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ROTOMETAL

we are for print

Print Sleeves
Catalogue
2023/ 2024

About us

Rotometal is a leader among European rotary tooling suppliers. Over 15 years of experience has helped us build an invaluable knowledge base that allowed us to establish a strong position in an extremely demanding market.

Here at Rotometal, we aim for continuous and sustainable growth. Our mission is to supply top quality products, at an affordable price, within an industry leading time frame.

Inspired by Innovation, powered by passion.

At Rotometal, we are driven by our passion for creating high-quality and durable products that meet the needs of our customers. We believe that innovation is the key to achieving excellence and sustainability in our industry. That's why we invest in research and development, constantly exploring new technologies and materials that can improve our performance and efficiency.

We are proud of our achievements and our reputation as a leading manufacturer of rotary dies, magnetic cylinders and printing accessories. We have been serving the printing and packaging sector for over 15 years, delivering solutions that enhance productivity and quality. We are always looking for new challenges and opportunities to expand our horizons and grow our business.

*We are Inspired by Innovation,
We are ROTOMETAL.*

Grzegorz Dollnick
CEO Rotometal



Our strengths

Cutting units • Cutting technology
Printing technology • Accessories

Our customers are mainly printers, but also the world's largest manufacturers of printing and converting machines. Most of the production is exported, but a large part of it remains in Poland. Precise workmanship, maintaining high quality of offered products at every stage of production, competitive price, have enabled the company to compete with the largest suppliers of this type of tools in the world.

Our strengths are:

- Ability to form long-term partner relationships with our customers
- Providing optimal manufacturing technology
- Great commitment to innovation
- Having our own in-house Design Engineering department
- Machine park equipped in modern CNC machinery
- Offering short lead times



Scan me for a factory
and product tour

Print Sleeves Comparison



	CRO Sleeve AL ANTISTATIC	CRO Sleeve AL Anodised	CRO Sleeve AL Standard
Inner core base layer			
Glass fiber	✓	✓	✓
Epoxy resin	✓	✓	✓
Bisphenol F	✗	✗	✗
Conductive auxiliary material	✓	✗	✗
Compensation base layer			
Elastomeric polyurethane material	Vulkollan	Vulkollan	Vulkollan
Volume layer			
3D Core Honeycomb	n/a	n/a	n/a
PU Rigid Foam	n/a	n/a	n/a
Outer base layer			
Glass fiber	✓	✓	✓
Polyester resin	✓	✗	✓
Epoxy resin	✓	✓	✓
Conductive auxiliary material	✓	✗	✗
Volume & surface conductivity			
	✓	✗	✓ (surface only)
External layer			
Anodised aluminum pipe	✗	✓	✗
Hydrophobic layer	n/a	n/a	n/a
ShoreD Hardness			
Epoxy stem	n/a	n/a	n/a
Polyester stem	n/a	n/a	n/a

CRO Sleeve GF

ANTISTATIC CRO Plate Mounting Sleeve

NEW! ECO CRO Sleeve GF ANTISTATIC

ECO CRO Sleeve GF

SIL CRO Sleeve GF

Inner core base layer

✓
✓
✗
✗
Glass fiber
Epoxy resin
Bisphenol F
Conductive auxiliary
material

Compensation base layer

Vulkollan
Elastomeric polyurethane
material

Volume layer

PET
PU
3D Core Honeycomb
PU Rigid Foam

Outer base layer

✓
✓
✓
✗
Glass fiber
Polyester resin
Epoxy resin
Conductive auxiliary
material

Volume & surface conductivity

External layer

✗
✓
Anodised aluminum pipe
Hydrophobic layer

ShoreD Hardness

80-90
70-80
Epoxy stem
Polyester stem

✓
✓
✗
✗

Vulkollan

PET
PU

✓
✓
✓
✗

✗

✗
n/a

80-90
70-80

✓
✓
✗
✓

Vulkollan

PET
PU

✓
✓
✓
✓

✓

✗
n/a

80-90
70-80

✓
✓
✓
✓

Vulkollan

100% rPET
ECO PU

✓
✓
✓
✗

✓

✗
n/a

80-90
70-80

✓
✓
✓
✗

Vulkollan

100% rPET
ECO PU

✓
✓
✓
✗

✗

✗
n/a

80-90
70-80

✓
✓
✗
✗

Vulkollan

PET
PU

✓
✓
✓
✗

✗

✗
✓

80-90
70-80

CRO Sleeve Print Cylinders

Composite Rotometal Sleeves (CRO)
are ultra-light Printing Cylinders.

