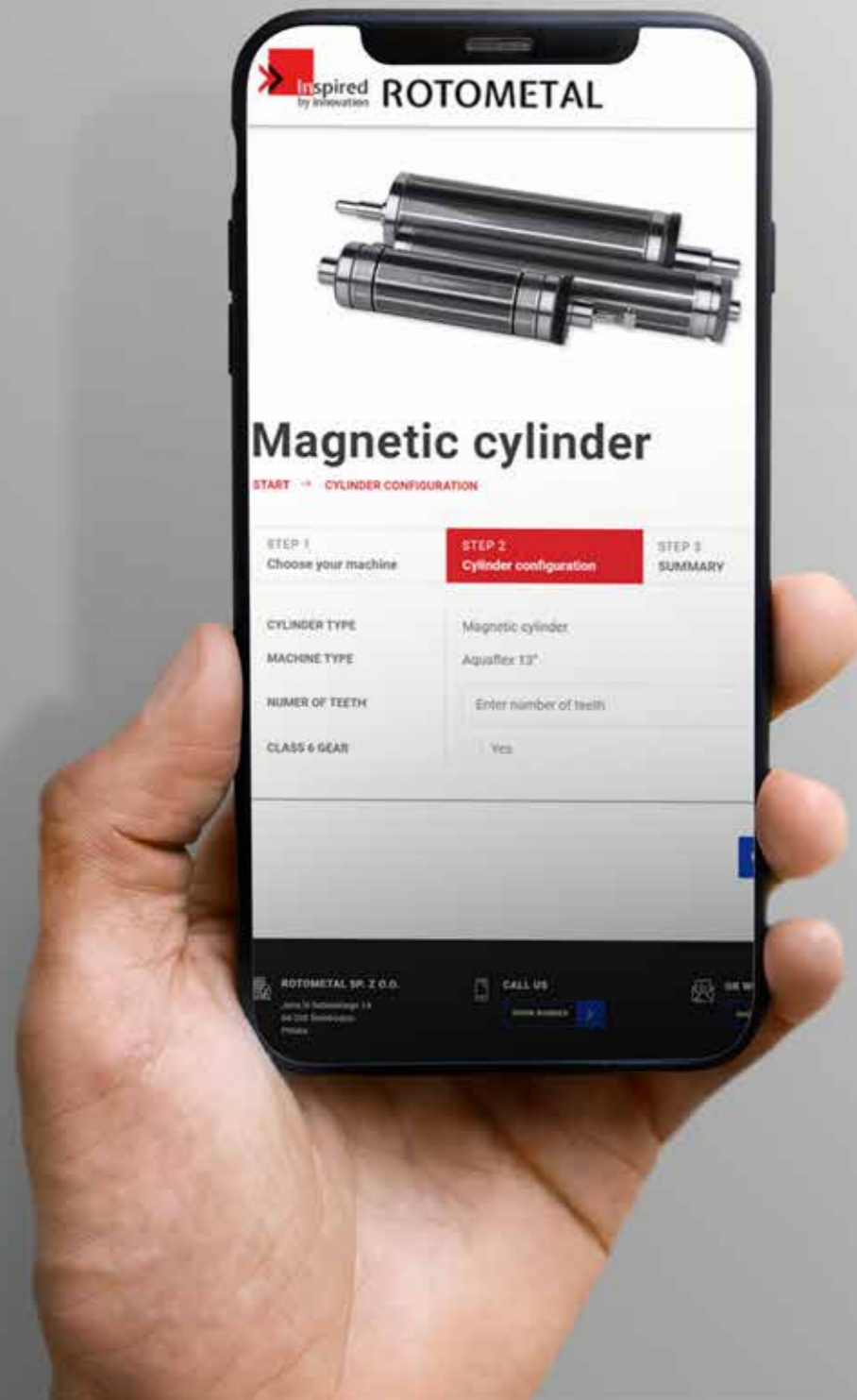




ROTOMETAL
we are for print

Product
Catalogue
2022/2023



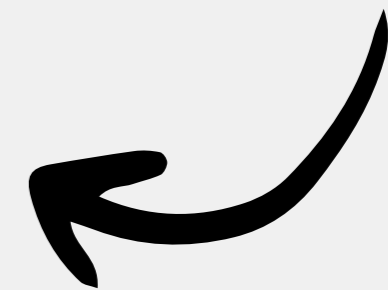
**Your next
cylinder is
just 3 clicks
away**

1. CHOOSE
your product



2. CHOOSE
your machine

3. CHOOSE
your configuration



rotometal.pl/rotoshop

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.

We are Inspired by Innovation

2021 seen us launching pioneering products and technologies such as IMAG, CRO GF or ANTIFRICTION. However, innovation does not end when a new idea is generated, nor does it stop when that idea is realized and ready for market.

