-310 to +500
Surface resistivity	D-257	Ohm/in. ²	10 ¹⁷
Tear elongation	D-638	%	300
Tear strength	D-1922	g/mil	40-70
Tensile strength	D-882	lbs./in. ²	4,000-7,000
Thermal conductivity at 23°C	BTU/hr./sq. ft. °F/in.	BTU/hr./sq. ft. °F/in.	1.5
Vacuum	-	Full vacuum capability	-
Water absorption	D-570	%	<0.03

Applications

- Augers
- Blenders
- Centrifuges
- Chutes
- Coating pans
- Conveyors
- Cookers
- Cutters
- Dryer trays
- Enrobers
- Feeders
- Freeze dryers
- Hoppers
- Kettles
- Mixers
- Molds
- Rollers
- Rounders
- Tanks
- Trays
- Troughs

Praxair Surface Technologies

Industry-leading services for chemical processing

➤ *Signature solutions*

Praxair Surface Technologies can create custom answers to your unique coating problems, adapting our application techniques to match your operating environment—so you can be assured you've got protection that fits.

➤ *Experience and expertise*

For more than half a century, we've been innovating and growing the way we coat high-performance parts. Our innovative research teams developed many of the materials and processes in use today throughout the industry.

➤ *Praxair's exclusive Coat2Go™ turnkey services*

When you're ready to add additional processing equipment to your operation, let us do the work for you. Our exclusive Coat2Go turnkey services will:

- Purchase all parts and accessories
- Coat each part for maximum protection in your operating environment
- Inspect, test, deliver and assemble the new parts

To learn more about SermaShield Magna coatings or our Coat2Go turnkey services, contact one of our custom coating engineers:

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