Using the latest composite production techniques, we produce our sleeves from the composite itself. This allows the use of other materials such as PET, Polyurethane, Polyester or very durable Epoxy resins.

Our sleeves work with the following substrates:

- PE
- PP
- PVC
- PET
- LDPE
- OPP
- HDPE
- PVC
- PAPER
- RETRACTABLE FILM
- ALUMINUM
- BOPP

Our sleeves work with the following inks:

- Water-based
- Solvent-based
- UV
- EB

Additional features:

- Rubber ring to protect the sides from shocks
- Customization
- Codes, names can be engraved
- RFID chip
- Notches of different types, also on both sides





DFTA



DFTA Test

The inks:

→ Solvent-based

Printer:

→ BOBST F&K Flexpress 6S/8

Technical data:

- Eight printing units
- Width 1300mm - Printing width 1285 mm
- Max print speed 500 m/min
- Solvent-based inks
- Anilox: 420 L/cm; 3,6 cm³/m² (Width 1330 mm / Diameter 162,36 mm)
- Hard plates used - Digital ACE 1.14
- Hard adhesive used - DuPont DPR 045

The result:

- Colour deviation: Rotometal 0,07 vs. Competitors 0,100
- Less rebound
- Smooth print performance
- High overprint compensation and speed variations
- Impressive stability at 500 m/min - vibration absorption
- Good contrast

CRO Sleeve Glass Fiber Print Cylinders

Composite Rotometal Sleeves (CRO)
are ultra-light Printing Cylinders.

Using the latest composite production techniques, we produce our sleeves from the composite itself or composite with an aluminum layer. This allows the use of other materials such as PET, Polyurethane, Polyester or very durable epoxy resins.

Technical details

Base layer

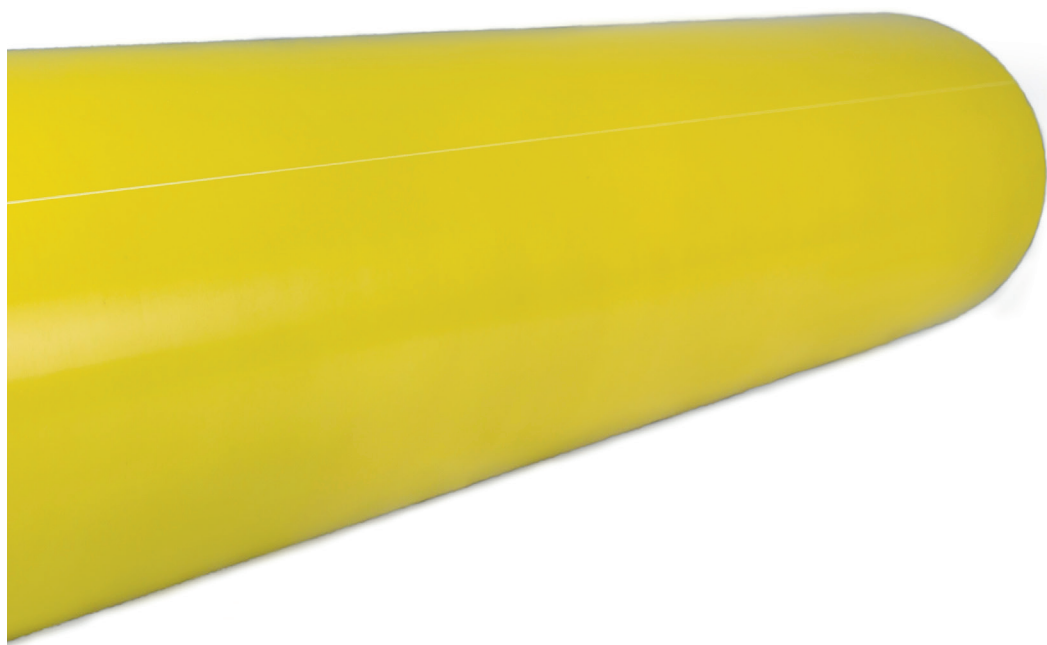
- Made of glass material and epoxy resin (customizable chemical composition)
- High thermal resistance
- High dimensional stability
- The possibility of placing additional information
- High core flexibility thanks to customisable chemical composition

