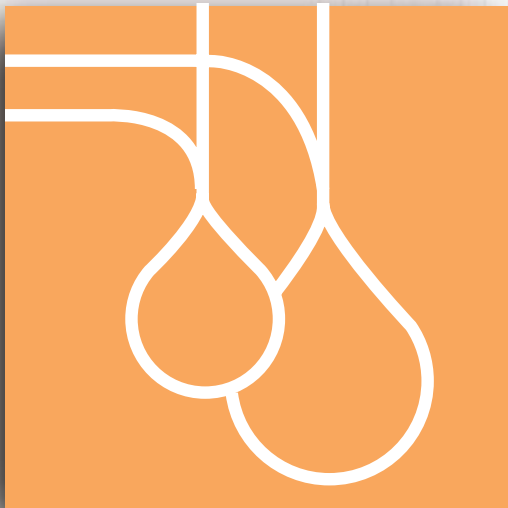




*Bringing Solutions  
to the Surface...  
for the*

# *Plastics Industry*



# Praxair Leads With Experience and Solutions For the Plastics Industry

As the world leader for over 45 years in wear-resistant overlays and services, Praxair Surface Technologies, Inc. specializes in providing solutions for the critical wear problems in the Plastics Processing Industry. With unmatched credentials Praxair has pioneered and leads the way in surface wear protection. Inventors of the detonation gun, plasma spray and HVOF processes, we continue to refine the industry resulting in such products as the shrouded plasma torch and Super D-Gun™ System.

With our 27 plants strategically positioned globally we can provide a complete range of advanced coating chemistries by many different systems:

SUPER D-GUN™  
D-GUN™  
HVOF  
PLASMA

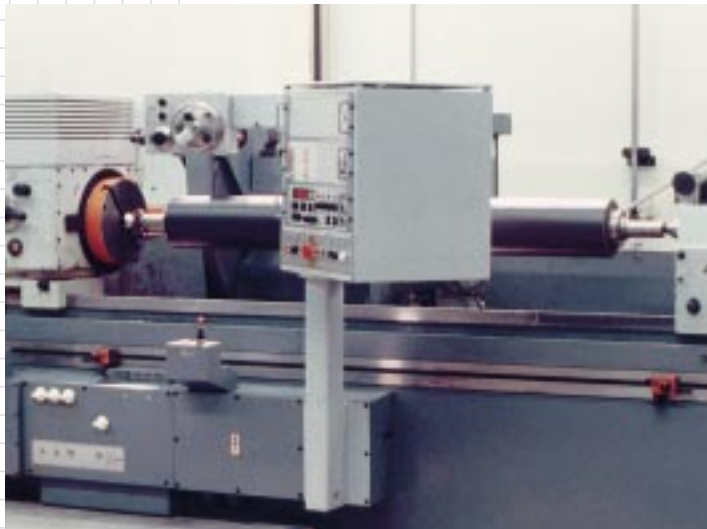
LASER CLADDING  
TRIBOMET™  
CVD  
PVD

Our proprietary UCAR® and SDG™ overlays have been proven cost effective solutions for a wide variety of wear problems associated with critical components utilized in plastics processing equipment.

Our technologically advanced coatings, thermal spray systems and comprehensive finishing capabilities get newly designed products reliably into production and keep existing equipment producing longer on reduced maintenance schedules. There are few wear problems in the plastics industry too large or too small for Praxair.

Continuous improvement is an inherent part of our manufacturing strategies and is maintained through our extensive R & D facilities, backed up by experienced materials and equipment specialists.

Our Praxair Surface Technologies Field Specialists are readily available for consultation and will examine the details of your application for the most cost effective solution.



diamond grinding and polishing of heat transfer roll

## Plastics Industry Applications

### Feed Screws

UCAR Tungsten Carbide  
D-Gun Coated

- Superior compatibility with wear resistant barrels
- Maintains screw efficiency
- Coating strippability can allow for both recoating and repair
- Coating coverage can be full encapsulation or flight only
- Longer overall screw life

### Heat Transfer Rolls

Ceramic or Tungsten Carbide

- Wear and corrosion resistant
- Heat resistant
- Excellent replacement for chrome
- Extended roll life increases productivity

### Corona/Flame Treater Rolls

Ceramic Coated

- Wear resistant ceramic surface
- Resist flame impingement corrosion
- Stable dielectric factor
- Longer overall roll life

