

ligum

FOLIARSTWO

DRUKARSTWO

PAPIERNICTWO

MEBLARSTWO

OPAKOWANIA

TEKSTYLIA

Meblarstwo



Opakowania



Drukarnstwo



Papiernictwo



Foliarstwo



Tekstylija



TWORZYMYSWÓJ ŚWIAT

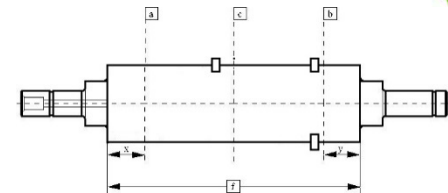
www.ligum.pl

LIGUM GROUP IN A GLIMPSE

- own production of elastomers

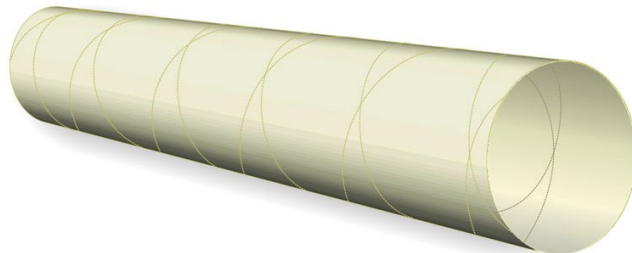


WESTLAND



- manufacturing of PU / silicone coatings
- specializing in the production of sleeves for flexography, gravure printing and lamination
- more than 50 different materials and linings used in flexography and still new solutions
- own production of GFK (OXXO) cylinders and cylinders
- many innovative methods: extrusion, strip Builder

OXXO
PIPE



ligum



○ INNOWACJA PRODUKTU -EOS SLEEVES

"Product innovation":

- introduction of the EOS Sleeves rubber surface replacement system
- SERIAL PRODUCTION to warehouse

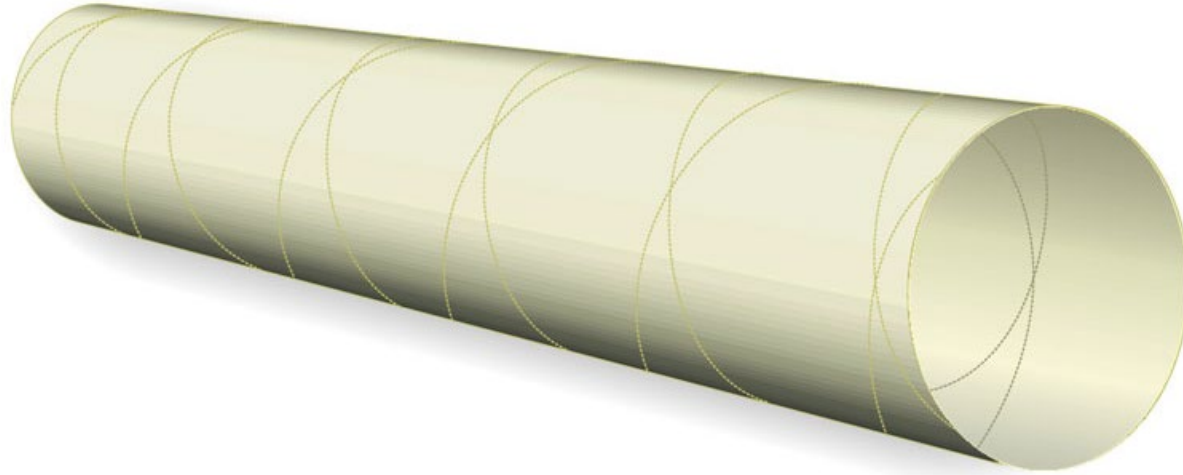
EOS (Exchange Of Surface)