Compensating layer

- Vulkollan, extremely resistant and resilient
- Thermal resistance up to 110C
- Fast shape recovery, up to 60% energy return
- Protected with a layer of reinforced resin

Layers responsible
for the behavior
of the sleeves
during application
on the mandrel





Technical details

About **products**

Layers responsible
for weight
reduction
and surface life:

Volume layer

- Light 3D core material with honeycomb structure made out of PET or PU material. Material use dependent on the size of cylinder to gain the optimal weight
- **PET**: Closed volume; Less resin
- **PU**: Ultra light; Rigid foam

External layer

- Glass material saturated with colored resin
- Possibility of making any color
- High hardness 80-90ShD and dimensional stability
- High mechanical resistance

Improvement
of product life

Special lock

- Milled
- Fixed using adhesive
- The fasteners hide under protective rubber

Safety rubber

- Outer diameter perfectly matched
- High mechanical resistance

Plate Mounting CRO Sleeve GF **ANTISTATIC**

CRO Plate Mounting Sleeves have been designed to be the best print cylinder for solvent inks.

Using the latest production techniques we produce our sleeves with a base composite layer with an ANTISTATIC carbon coating. This coating has excellent conductivity that has been independently credited by a laboratory. This combination means our CRO Plate Mounting Sleeves are recommended and designed for solvent inks.

Technical details

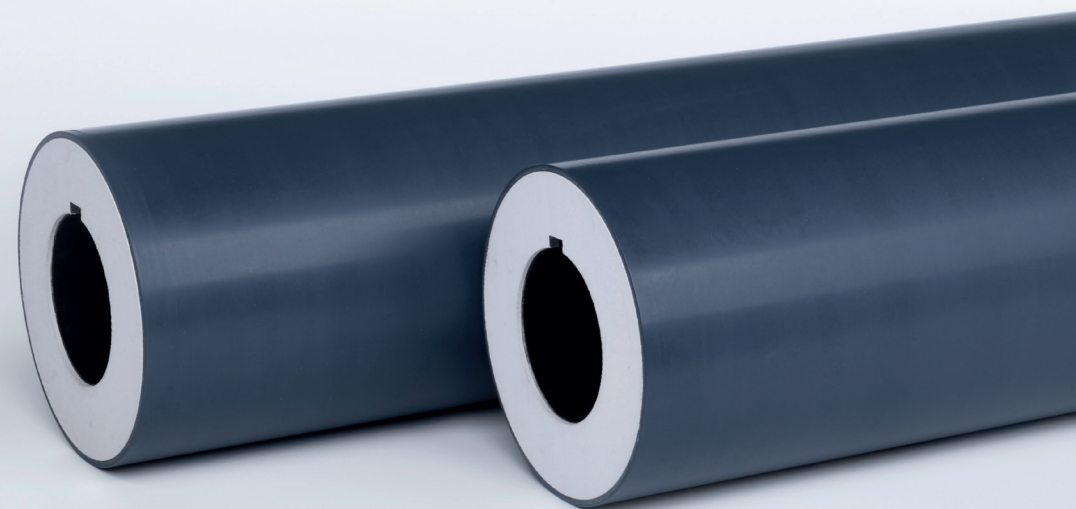
Base layer

- Made of glass material and epoxy resin
- High thermal resistance
- High dimensional stability
- The possibility of placing additional information

