



BUSINESS STATEMENT

Urethane Industrial Products Ltd

Since its founding, in 1983, as an independent private company and major supplier to the Metal Coating Industry, Urethane Industrial Products prides itself on its commitment to building client value, responding positively to client needs and its insistence on continuously improving business performance. Urethane Industrial Products is first choice for polyurethane elastomer coatings for process rollers.

Located in Whitchurch, 100 Km south west of London, with easy access to major airports and seaports and good links to both north/south and east/west major road networks, UIP concentrates on the development and manufacture of polyurethane roller coatings for the industrial metal coil and canning markets.

The Company's International Customer Base enjoys top quality products and unceasing technical backup and support. UIP's responsive approach to its delivery service and technical support adds further strength to its products and adds value to your business.

UIP strives for long term, mutually rewarding, partnerships with its customers. The stability and continuous growth of its customer base indicates the high degree of success the company can demonstrate in this direction.

UIP provides a complete roller manufacturing service with a recovery and regrind service. Experience and technical assistance is available to ensure the correct choice of covering for a particular application.

An existing exporter to many countries, UIP supplies numerous large operators in both the coil coating and metal decorating industries.

Coil Coating Industry

Corus (Tata) - SSAB Sweden - Arcelor Mittal - Hydro Aluminium - Ruukki - Finland.

Metal Decorating Industry

Crown Cork & Seal - Impress Metal Packaging Group

UIP's SUPERCOAT quality covering is used for paint applicator and lacquering rollers throughout these industries.

For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>



GENERAL PRODUCT INFORMATION

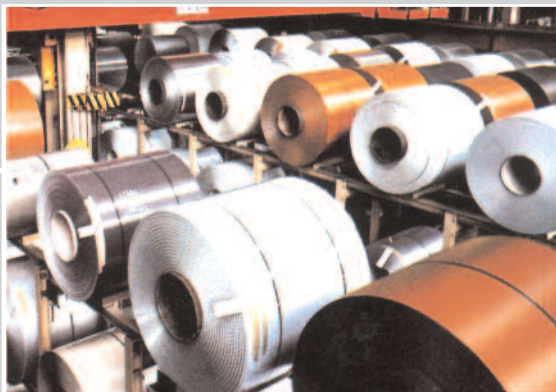
Polyurethane Covered Rollers

Elastomeric roller coverings ensure efficient, economic handling for the processing and refining of cold rolled strip materials.

Polyurethane covered rollers are used in continuous production for:

- Pickling
- Degreasing
- Annealing
- Tin and Zinc Plating
- Coating
- Laminating
- Recoiling
- Seaming
- Splitting
- Stretcher Levelling

During these manufacturing processes the roller coverings are exposed to severe mechanical, chemical and thermal stresses which the coverings have to withstand; whilst protecting the strip surface!



The requirements of different processes have resulted in the development of a wide variety of materials exhibiting an extensive range of advantages:

- High elasticity and matched hardness resulting in controllable, reversible deformation of the covering material surface
- Wear, pressure and cutting resistance
- High friction coefficient providing non-slip
- Optimum resistance to chemical and thermal stress with wide diversity in the range of elastomer compounds available

Urethane Industrial Products has the technical expertise and skilled workforce necessary to ensure the optimum selection and application of elastomer technology for your roller covering requirements.

For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>



PAINT AND LACQUERING APPLICATOR ROLLERS

Polyurethane Covered Rollers

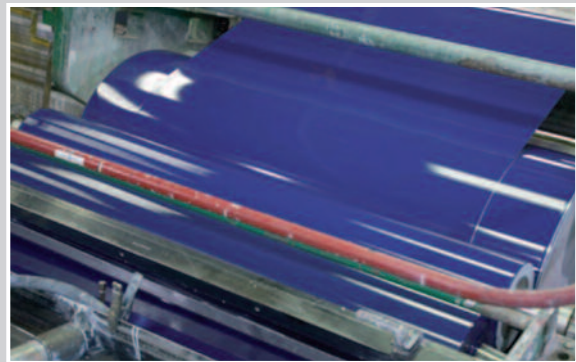
Used throughout the Aluminium and Steel Coil Coating Industry.

