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Printing Catalogue





Kenosha  
USA, Wisconsin

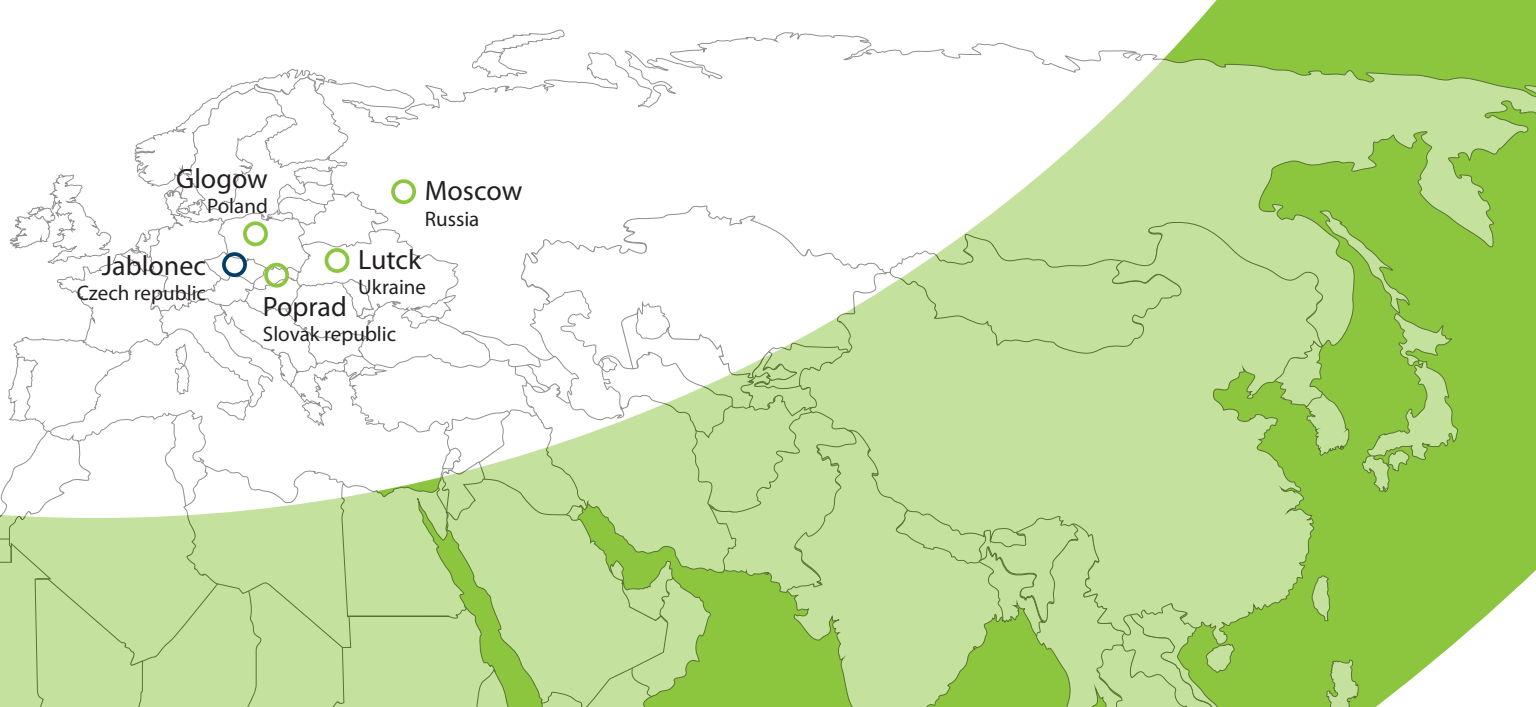
# Profile

LIGUM spol. s r.o. started production in Jablonec nad Nisou (Czech Republic) in May 1993. In 1997 Westland GmbH (Germany) invested its capital into LIGUM and the company received unique know-how and hi-tech materials for offset printing.

In the same year, the first "sleeve", a elastomer covered fibreglass for flexographic printing, was produced. At present, flexographic printing is the main specialization with great potential for development in our new modern plant in Jablonec nad Nisou. However, the same attention is paid also to other specializations, i.e. offset, gravure printing, laminating, textile industry, metallurgy, wood processing, engineering, packaging production and further industries.