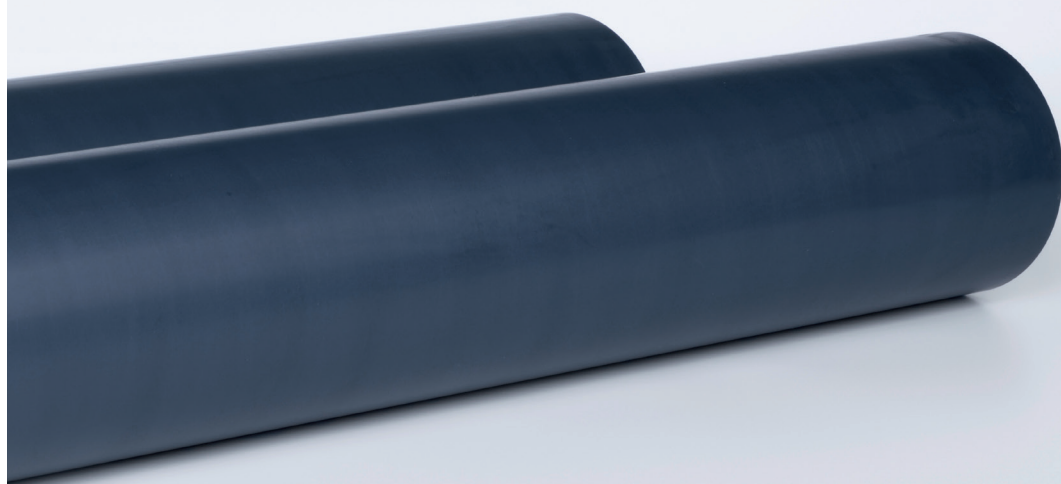
Compensating layer

- Vulkollan, extremely resistant and resilient
- Fast shape recovery, up to 60% energy return
- Protected with a layer of reinforced resin

Layers responsible for the behavior of the sleeves during application on the mandrel



Technical details



Layers responsible
for weight
reduction
and surface life:

Volume layer

- Honeycomb, PET or XPS materials
- High thermal and chemical resistance
- Closed volume - less resin
- Reduction of weight

External layer

- Custom ANTISTATIC carbon coating
- Surface conductivity value $< 10^5$ Ohm
- Value of cross conductivity $< 10^6$ Ohm
- Safety certified by an independent accredited body
- Colour - Steel Blue

Improvement
of product life

Special lock

- Milled Fixed using adhesive
- The fasteners hide under protective rubber

Safety rubber

- Outer diameter perfectly matched
- High mechanical resistance

NEW!

ECO CRO Sleeve GF **ANTISTATIC**

Sustainable and safe printing solution for flexographic Industry designed to work with solvent-based paints.

Designed for use with solvent-based paints, the ECO CRO Sleeves GF ANTISTATIC Print Cylinders incorporate carbon materials for charge dissipation and reduced surface resistance. This ensures safe production by discharging static charges generated during printing.

Technical details

Base layer

- Bio- based (28% of plant content) epoxy resin reinforced with Glass Fibre
- Vulkollan - polyurethane fast shape recovery rubber - thermal resistance up to 110C

Volume layer

- Light 3D core material with honeycomb structure made out of 100% recycled PET or ECO PU material made out of natural raw materials.



Technical details

External layer

- Bio- based (28% of plant content) epoxy resin reinforced with Glass Fibre with 80-90 Shore D hardness
- Glass fibre reinforced free of styrene polyester resin with 70-80 ShoreD hardness
- Custom ANTISTATIC carbon coating
- Surface conductivity value $< 10^5$ Ohm
- Value of cross conductivity $< 10^6$ Ohm
- Safety certified by an independent accredited body
- Colour - Dark Green

Improvement of product life

Special lock

- Milled
- Fixed using adhesive
- The fasteners hide under protective rubber

Safety rubber

- Outer diameter perfectly matched
- High mechanical resistance



NEW!

ECO CRO Sleeve GF

ECO Cro Sleeves GF are the sustainable,
eco-friendly alternatives to
the regular CRO Sleeve GF.

Our ECO composite sleeves are manufactured using the perfect
blend of traditional and sustainable materials.