- ❖ **SECURITY** of supply
- ❖ **Deliveries on time**

EOS
sleeves



GFK TUBES



- EOS System is based on GFK tubes made of fiberglass



○ RUBBER COVERING OF GFK TUBES



- GFK tube is covered with rubber like standard metal roller

- Identification of sleeves in RFID technology

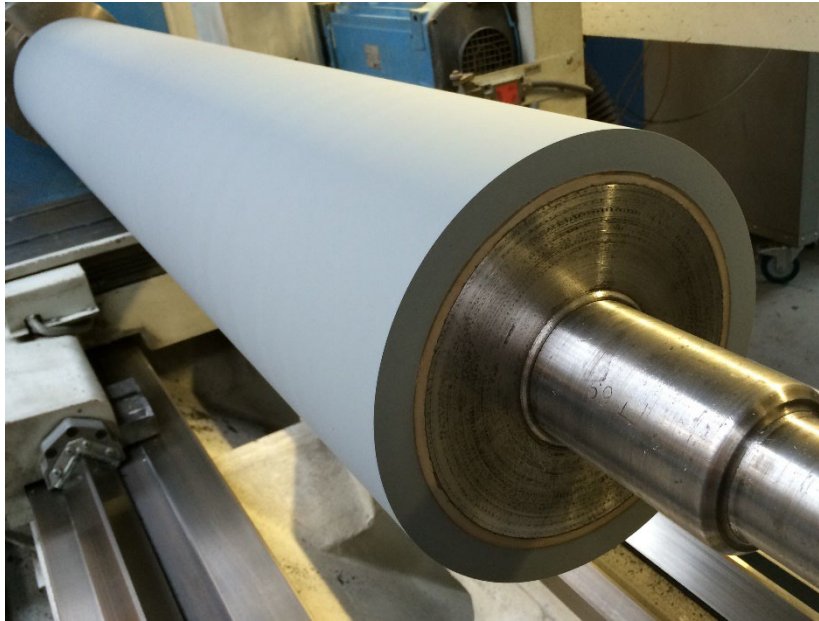
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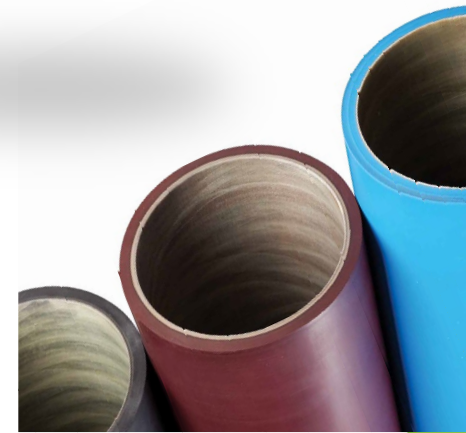
○ NEW PRODUCTS