### Coated Slitter Blades

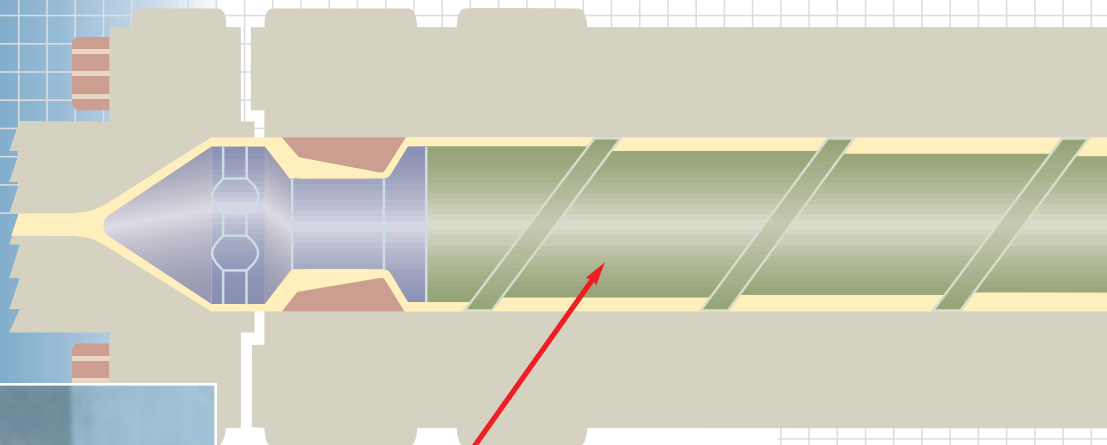
Titanium Carbide/UCAR LSR-1

- Extremely hard surface
- Longer life
- Reduces blade change downtime
- Increases productivity
- Inventoried for quick delivery

Robotics can be used singularly or in tandem



wear-resistance UCAR® overlay  
applied to tungsten carbide feed screw



screws  
for injection molding process



surface inspection of glass roll with  
5 to 6  $\mu\text{m Ra}$  (less than 2 Ra achievable)

## How Praxair Can Benefit You

- Best Surface Solutions for the Plastic Industry
- Exclusive Technology in Automation and Application Systems
- Over 100 Metal and Ceramic Overlays to Solve Your Problem
- Ancillary Services-Strip and Recoat used parts  
Diamond Grinding  
Diamond Honing  
Diamond Lapping
- 27 Plants Worldwide Provide Technical Support, Consultation, Sales and Service





# **PRAXAIR**

## **SURFACE TECHNOLOGIES**

For more information on these and other Plastics related applications, call: 1-800-822-7284 or contact one of these plant locations.

### **United States**

3225 Honeybee Lane  
New Castle, PA 16105  
Tel (412) 658-6678  
FAX (412) 656-1745

4101 W. 124th Place  
Alsip, IL 60658  
Tel (708) 371-6790  
FAX (708) 371-1449

9200 Telephone Road  
Houston, TX 77075  
Tel (713) 991-8700  
FAX (713) 991-8707

8501 Statesville Road  
Charlotte, NC 28213  
Phone: (704)596-5360  
Fax: (704)597-0740

### **England**

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Drakes Way  
Greenbridge Estate  
Swindon, Wiltshire SN3 3HX  
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Phone: 44.1793.512.555  
Fax: 44.1793.611.608

### **Italy**

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Via Fleming, 3  
28100 Novara Italy  
Phone: 39.321.36.441  
FAX: 39.321.36.691

### **France**

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42, allée Jules Bigot  
Z.I. de Molina-la-Chazotte  
42029 Saint Etienne CEDEX 1  
France  
Phone: 33.477.42 62 62  
Fax: 33.477.42 62 60

### **Japan**

Kozuki Plant  
Phone: 81.790.88.0564  
Fax: 81.790.88.0548

### **Okegawa Plant**

Phone: 81.485.91.0731  
Fax: 81.485.92.3441

### **Germany**

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FAX: 49.2102.495219

### **Singapore**

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Republic of Singapore  
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FAX: 65.542.8121

### **Switzerland**

Meyrin, Switzerland  
Phone: 41.22.989.8989  
Fax Plant: 41.22.989.8915  
Fax HQ: 41.22.989.8913