Customer satisfaction in our field of business requires primarily the optimal choice of materials for covering and of course high-quality production with short delivery terms. This requires understanding of the whole range of technologies where our coverings are used. The constant improvement and development of suitable solutions together with material suppliers, designers and engineers is our challenge.

LIGUM expanded internationally, establishing affiliated companies in:



# Offset

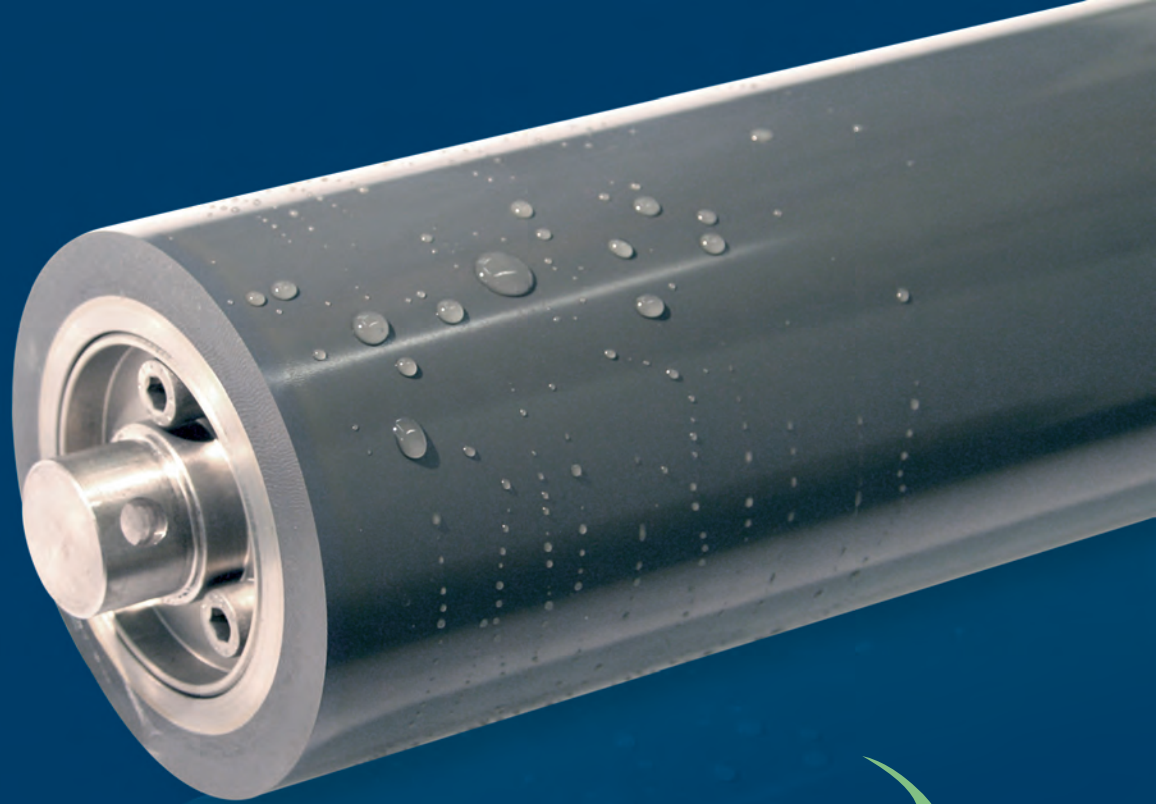


The LIGUM company, as a member of the Westland Group, manufactures and supplies printing rollers meeting the quality standards of the printing machine manufacturers. Additionally to the first equipment of new printing machines, we offer roller recovering for all printing machines and roller exchange for sheet-fed offset rollers for many printing machines.

The printing roller qualities developed and produced by Westland guarantee constant quality standard thanks to the same know-how in all production plants and to adherence to EN ISO 9001:2008.

## Inking rollers

- 
- A background image showing several printing rollers of various sizes and colors (yellow, grey, red) arranged in a row, slightly overlapping. The rollers are set against a light grey background that has a subtle gradient.
- **Werograph**  
The tried-and-tested ink roller quality with high volume stability thanks to good swell resistance and minimized heat-build-up. It also offers easy washability and guarantees long life.
  - **Wero-UV**  
The optimal quality for ink and dampening form rollers for pure UV inks.
  - **Weromix**  
The special quality for ink and dampening form rollers for mixed printing. This quality is recommended also for hybrid inks.
  - **Weronews**  
The new ink and dampening form roller generation for newspaper printing for coldset inks containing vegetable oils.
  - **Weronit**  
Rider or distributor rollers as an alternative to rilsan coated rollers. This quality offers excellent runability and is used also for recovering of film rollers with rhomb or polygone profile.



