

# **Food Processing**

**Durable FDA Compliant Coatings for Quality Food Processing** 





# Kneading, Conveying, Baking, Filling, Packaging...

Nothing is more frustrating than cleaning baked-on food or sticky food products from a stainless steel surface. Precision weighing and packaging equipment are no longer precise and packages are underfilled/overfilled until someone stops and cleans the equipment. Downtime and package overfill is money wasted. With Impreglon's new generation of nonstick coatings, uptime and accurate filling puts money back into the company's pocket.

Every process problem has its unique twist that makes it different from other process problems. It may be differences in the recipe, processing equipment, process conditions or some combination of the above. Standard coatings often fall short of solving these problems. The answer is a consultative approach: creating a tailored solution by testing and experience. Whatever the need: nonstick, sliding, traction, temperature resistance, corrosion protection or FDA compliant, Impreglon has a proven solution.

### **Dough Cutting Roll**

- Cutting pizza dough
- Good nonstick and wear resistance
- FDA compliant

#### Rice Cooker

- Camping equipment
- Nonstick, easy clean and wear resistance
- FDA compliant

#### **Spiral Stirrer**

- Guides for sticky films
- Excellent wear resistance combined with nonstick and sliding
- Easy clean and improved process speeds
- FDA compliant

#### **Industrial Bake Ware**

- Industrial bakery machines
- Inexpensive system for release and wear resistance
- FDA compliant

#### Chute

- Transfer of sticky food materials
- Good nonstick, sliding and high wear resistance
- FDA compliant

# **Kneading Tools**

- Noodle production
- Smooth surface with high nonstick and wear resistance
- FDA compliant

# Weighing Unit

- Automatic weighing of abrasive food products with sticky contents
- Good nonstick and exceptional wear resistance
- FDA compliant

## **Forming Tool**

- Mozzarella cheese production
- Nonstick, easy clean and wear resistance
- FDA compliant



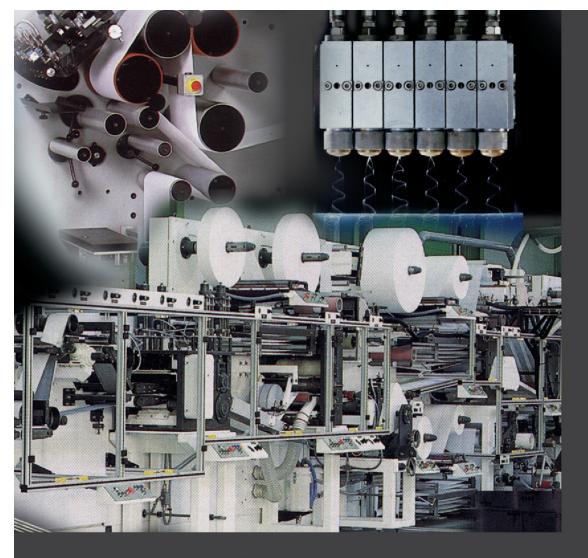




# Nonwoven

High Performance Coatings for High Speed Production Processes





# Durable Coatings with Exceptional Nonstick, Wear Resistance and Sliding Properties

At 1,000 m/min., even lightweight poly and nonwoven substrates aggressively attack contacted surfaces. Aluminum surfaces and non-stick coatings do not last in most nonwoven applications. Super Absorbent Powder abrasion, hot melt sticking and grabbing of substrate, guides and turning bars with high friction, glue build-up on vacuum drums or Lycra cutting into the guides are just some of the factors creating maintenance and downtime. Each part or component has a unique function in nonwoven applications. Impreglon has designed its coatings to pay for themselves in up-time and improved processing. With custom-tailored coatings containing unique reinforcements, Impreglon offers a family of solutions with superior non-stick and unrivalled wear resistance – the answer to our customers' demand for increased quality and productivity!