■ Homogeneous coverings

Rollers operating in coating machines need to ensure a perfect coating of the passing metal strip. With UIP's polyurethane coverings a perfectly homogeneous structure provides the best solution.

■ Approved compounds

Working in close co-operation with the strip metal coating industry and coating plants, UIP has developed a range of approved polyurethane compounds. The coatings, their solvents and the operating conditions determine the compound formulation.



Throughout the European Coil Coating Industry, SUPERCOAT, a UIP developed product, is covering paint applicator rollers.

The company is an existing exporter to many countries, supplying numerous large operators: Hydro Aluminium - Rautaruukki - SSAB - Plannja - Corus (Tata) - Arcelor Mittal.

SUPERCOAT is also used to very good effect for some chromating applications.

UIP has the ability to add a new dimension to the world-wide coil coating industry.

Typical machine manufacturer for which rollers are supplied is - GFG (America).

For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>



APPLICATOR ROLLERS FOR THE 3-PIECE METAL DECORATING INDUSTRY

Polyurethane Covered Rollers

Used throughout the three piece canning industry for the coating of sheet steel, it is imperative, for optimum performance, that these rollers are provided with:

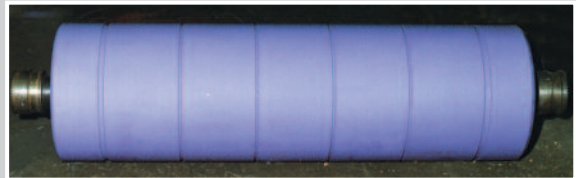
■ Homogeneous coverings

Rollers operating in coating machines need to ensure a perfect coating of the passing steel. With UIP polyurethane coverings a perfectly homogeneous structure provides the best solution.

■ Approved compounds

Working in close co-operation with the 3-piece coating industry and coating plants, UIP has developed a range of approved polyurethane compounds. The coatings, their solvents and the operating conditions determine the compound formulation.

The particular strengths of UIP are:
Top quality product
Superb delivery service



The company is a major supplier to customers producing General Line Products, Aerosol Cans and both Human and Pet Food Cans.

UIP specialises in the production, to very close tolerances, of:

Stencil rollers
Spot and Panel rollers

The company's **SUPERCOAT** quality covering is used for coating rollers throughout the industry and it is an existing exporter to many countries.

UIP supplies large operators in the market such as Crown Cork & Seal and The Impress Metal Packaging Group.

Typical machine manufacturers for which rollers are supplied are Ratcliff - Crabtree - Mailander (LTG) and Wagner.



For further information please contact the Sales Department.

Tel +44 (0)1256 892830

Fax +44 (0)1256 896899

E-mail sales@uip ltd.com

Website: <http://www.uip ltd.com>



POLYURETHANE MOULDED PRODUCTS

Use robust polyurethane elastomers to:

- Save wear
- Improve quality
- Enhance performance

Polyurethane mouldings gain advantages over competitive materials in:

- Abrasion resistance
- Impact absorption
- Flexure, Compression and Tension
- Resists Fuel Oils, Solvents and Oxidation
- Low temperature operations

Standard products are available in:

- Rod
- Tube
- Sheet
- Block



Typical uses are as:

- Wheels
- Rollers
- Bumpers
- Impellers
- Pumps
- Wear Pads and Coatings

Typical Industry Applications are found in:

- Mining
- Quarrying
- Transport
- Mechanical Handling
- Offshore
- Press Forming
- Electrical and Mechanical Engineering

UIP is able to provide Specialist Design and Production facilities including retro-engineering to produce replacement parts.