That's why we believe that 2022/23 will be incredibly exciting for us and for you as we have even more innovation, improvements and ideas coming very soon.

We are Inspired by Innovation,
We are ROTOMETAL.

Grzegorz Dobniak
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

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

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

Volume layer

- Light 3D core material with honeycomb structure made out of 100% recycled PET

External layer

- Glass fibre reinforced Bisphenol F epoxy resin with 80-90 Shore D hardness
- Glass fibre reinforced free of styrene polyester resin with 70-80 ShoreD hardness

**Technical**
detailsImprovement
of product life

Special lock

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

Safety rubber

- Outer diameter perfectly matched
- High mechanical resistance
- Aluminum products can be protected

NEW!

RAG System

Rotometal Adapted Gap (RAG) System is an adjustable Anvil Cylinder that allows precise adaptation of the gap between Anvil and the Magnetic Cylinder, guaranteeing the highest possible quality of the punching process.

Thanks to the use of Rotometal's adaptive system, the gap can be adapted depending on the variables. These can include die wear, quality and thickness of the substrate or other variables that may adversely affect the quality of punching.

The control is carried out by means of 2 knobs placed according to your requirements. Each of the knobs independently controls one of the tracks, adjusting the gap for the best punching quality. RAG System can successfully replace an existing Anvil cylinder, making the work easier and more efficient.



Technical details

Advantages

- The ability to replace your current Anvil
- The gap can be adjusted every 0.5 μm
- Adjustment for each side of the cylinder both during standstill and during operation
- Adjustment range +/- 100 μm

RAG System includes

- RAG Cylinder
- Support cylinder
- Control knobs with indicator

NEW!

Aluminum Magnetic Cylinder

Rotometal introduces a new type of magnetic cylinder: MCA. It is a new product family that provides all the features of the standard MCs currently available, while optimizing cylinder weight and shipping costs..

The aluminium alloy used in MCA cylinders is used in the aviation and space industries, ensuring low weight with very high strength and high hardness.

We recommend making cylinders in the new technology for cylinders over 120T, which ensures a weight reduction of nearly 50%, facilitating assembly, disassembly, use of the cylinder and its storage.



Technical details

The new technology retains all the most important parameters of the standard technology:

- Corrosion-resistant body
- Magnetic force maintained throughout the product life cycle
- Hardened raceways with a hardness above 60HRC
- Possibility of cylinder regeneration
- Easier assembly of flexible die thanks to the mounting line
- Possibility of making additional pins for additional protection against displacement
- axial runout precision -0.01mm (-0.0004"), cylinder gap 0.003mm (0.0001")
- Fast delivery time

Diameter up to 360 mm (14")
Total length up to 2000 mm (79")
Total weight up to 300 kg (661 lb)

IMAG Magnetic Cylinders

IMAG Magnetic Cylinders have been designed to optimize cylinder performance in the most effective way. We guarantee:

- ✓ Reduced weight that makes it easier to set up the machine and as a result shortens the time required to prepare for work.
- ✓ Light construction, which allows extending the life of the cylinder and gear. This also reduces the load on the machine components and associated tools.
- ✓ Reduced risk of damaging the magnetic part as a result of hiding delicate magnets inside the body.
- ✓ Anodized surface that gives protection against scratching of the cylinder surface.
- ✓ Savings related to lower transport costs and lower energy consumption due to the reduced weight.



Technical details

Body

- The body is made of aluminum
- Anodized Housing
- Coating hardness around 500HV
- Magnets placed internally

Bearers

- Hardened cylinder bearers with a hardness of 60 +/- 2HRC

Gears

- Standard
- Standard, hardened
- Hardened and ground

Advantages

- Cylinder weight reduction.
- Hiding the magnets inside the cylinder.
- Protection of the surface against scratching.
- Optimizing the performance of the tool.

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
- 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

Outer 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
- Aluminum products can be protected



CRO Plate Mounting Sleeve

Wide Web ANTISTATIC
Print Cylinder

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 verified by a registered body. 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

Outer 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
- Products can be protected



DFTA tested and certified (Stuttgart)

Antifriction Print Cylinders

ANTIFRICTION means greater efficiency
and productivity at the plant level.

Rotometal has developed a new method for hardening printing cylinders: ANTIFRICTION. It is a breakthrough solution that optimizes the friction properties and smoothness of the coating thanks to the use of the Polimeroxid®matrix, which is cross-linked with a special LF4 polymer over the entire thickness section.

The use of this innovative method in the production of our printing tools has resulted in exceptional surface smoothness while maintaining high hardness, around 450 HV, depending on the aluminum alloy used.

This pioneering solution has enabled us to produce tools with unprecedented performance properties, which, by combining high strength and optimal grip, distinguish us from other suppliers.

Preparing the cylinder for work has never been easier. Thanks to the ANTIFRICTION coating, the foam tape fixing the polymer sheets is easy to change and takes much less time.