Technical details

Base layer

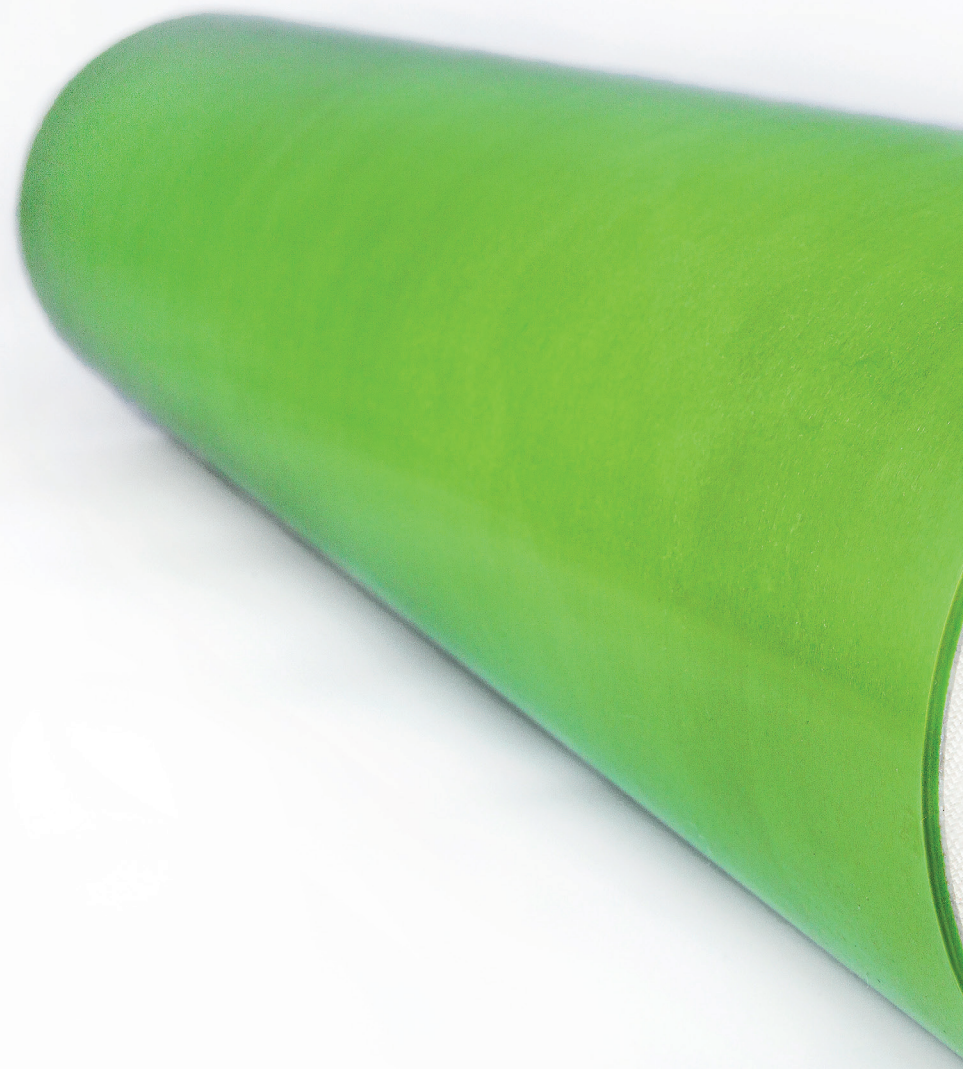
- Bio- based (28% of plant content) epoxy resin reinforced with Glass Fibre
- Vulkollan - polyurethane fast shape recovery rubber - thermal resistance up to 110C

Volume layer

- Light 3D core material with honeycomb structure made out of 100% recycled PET or ECO PU material made out of natural raw materials.

External layer

- Bio- based (28% of plant content) epoxy resin reinforced with Glass Fibre with 80-90 Shore D hardness
- Glass fibre reinforced free of styrene polyester resin with 70-80 ShoreD hardness





Technical details

Improvement
of product life

Special lock

- Milled
- Fixed using adhesive
- The fasteners hide under protective rubber

Safety rubber

- Outer diameter perfectly matched
- High mechanical resistance

SIL CRO Sleeve GF

The outer layer of the SIL CRO Sleeve has a physical and chemical treatment that creates a hydrophobic barrier.