For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>

CORRUGATED PACKAGING INDUSTRY

Polyurethane Covered Rollers

UIP supplies many board and sheet plants with polyurethane covered rollers, and spare parts such as:

- Splicer Bars - refurbished (bonded)
- Feed Rollers with a soft covering or dual hardness
- Corrugated Pull Rolls
- Printer Slotter, Ductor and Wiper rollers
- Zero Crush Wheels
- Flexofolder gluers, Flexo presses, Corrugators, (i.e. Creaser bosses and Anvil covers), Edge Feeder Tyres
- High tear resistance
- Exceptional wear resistance
- High friction, providing extra grip for feed rollers
- Improved coating transfer
- Quality of Print
- Excellent solvent resistance
- Easy cleaning
- Longevity in line and minimum downtime



- Recovering Vacuum Rollers

Polyurethane elastomers provide a variety of benefits such as:

- Better tensile strength than competitive coatings



SCA, DS Smith, Smurfit Kappa, Mondi Board. These customers taking advantage of these benefits find significant savings on roller coverings compared with rubber!

Typical machine manufacturers supplied are:

Bobst - Martin - Ward - Simons - Emba



For further information please contact the Sales Department.
 Tel +44 (0)1256 892830
 Fax +44 (0)1256 896899
 E-mail sales@uip ltd.com
 Website: <http://www.uip ltd.com>

TENSION, BRIDLE AND DEFLECTOR ROLLERS

Polyurethane Covered Rollers

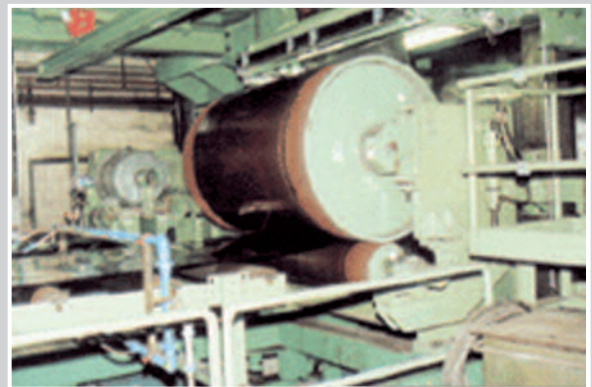
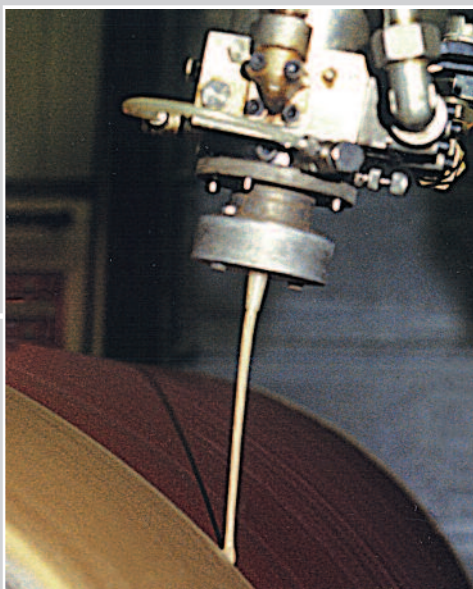
■ High Friction

The ability to provide non-slip drive and deflection of strip material are the imperatives of elastomer covered rollers.

Where the decisive criterion is the friction coefficient of the roller surface polyurethane coverings can provide extremely high friction values, invaluable in processes using very high specific strip tension.

■ Longevity

In high friction environments, elastomer qualities ensuring permanent roughness provide increased intervals between downtime.



Driving Pulleys

■ Durability

Polyurethane elastomer coatings deliver outstanding tear, abrasion, cut and oil resistance.

■ Lower Deformation

With high linear pressures of 100/200 Kp/cm preference should be given to polyurethane coverings over rubber.

Typical machine manufacturers for which UIP can supply rollers are:
KCS Herr Voss - Davy Corporation - Bronx Engineering.