- SMOOTH COATING sleeves for varnishing or with „OPTI/ RILI” cuts;
20-50' ShA



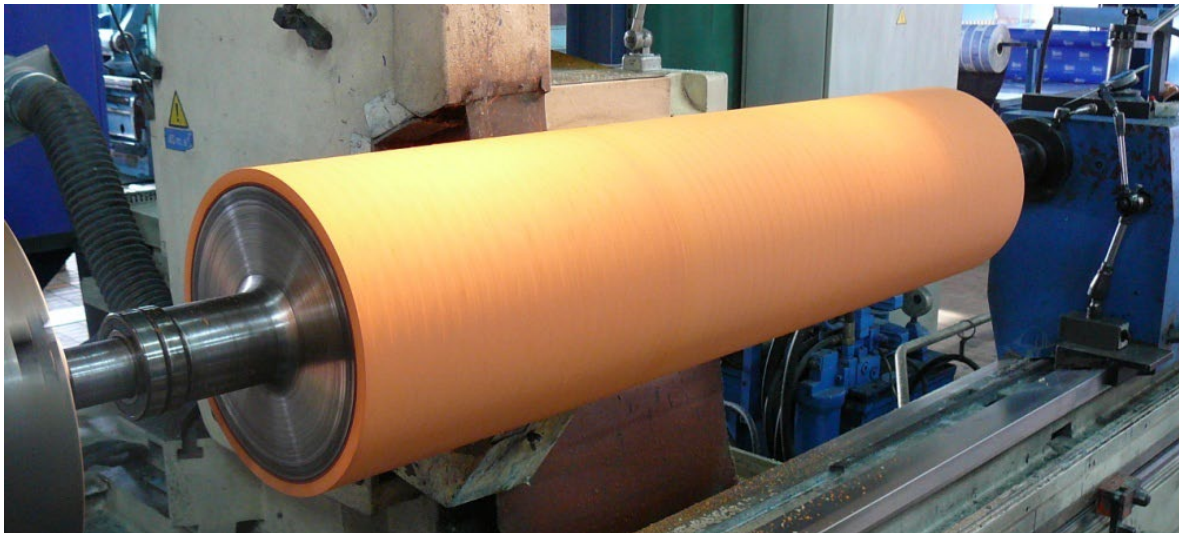
EOS
sleeves

Available as part of the EOS Sleeves coating replacement system in 48 hours



○ NEW PRODUCTS

- PRINTING SLEEVES - FOR PRINTING ON HARD AND FLAT SURFACES



EOS
sleeves

Available as part of the EOS Sleeves coating replacement system in 48 hours



○ NEW PRODUCTS

- SLEEVES FOR OILING 25-38 ShA



EOS
sleeves

Available as part of the EOS Sleeves coating replacement system in 48 hours



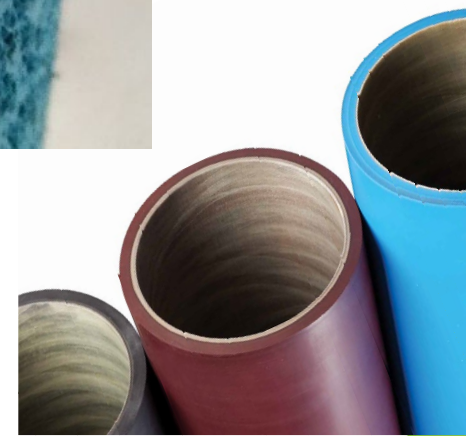
○ NEW PRODUCTS

- SPONGE SLEEVES for stain EPDM BY1L-BY3L
and for oiling NBR BY2N-BY4N



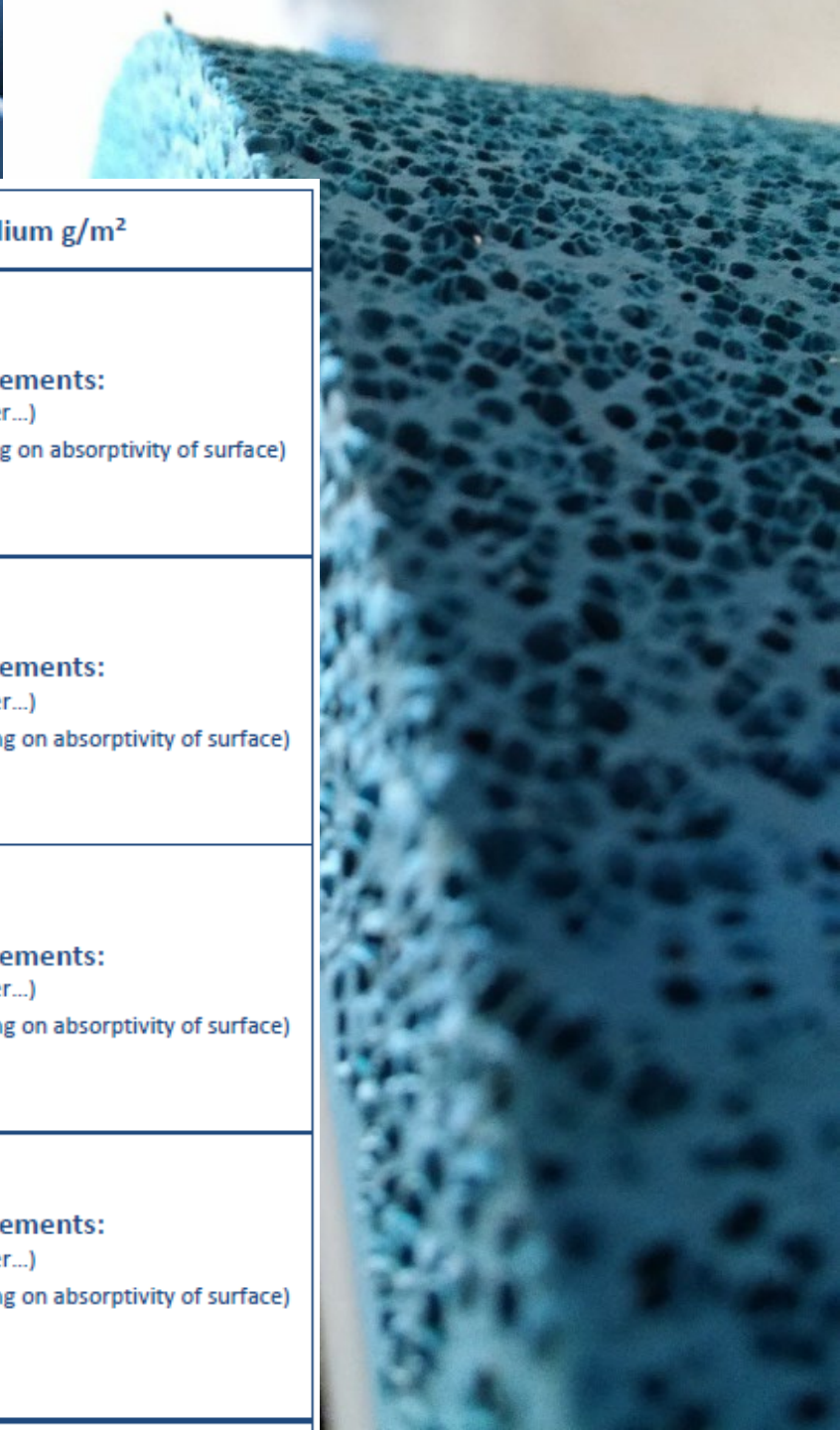
EOS
sleeves

Available as part of the EOS Sleeves coating replacement system in 48 hours