SIL CRO Sleeve GF is dedicated to processes where the easy assembly and disassembly of double-sided foams are required. They are designed to help printing houses where the speed of changeover plays a significant role in the output of the manufacturing process.

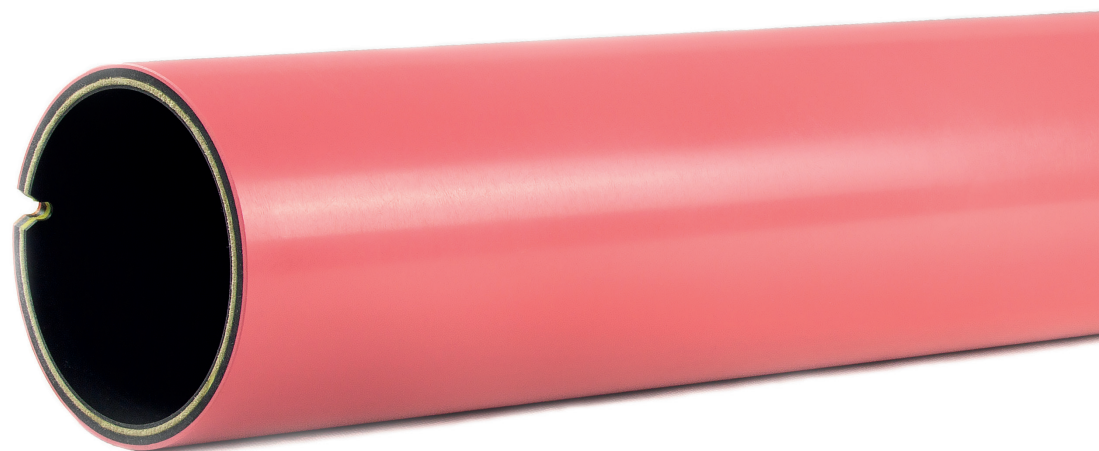
The outer layer of the sleeve has a physical and chemical treatment that creates a hydrophobic barrier. The hydrophobic barrier is permanent over time, significantly reducing the problems caused by moisture. This means it retains its dimensional stability better than the market standard sleeves.

These sleeves are dedicated to water and UV inks. They also excel where high dimensional stability of the sleeve and high print quality is required.

Technical details

Base layer

- Glass fiber reinforced epoxy resin based on Bisphenol A with chemical composition
- Vulkollan - polyurethane fast shape recovery rubber - thermal resistance up to 200C



Technical details

Volume layer

- Light 3D core material with honeycomb structure made out of PET.
- Hydrophobic duroplast added to prevent humidity absorption

External layer

- Glass fiber reinforced polyester resin with UV and chemical treatment
- Specially activated surface prior to imparting hydrophobic properties
- Super hydrophobic properties