LotoTec®

## Dampening rollers

- **Werodamp®-LotoTec®**  
New generation of dampening rollers for offset printing with reduced IPA contents or for completely alcohol-free printing. Long life, high printing process stability, easy and quick cleaning. Extreme resistance against adverse effect of printing inks and cleaning liquids.
- **Weroaqua®**  
The perfect dampening roller quality for alcohol reduced or free printing. It is already used by many printing machine manufacturers in the first equipment.
- **Werodamp®**  
The tried-and-tested dampening roller quality for continuous-film dampening systems for sheet-fed and web printing. The hydrophilic surface and the constant Shore hardness guarantee constant wetting over a long time.
- **Werodahl**  
The quality with high mechanic stability for dampening form rollers for Dahlgren and Delta dampening systems with excellent media resistance.

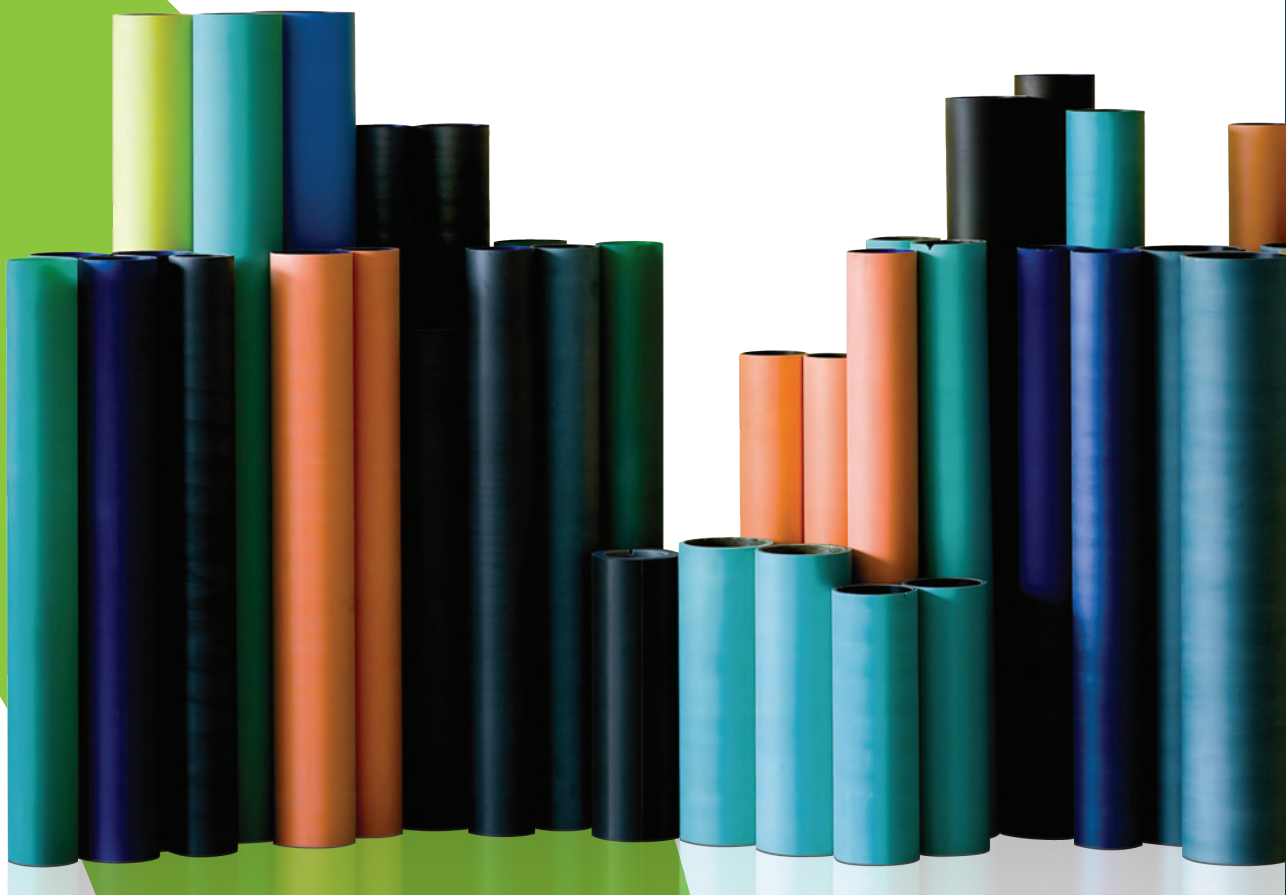
## Other rollers

- varnishing rollers
- developing rollers
- press and guiding rollers
- stretching rollers
- PUR rings for folding rollers
- complete rollers including Ready-to-run accessories

# Flexography printing

Flexography printing is constantly growing in popularity in the market by providing ever increasing print quality and flexibility in using different inks and substrates. The sleeve technology has brought acceleration in speed, simplification and lower costs when replacing a printing form and within printing itself. Quick development of direct laser engraving and new generation of elastomers allow achieving very high printing quality.

Based on many years of experience and continuous development of materials including many laboratory and practical tests, we are able to choose or adjust an optimal material according to the requirements and needs of each customer.