For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uipltd.com>

SQUEEGEE AND PRESSURE ROLLERS

Polyurethane Covered Rollers

Polyurethane covered rollers are widely used throughout the Steel Industry for numerous squeegee applications.

Exposed to severe conditions during strip metal manufacture, the combination of mechanical, thermal and chemical stress has a particular influence on the choice of polyurethane elastomer coverings.

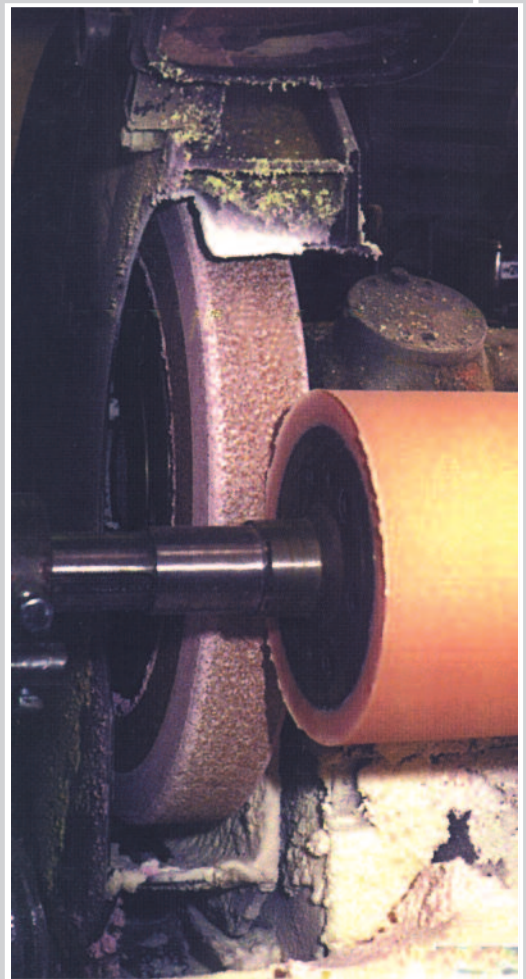
Careful determination of an appropriate composition and quality is essential. UIP has the knowledge and experience to help you make that critical choice.

The advantages of UIP rollers are:

Longer life in line, with high wear resistance producing less downtime.

Corrosion resistant. Covered end faces and journals provide continuity of covering, allowing no acid ingress.

Cost savings. UIP polyurethane coverings are as competitive as rubber!



**For further information please
contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uipltd.com
Website: <http://www.uipltd.com>**



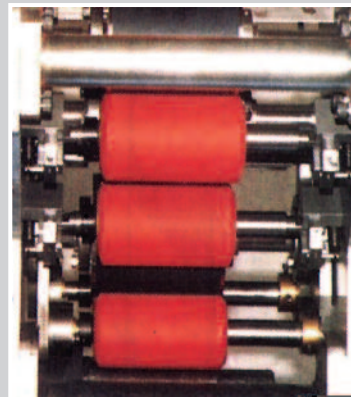
INKER ROLLERS - SUITABLE FOR 2-PIECE DECORATORS

Polyurethane Covered Rollers

UIP produces top quality polyurethane covered Inker Rollers for machines such as the Rutherford and Ragsdale.

The polyurethane elastomers used present wide ranging advantages over their competitors with specifically improved physical properties, such as:

- Excellent Resilience
- High resistance to Abrasion
- Cut and Tear resistant
- Low Compression Set



They offer the following advantages over rubber:

- Retention of an even surface when swollen (no orange peel effect)
- Freedom from seams and other building faults
- No uneven dispersion of ingredients
- Superior ink transfer

UIP can supply Inker Rollers as complete units, including aluminium base and top quality bearings, ready to run!

Customer special requirements can be manufactured.

Present customers include:
Crown Cork & Seal, Rexam, Ball Packaging.