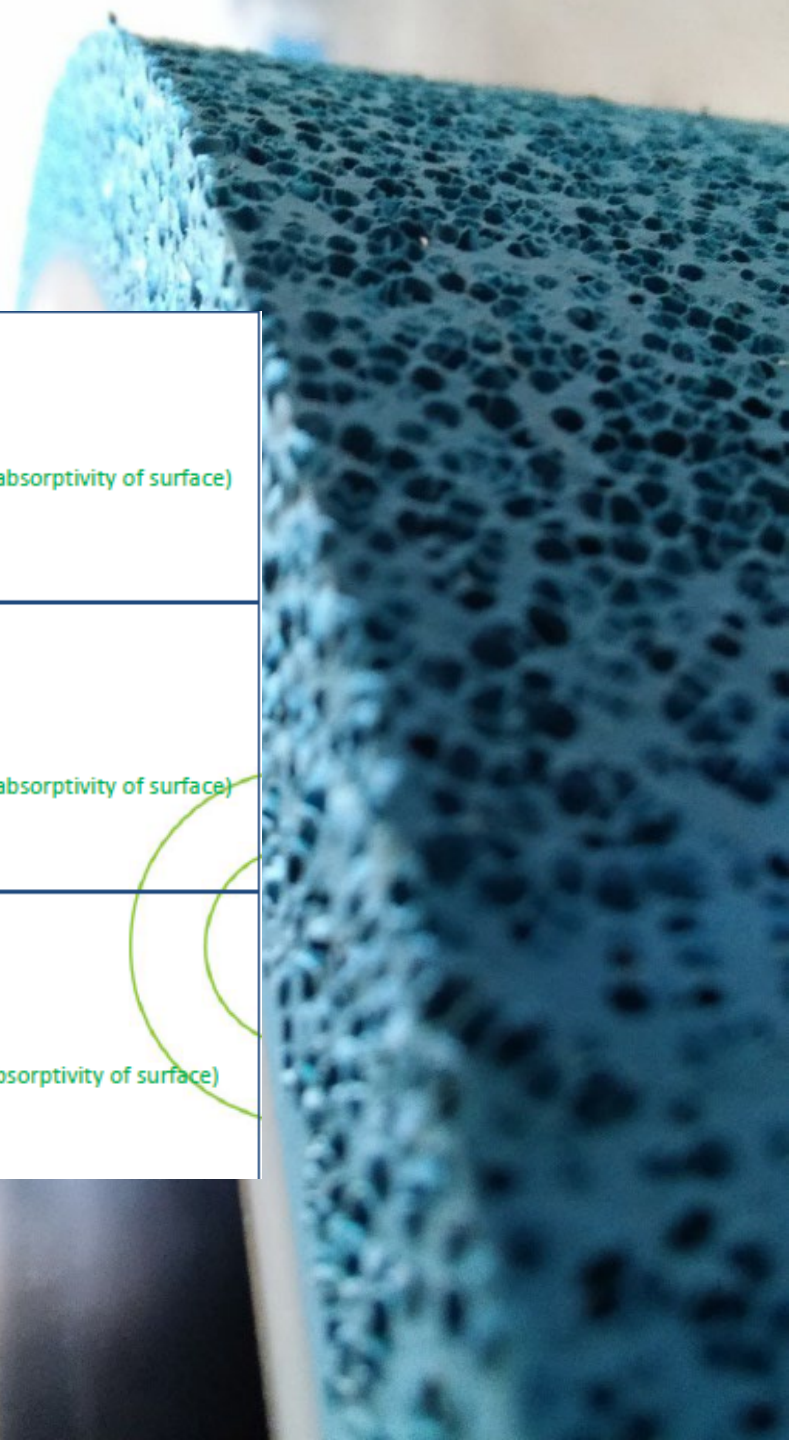


SPONGE SLEEVES FOR STAINING

Marking / colour / ShA0	Variant	Application / coating medium g/m ²
<p>BY1L green, 30'ShA0</p>	<p>Optimum coating thickness 10 mm / side</p>	<p>Varnishing/staining of elements: (wood, chipboard, veneer...) *Coating within: 12-18 g/m² (**depending on absorptivity of surface)</p>
<p>BY2L green, 20'ShA0</p>	<p>Optimum coating thickness 13 mm / side</p>	<p>Varnishing/staining of elements: (wood, chipboard, veneer...) * Coating within: 22-28 g/m² (**depending on absorptivity of surface)</p>
<p>BY25L green, 15'ShA0</p>	<p>Optimum coating thickness 20 mm / side</p>	<p>Varnishing/staining of elements: (wood, chipboard, veneer...) * Coating within: 25-32 g/m² (**depending on absorptivity of surface)</p>