Improvement of product life

Special lock

- Milled
- Fixed using adhesive
- The fasteners hide under protective rubber

Safety rubber

- Outer diameter perfectly matched
- High mechanical resistance

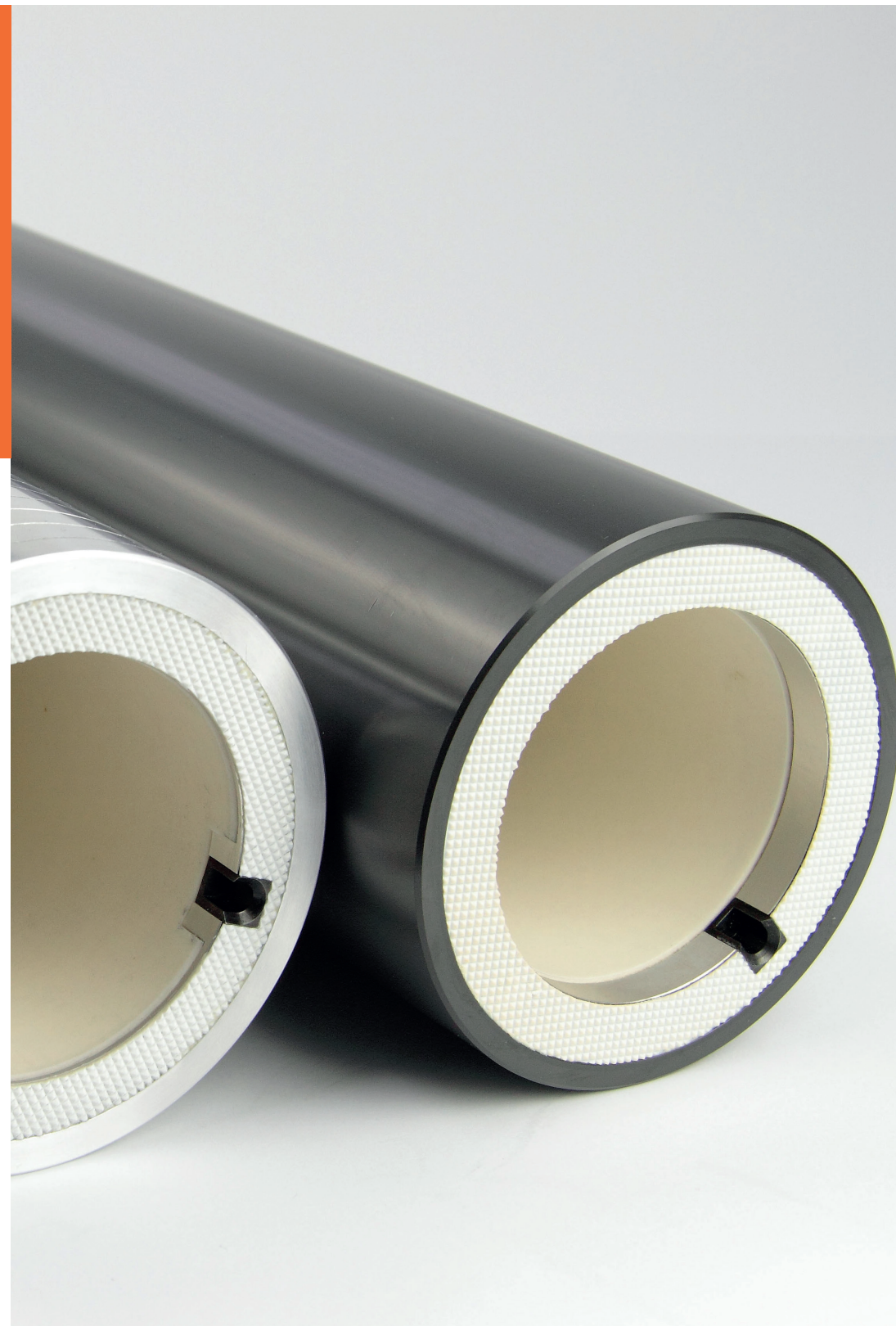


CRO Sleeve Aluminium Print Cylinders

In our product range, modern sleeve print cylinders can also be found. These cylinders can be produced using aluminum as a working surface. The surface can be supplied as a standard or with an anodized finish. Easy and fast assembly, high working precision are very good arguments for using them. Less waste during the mounting of plates, better adhesion of the tape and reduced weight are also their advantages.

Technical details

- Easy and fast assembly on air mandrel thanks to high core flexibility thanks to customisable chemical composition
- High accuracy
- High durability inner core
- Scratch proof
- Light construction
- Horizontal and vertical guide lines for easy plate assembly
- ANTIFRICTION coating available
- Short manufacturing lead time



Anilox Sleeve Base

Maximum length - 1800 mm (71")
Diameter from 80 mm (3") to fi-200mm (8")
Lightweight construction
Easy assembly and disassembly
Working pressure 4.5-8 bar

The base for the anilox sleeve is finished with stainless steel rings for better corrosion protection.





Rotometal DBN Sp. z o.o.
Jana III Sobieskiego 14
66-200 Świebodzin, Poland

Tel +48 68 459 46 05
Mobile +48 728 471 035
Fax +48 68 459 46 06
biuro@rotometal.pl

www.rotometal.pl



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