Thanks to the intensive technology development and unique innovations in the production process, we have created a modern facility for production of elastomer covered sleeves at LIGUM in Jablonec nad Nisou (Czech Republic):

- for direct laser engraving with CO<sub>2</sub>, YAG or diode lasers
- for solid printing
- under seamless photopolymer

Main benefits of direct engraved elastomer covered sleeves are:

- excellent transfer of all printing inks
- possibility of printing seamless motives
- no plate lift
- optimal register
- increased press speed
- high resistance to solvents (ethyl acetate, ethanol, mek)
- high durability of printing form
- possibility of combining several materials
- possibility of setting mechanical properties
- conductive sleeves
- environmental friendly
- possibility of regrinding and recovering already used sleeves

We offer also polyurethane mounting sleeves under the elastomer or photopolymer plates and adapters.





# BLUE ONE sleeves

## BLUE ONE sleeve PREMIUM sleeve

Maximum attention is paid to the development of new materials and technologies for production of flexographic printing sleeves. The result of the development consist in new generations of BLUE ONE and PREMIUM sleeves in Thin and Classic versions intended for direct engraving with the help of CO<sub>2</sub>, YAG and diode lasers:

### BLUE ONE sleeve:

- Thin (thickness 1,54 mm)
- Classic (thickness 3,12 mm)

Both types of sleeves can serve for printing on compressible adapters (similarly as for photopolymer sleeves) in standard Stork sizes; in case of BLUE ONE Classic sleeves, the printing is possible also directly on air mandrels or adapters with hard surfaces.