For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>



PAINT AND LACQUERING APPLICATOR ROLLERS FOR THE 2-PIECE CANNING INDUSTRY

Polyurethane Covered Rollers

Used throughout the Aluminium and Steel two piece beer and beverage canning industry, it is imperative, for optimum performance, that these rollers are provided with:

■ Homogeneous coverings

Rollers operating in coating machines need to ensure a perfect coating of the passing steel or aluminium. With UIP polyurethane coverings a perfectly homogeneous structure provides the best solution.

■ Approved compounds

Working in close co-operation with the 2-piece coating industry and coating plants, UIP has developed a range of approved polyurethane compounds. The coatings, their solvents and the operating conditions determine the compound formulation.



Throughout the European Coating Industry, SUPERCOAT, a UIP developed product, is covering paint applicator rollers.

UIP offers:

- Complete Roller Manufacture
- Recovery Service
- Replacement Sleeves, for basecoat and overvarnish, to customer requirements
- Regrind Service
- Technical Assistance with elastomer choice

Present customers include:

Rexam, Ball Corporation,
Crown Cork and Seal.



For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>

LUBRICATOR ROLLERS

Polyurethane Covered Rollers

As well as all of the general advantages of Polyurethane elastomer coverings, the main requirement for Lubricator Rollers is:

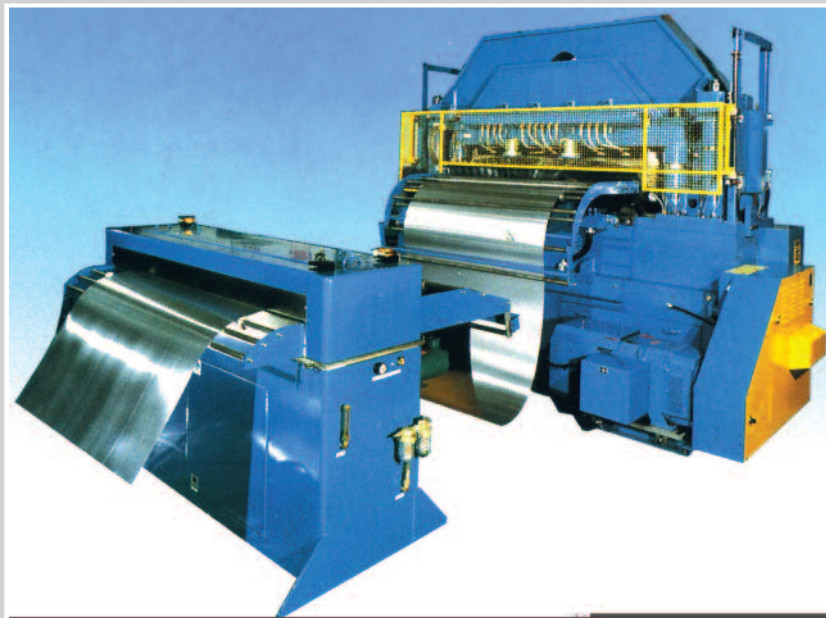
■ **Accuracy**

UIP has been supplying and

refurbishing these types of roller, to the highest standards, for many years.

End users world-wide are supplied with top quality rollers and coverings suitable for both natural and synthetic lubricants.