#### **Forming Roll**

- Forming of nonwoven materials
- Excellent release with high wear resistance and traction (sharp peaks)
- FDA compliant

#### Hot Melt Adhesive Tanks

- Melting of thermoplastic adhesives
- Good release, easy clean and chemical resistance
- FDA compliant

#### Idler Roll

- Transport and guiding of films
- Excellent release with high wear resistance and traction (round peaks)
- FDA compliant

#### **Rotary Die Cutters**

- Cutting of sticky laminates
- Excellent release with high wear resistance and traction (sharp peaks)
- FDA compliant

# Vacuum Cylinder

- Transport of nonwoven and film
- Excellent release with high wear resistance and traction (sharp peaks)
- FDA compliant

#### Vacuum Shell

- Lamination of nonwoven and film
- Good release and good sliding, high wear resistance and traction (round peaks)
- FDA compliant

















Pumps, Valves, Compressors
For Better Flow Control





# Improved Handling of Aggressive Fluids and Gases

Salt water, tight tolerances, corrosive chemicals and long life are some of the tough requirements for today's gas and fluid processing equipment. Often the solutions are expensive alloys and part manufacturing. Impreglon offers coatings designed to solve these problems and let the OEM use common materials for making components. MagnaCoat® – PlasmaCoat® – ChemCoat® – TempCoat®: These families of coatings offer a variety of proven solutions for fluid and gas processing. Dry film lubrication, sliding, wear resistance, non-stick and chemical resistance are some of the features of these coatings. The benefits are more economical components, faster manufacturing to market, and the ability to restore old components cost effectively. Valves, pistons, blowers, silencers, mixers and tanks: Contact an Impreglon applications specialist today to match unique application needs with a cost saving solution.

#### **Ball Valve**

- Excellent resistance to aggressive chemicals
- Reduction in break out torque needed to operate valve
- Eliminate valve sticking due corrosion

### **Butterfly Valve**

- Impermeable to chemical attack
- Exceptional wear resistance to abrasive slurries

#### **Rotary Piston**

- Compression of aggressive gases
- Good chemical resistance, corrosion protection and non-stick

#### **Piping**

- Transport of abrasive slurries and chemicals
- Exceptional chemical resistance, nonpermeable, high temperature, wear resistance and non-stick

#### Silencer Plate

- Silencer for lime kiln process
- Exceptional alkaline and heat resistance
- Non-permeable, high temperature, wear resistance and non-stick

# **Blower Housing**

- Rotary piston blower for compressing aggressive gases
- Good chemical resistance, corrosion protection and non-stick

#### **Fueling Guard Rail**

- Fueling of airplanes
- Resistant to all fuels
- Elimination of spark potential

# Pipe Clip

- Tapping sleeve fixture for gas pipes
- Good chemical resistance and assorted colors







# **Hardness and Wear Resistance**

For Demanding Production Processes





# Ceramic and Metal Coatings with Extreme Hardness and Wear Resistance

The wear resistance and surface properties of machine components have become an important factor in the improvement of production processes. Higher machine speeds and new materials increase the demands on component surfaces. Aside from longevity and improved wear resistance, environmental aspects play an increasing role in the development of new surfaces.

Impregion offers its customers a large variety of high-performance surfaces with unique properties or combinations thereof: extreme hardness, excellent wear resistance, high temperature resistance, "zero" porosity, finished surfaces.

#### Wire Drum

- Drawing of wires for tires, concrete reinforcement, cables etc.
- Extreme wear resistance
- Excellent sliding
- Release (inside coating to prevent limestone deposits)

#### Transport Roll

- High Speed transport roll for cartoning machine
- Extreme wear resistance
- Excellent traction with defined roughness

#### **Transmission Housing**

- High Speed drawing of steel wires (22,000 rpm)
- Complete refurbishment of bearing and sealing surfaces
- Excellent temperature resistance
- Extreme wear resistance

#### Piston Rod

- Injecting and metering of molten aluminium in die casting machines
- Self-cleaning ceramic coating
- Extreme wear resistance
- Surface ground and polished

#### **Compression Gland**

- Sealing function in large chemical grinding and mixing mills
- Excellent wear and abrasion resistance
- "Zero" porosity
- Surface ground and polished

#### **Worm Drive**

- Critical drive component in transmissions for rolling mills
- Complete refurbishment of bearing and sealing surfaces
- Excellent wear resistance
- High stability against fast temperature changes

## Auger

- Transportation of highly abrasive materials in mono pumps
- Excellent surface hardness and "zero" porosity
- Extreme wear resistance
- Dry lubricity properties

# Forming Shoe

- Forming of non-woven products on vacuum drum
- Coating of tungsten carbide
- Extreme wear resistance
- Excellent slide and release properties