<p>BY3L Green / blue 15'ShA0</p>	<p>Optimum coating thickness 20 mm / side</p>	<p>Varnishing/staining of elements: (wood, chipboard, veneer...) * Coating within: 33-45 g/m² (**depending on absorptivity of surface)</p>



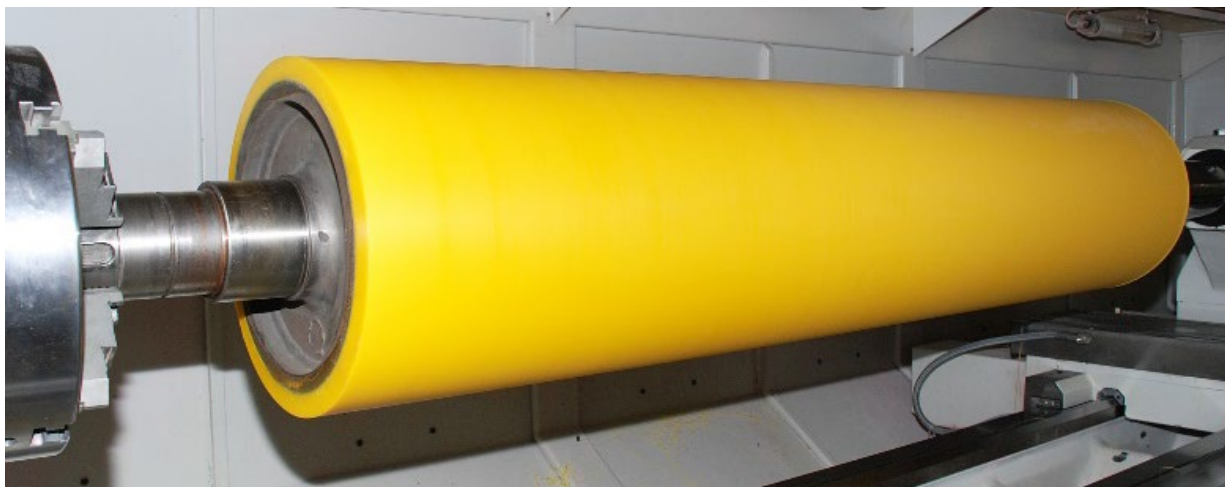
SPONGE SLEEVES FOR OILING



BY2N black 50'ShA0	Optimum coating thickness 18 mm / side	Oiling of elements: (wood, chipboard, veneer...) *Coating within: 22-28 g/m² (**depending on absorptivity of surface)
BY3N black 50'ShA0	Optimum coating thickness 20 mm / side	Oiling of elements: (wood, chipboard, veneer...) *Coating within: 33-45 g/m² (**depending on absorptivity of surface)
BY4N orange 30'ShA0	Optimum coating thickness 20 mm / side	Oiling of elements: (wood, chipboard, veneer...) * Coating within: >35g/m² (**depending on absorptivity of surface)