■ **Natural and Synthetic Lubricants**



For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>



LACQUERING APPLICATOR ROLLERS FOR BOTTOM RIM APPLICATION

Polyurethane Covered Rollers

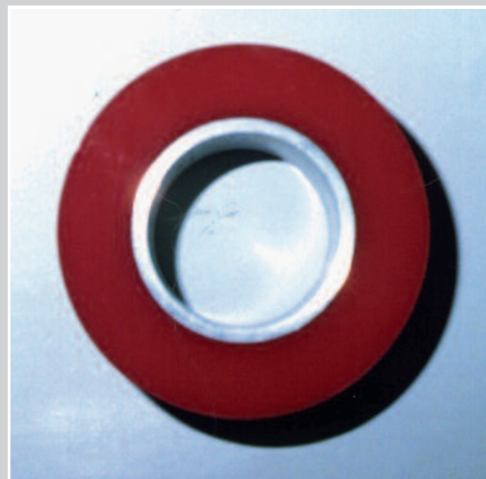
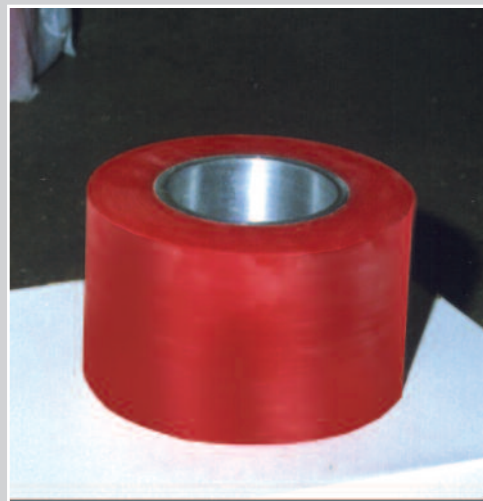
UIP manufactures bottom rim coater sleeves, suitable for applying coatings to the base of the 2-piece can.

Designs are available both with or without aluminium centres.

The hardness of the polyurethane compound can be varied to suit customer requirements.

Types commonly used are:

- 0 - 5 durometer (hardness)
- 8 -12 durometer
- 20 - 25 durometer



For further information please
contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uipltd.com
Website: <http://www.uipltd.com>



POLYURETHANE MOULDED PRODUCTS FOR 2-PIECE CAN MANUFACTURERS

Use robust polyurethane elastomers to:

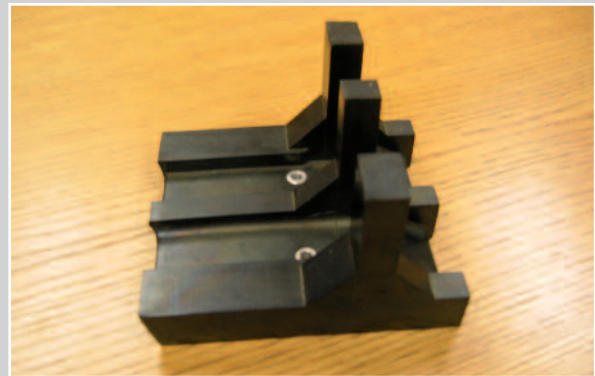
- Save wear
- Improve quality
- Enhance performance

Polyurethane mouldings gain advantages over competitive materials in:

- Abrasion resistance
- Impact absorption
- Flexure, Compression and Tension
- Resist many biocides used in bodymaking

Typical applications:

- **UNLOADER POCKETS** to suit Ragsdale, Standun and



UIP manufactures a wide range of standard Unloader Pockets as well as a range of customer designed Pockets for particular requirements.

The durometer (hardness) of the polyurethane elastomer for Unloader Pockets can vary according to process needs.

- **BUMPER PADS and SUCTION CUPS** used for the transfer of cans on Transfer Units.
- **DIE CLAMP BLOCKS** manufactured from top quality polyurethane with superb wear characteristics.

UIP is able to provide Specialist Design and Production facilities including retro-engineering to produce replacement parts.



For further information please contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>



CAPACITY LIST FOR POLYURETHANE ROLLER COVERINGS

Softer Range 0° - 60°

Grinding Capacity

Diameter 635mm
Length 6 metres
Weight 5 tonne

Casting Capacity

Diameter 1,000 mm
Length 6 metres
Weight 5 tonne



Harder Range 70° - 95°

Grinding Capacity

Diameter 1,000mm
Length 4.4 metres
Weight 5 tonne

Casting Capacity

Diameter 1250mm
Length 4.4metres
Weight 5 tonne

Turning Capacity

Diameter 1250mm
Length 3.6 metres



For further information please
contact the Sales Department.
Tel +44 (0)1256 892830
Fax +44 (0)1256 896899
E-mail sales@uip ltd.com
Website: <http://www.uip ltd.com>