### Main benefits of BLUE ONE sleeve:

- high printing quality
- very short delivery terms
- interesting price

### PREMIUM sleeve:

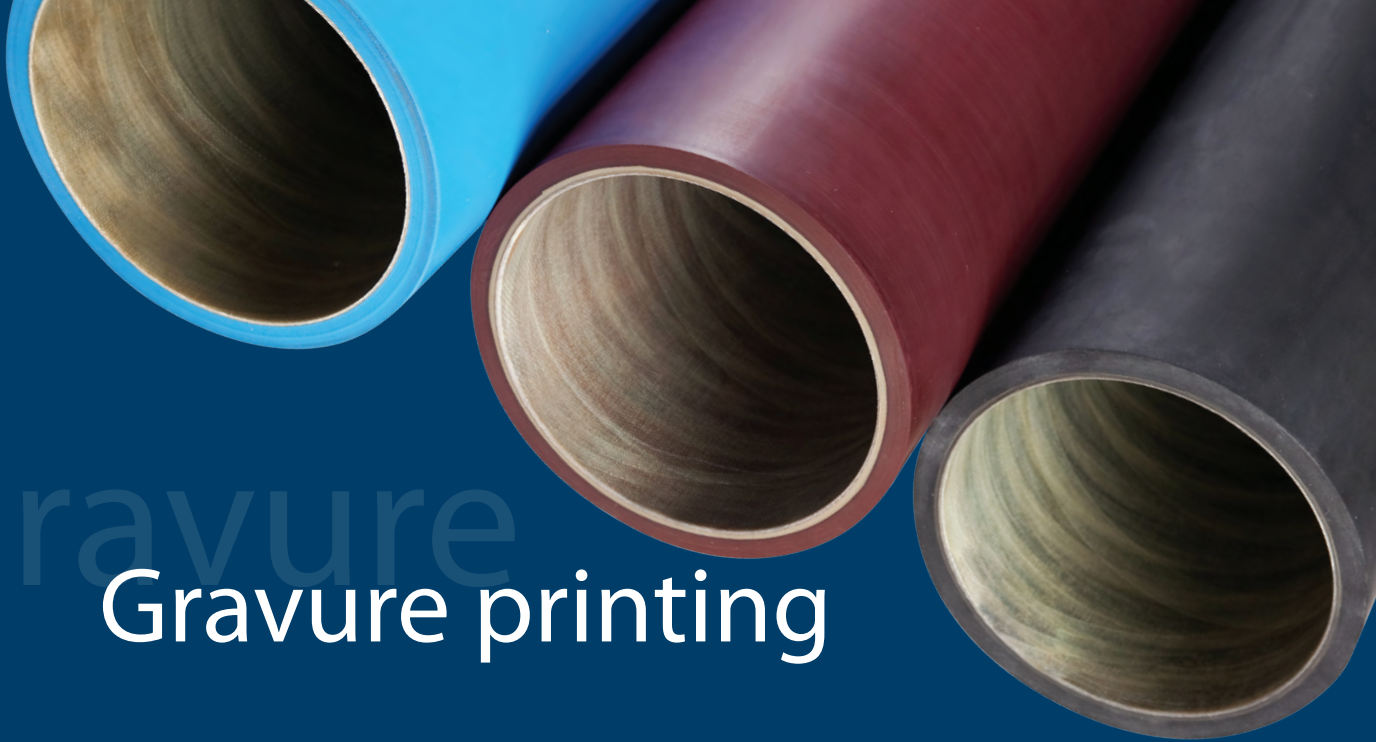
- Thin (thickness 1,54 mm)
- Classic (thickness 3,12 mm)  
with compressible layer  
without compressible layer

PREMIUM sleeves are intended for printing with the highest demands on quality (HD-Flexo). New type of ground fibreglass is used for production of these sleeves. The newly developed elastomer is applied with the help of modern extrusion technology.

### Main benefits of PREMIUM sleeve:

- very high printing quality = HD-Flexo
- higher engraving speed (lower engraving costs)
- better dynamics thanks to compressible layer





# Gravure

## Gravure printing

Gravure printing as a technology with high printing speed and quality places high demands on the quality of presser rollers or sleeves = pressers. Additionally to mechanical demands, long lasting stability in gravure printing inks is important.

LIGUM offers suitable elastomer covers with materials based on EPDM, NBR, Hypalon, ECO, and Viton for different types of gravure printing inks. Pressers with electrostatic printing assistance (ESA) are breaking through more and more with the growing demands on increased printing quality.

### Types of rollers, sleeves:

- standard pressers (without ESA)
- pressers with electrostatic printing assistance (ESA)
  - 1-layer , 2-layer , 3-layer

### Sleeve types by shapes:

- conical
- cylindrical
- special (Nipco)

### Benefits:

- high resistance against pressure and mechanical load
- high resistance against solvents (alcohols, esters, toluene)
- choice of adequate mixture according to ESA demands
- possibility of recovering of rollers and sleeves

# Lamination

Additionally to rollers and sleeves for flexographic printing and gravure printing, LIGUM offers also elastomer coverings for further converting technologies:

## Rollers and sleeves for:

- lamination
  - cold
  - hot
- lacquering
- printing
- coating
- other types (embossing, flatting, guiding, Corona, etc.)

Optimal mixtures have been developed for individual technologies in broad scope of elastomer compounds: EPDM, NR, SBR, Hypalon, Silicone, Viton, CPE.

The new SIMPLY BLUE formula in hardness from 60° to 90° Sh A has proven very successful for laminating of foils in production of flexible packaging.

## Benefits:

- possibility of optimum choice and setting of material for each technology
- very good antiadhesive characteristics
- high resistance against laminating materials and solvents
- very good mechanical properties