Technical details

- Completely new Polymeroxid® - matrix
- High surface smoothness
- Coating hardness around 450HV
- Optimal foam adhesion
- Quick foam replacement without adhesive residue on the cylinder surface



Magnetic Cylinders

The use of the highest quality materials and the most modern CNC machines, which combined with many years of experience guarantees you the highest quality and precision of workmanship.

Our Magnetic cylinders are manufactured to a high quality standard that assures accuracy and consistency of the final product. Body made from nonmagnetic stainless steel provides an excellent protection against corrosion, does not deprive the strength of magnet power and enables high and equal adhesion of flexible die during use. Bearers made from high quality tool steel hardened above 60 HRC ensure long term and trouble-free performance. Optimum grip of flexible die is obtained by using ferrite magnets. For special jobs and better adhesion, strong neodymium magnets are recommended as an alternative or additional option. The light weight of the magnetic roll is also possible when the body is made from aluminum or is hollow inside. Minimum gap size tolerances guarantee the highest precision of cutting.



Technical details

- The cylinder body is made of high-quality, non-magnetic stainless steel for long-term corrosion protection
- Hardened bearers for hardness over 60 HRC ensure long life during use
- High punch adherence due to the use of special ferrite magnets to increase the attraction force
- It is possible to use neodymium magnets
- At the customer's request, to reduce weight, the body can be made of aluminum or hollow inside
- Possibility of cylinder regeneration
- Mounting line on the body to facilitate the assembly of the flexible die
- Possibility to install pins for additional protection against displacement of the die
- Precision -0.01mm (-0.0004") axial runout, 0.003mm
- (0.0001") cylinder gap
- Fast delivery time

Diameter up to 360 mm (14")
Total length up to 2000 mm (79")
Total weight up to 300 kg (661lb)

Anvil Cylinders

Anvil cylinders made of hardened tool steel. In order to achieve the highest manufacturing accuracy, these cylinders are manufactured on the most modern CNC machines.

Rotometal supplies Anvil Cylinders as well as Support Rollers made from high quality tool steel. Depending on the customer needs, it can be induction hardened or through hardened up to 62 +/- 2 HRC. Anvils can also be made as plus or minus cylinders to compensate for the difference in material thickness. Highest precision of execution ensures best possible pressure parameters, increases the lifetime, reduces the wear of dies, plates and press. Short manufacturing lead time.



Technical details

- At the customer's request, there is a possibility of induction hardening or through-hardening
- Guaranteed hardness of 62 +/- 2 HRC
- The possibility of making a variable diameter of the working surface

Sheeter (cross cutter)

Sheeters for perforating, cutting and kiss cutting. The tools are supplied with replaceable hardened blades

Our removable blade sheeters are precisely manufactured with CNC machinery to guarantee high center-to-center and square accuracy in order to provide best cutting effect. Two types of blades – for cutting and perforation - to suit different requirements. On customer request the slots can be located at equal or special position around the roll.

- ✓ Quick and easy blade replacement
- ✓ Exceptional manufacturing precision and accuracy
- ✓ High quality of cutting and perforation
- ✓ Fast setup time
- ✓ Wide range of cutting blades available

Technical details

- Two types of replaceable knives available - for cutting or for perforation
- Arrangement of knives tailored to customer requirements



Embossing Cylinders

Rotometal embossing cylinders make full use of all the advantages of the embossing technique. This consists of, in essence, squeezing the material between two hard forms - named male and female.

Our cylinders are produced for the method of cold embossing, i.e. creating a three-dimensional pattern in the embossed material by squeezing a die / matrix in order to emphasize the previously printed pattern, e.g. an inscription, logo or a decorative element.

An additional advantage of Rotometal embossing cylinders is that the pressing takes place at the ambient temperature.

Print Cylinders

Our print cylinders are made of special aluminum material or steel. The working surface can be anodized to protect it from scratching.

Our print cylinders are made of special aluminum material or steel. The working surface can be anodized to protect it from scratching. The plate cylinders can be made of tube to reduce the weight. All cylinders are supplied with standard gears, but for better quality of print we can also supply it with hardened and ground gear. Rotometal manufactures printing cylinders for all flexo machines.

- ✓ High accuracy
- ✓ Scratch proof
- ✓ Horizontal and vertical guide lines for easy plate assembly
- ✓ Short manufacturing lead time
- ✓ Repair service on customer request



Technical details

- Made of aluminum or steel
- The cylinder surface can be anodized, making it less susceptible to mechanical damage.
- The cylinder can be equipped with standard or hardened and ground gears to ensure high quality printing.