○ NEW PRODUCT

- Varnishing SLEEVES made of polyurethane from 15 ShA - **EOSPren**



Available as part of the EOS Sleeves coating replacement system in 48 hours



NEW PRODUCTS

EOS Glue:

- The possibility of making sleeves for glue(grooved or smooth) for air cylinders
- Comprehensive execution of sleeves + air cylinder based on the technical documentation provided by the customer
- When ordering, it is necessary to order a set of covers and adjust their size to the diameter of the sleeve:
 - ✓ \varnothing 187mm , \varnothing 197m , \varnothing 213mm
 - ✓ maximum length of the working surface of glue rolls 1750 mm
 - ✓ outer diameter of sleeves according to the customer's order
- Dispensing sleeves (hardness 100 ShA), the minimum diameter that we can make from technological point of view, depending on the dimensions of the air cylinder:
 - ✓ Cylinder \varnothing 187mm minimal diameter of Sleeves \varnothing 210mm
 - ✓ Cylinder \varnothing 197mm minimal diameter of Sleeves \varnothing 220mm
 - ✓ Cylinder \varnothing 213mm minimal diameter of Sleeves \varnothing 236mm



○ NEW PRODUCTS



It is a line of the latest generation of environmentally friendly products - no volatile compounds (VOC) - supporting the optimal performance of the rollers.

Produkty dedykowane do skutecznego czyszczenia powierzchni gumowych sleeves i walców stosowanych w Meblarstwie



- [Dyna UV Wash 909](#)
- [Dyna Clean FC WB](#)

gumy EPDM i NBR (VOC free)
gumy EPDM i NBR (VOC 1,5%)



QUALITY CONTROL

Quality control confirmed by a ISO 9001



We control in tolerance::

- Radial runout 0.02-0.08 mm
- Cylindricity 0.02-0.08 mm
- Bombasticity 0.03-0.4 mm
- Hardness of rubber compound 15-100ShA +-3 ShA
- Diameters of rolls 0.02-0.5 mm
- Ra-min 0.4 μm
- Rz-min 1.8 μm



○ ADVANTAGES

Advantages, additional benefits

- EOS Sleeve – fiberglass tube with new **PREMIUM** rubber coating with excellent surface quality, longer life and quality
- **Customer safety** – sleeve availability guarantee, **always** ensures continuous operation of the line
- **Shipment** of ready sleeves within **48h** from customer's order (upon admission of cooperation), Guarantee of quality and continuity of supplies
- **Flexibility** - the possibility of using many types of coatings on one cylinder (rubber, PU, sponges ...), which allows for quick conversion of the line and change of the production profile



○ ADVANTAGES

Advantages, additional benefits

- **Measurable economic benefits:**
 - LIGUM's takeover of customer's roller stocks
 - significantly reduces roller stocks in your factory
 - purchase of sleeves from LIGUM stock in exchange
 - elimination of standard roller recovering times, no need to replace the bearings each time
 - lack of transportation costs spent for roller recovering - instead of a heavy box, a sleeve 3 times lighter in a box
 - reduction of internal transportation at the customer's facility - No need to engage forklifts, Increasing the safety of employees - manipulating with a light sleeve



○ ADVANTAGES

Advantages, additional benefits

- Ensuring the performance of air mandrels and mounting stands
- Possibility of implementing the full sleeve identification system – RollerID by the customer
- Sleeve technology development – implementation of EOS System by varnishing line producers as a standard
- Ecology - limiting transport, quantity of packaging, ecological production process, drastically reduced CO_2 emissions
- Innovation - Burkle decided to equip the new varnishing line with OEM sleeves!
- EOS CLUB - additional tangible benefits [e.g. points, training, cylinder service,



Thank you for your attention!