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
- High durability inner core
- Light construction



Anilox Sleeve Base

Maximum length - 1800 mm (71")
Diameter from 1800 mm (3") to fi-200mm (8")
Lightweight construction
Easy assembly and disassembly
Working pressure 6-8 bar

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



Air Cylinder

Air cylinders with an air adapter for applying rubber sleeves and sleeve printing cylinders. This solution allows you to work on the entire surface of the rubber sleeve and print endlessly.

Rotometal offers different kinds of tint kits for varnishing and other applications. The installation of the rubber is quick and easy. There are two collar rings to secure the rubber sleeve in position. This solution allows it to work on the entire surface of a rubber sleeve and enables an endless printing.

Technical details

- Work with a wide range and lengths of rubber sleeves
- Available also with adaptor for easy air supply
- Quick and efficient cylinder assembly
- Covers wide range of applications



Rubber Coated Cylinder Base

Rotometal offers bases for rubber coated cylinders.

Bases for rubber coated cylinders also known as varnishing cylinders, lacquering cylinders can be supplied for wide range of machines. The base cylinder can be made from steel or aluminum with various types of gears upon customer request.

- High precision workmanship
- Fast delivery time



End rings

We offer End rings made of aluminum in the standard or anodized version.

We supply End Rings made from aluminum in a standard or hard anodized version. Application of modern manufacturing technology enables us to provide the highest quality of this product. Available for almost all types of screen printing cylinders.

Technical details

- Available for most machines
- Different designs depending on the type of machine
- Short delivery time



Bearing housing

Bearing housing are an indispensable element of a magnetic cylinder, anvil, support cylinder, embossing cylinder or knife sheeter



Gears

We supply a variety of gears which are typically produced from steel, although other materials are also available.

We can supply a variety of gears which are typically produced from steel, although other materials are also available. Helical or spur teeth gears can be offered in standard quality and also hardened and ground to reduce the noise, eliminate backlash problem and to ensure high quality of print. On customer request the product can be customized to ensure individual requirements.



Technical details

- ✓ Possibility to use different materials
- ✓ High precision of execution allows the use in the latest machines
- ✓ Hardened and ground gears in print cylinders guarantee the highest print quality

Cutting Units

Perfect solution for small production and samples. Can be used as an additional module in existing machines.

Perfect solution for small production and samples. Can be used as an additional module in existing machines. Equipped with a Rotoset pressure control system. Different working widths and rotary tooling configuration. Manually or mechanically operated. The frame can be made from steel or aluminum. Designed to individual customer needs and expectations.

Technical details

- Width, configuration tailored to individual customer needs
- All elements made using high quality CNC machines
- Can be installed as an additional machine module
- Body made of aluminum or steel



Rotosetcontrol

Pressure gauges to regulate and monitor cutting pressure for rotary cutting tools. These ensure an efficient and controlled process for all cutting, notching or perforation tasks.

This easy-to-use system allows machine operators to monitor the force applied to the punching tools on easy-to-read gauges. The height of the set screw can be easily adjusted immediately after changing jobs with the quick-latch system. The working range of the manometer is max 160 bar. To meet our customers' expectations, it is possible to use pressure gauges with a reading in kN (max 12.5 kN). We can supply a gauge system that can be retrofitted to most die cutting stations.

- ✓ Available for most machines
- ✓ Various designs depending on the type of machine
- ✓ Reduces wear and damage to cylinders and flexible dies caused by the application of excessive pressure

Mobile Cylinder Rack

Rotometal supplies advanced storage solutions which make cylinder racking easy and convenient.

Cylinder storage rack is a safe and cost effective solution which protects the tools from accidental damages, maximize machine operator safety in the workplace and help organize working areas. Recommended for use where cylinders may be exposed to any possible equipment collisions. Available in standard and custom design for various machine configurations. Designed for safe and efficient storage and transportation. Allow the staff to work more efficiently by transporting more cylinders in one journey. Heavy duty rotating rubber wheels make it easy to maneuver, provide floor and cylinder protection and ensure safe movement.

- Safe movement of cylinders
- Easy access to the cylinders
- Easy identification of cylinders
- Can be set up for various sizes
- Safe movement of multiple cylinders - up to 4 sets of 10 cylinders with bearers
- Easy identification of various cylinder sizes
- Can be set up for various sizes
- Easy access to the cylinders



Stationary Cylinder Rack

Stationary storage racks are recommended where cylinders may be exposed to any possible damages caused by equipment collisions in a workplace.

This solution makes the cylinder racking easy and convenient. Wall mounted cylinder rack allows permanent designation of appropriate cylinder storage area. Modular construction enables simple and easy adjustment for various cylinder sizes depending on machine type.

- Two-level construction including mobile rack
- Safe movement of multiple heavy cylinders
- Can be set up for various sizes
- Easy access to the cylinders
- Safe storage of multiple cylinders for various machine types
- Can be set up for various sizes
- Easy identification of cylinders
- Easy access to the cylinders
- Modular construction
- Custom design



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