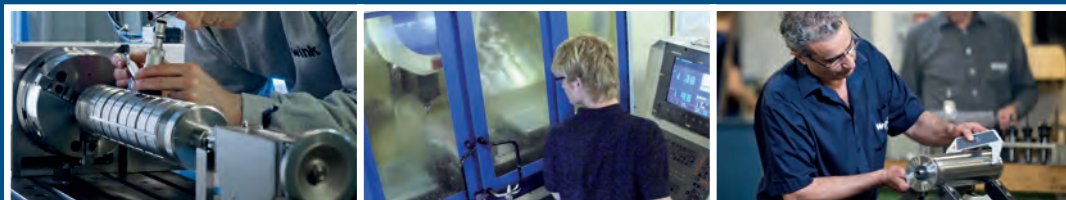




# Rotary Cylinders

Die-cutting and printing at the highest level



[www.wink.de](http://www.wink.de)

**wink**<sup>®</sup>  
*You cut, we care.*



## ALLROUND SOLUTIONS

We are a leading supplier of cutting tools for the graphic industry. As well as flexible and steel rule dies, we can also provide you with a wide range of cylinders and magnetic carriers. By using state-of-the-art CNC technology, we are able to guarantee optimum precision and maximum durability for our tools.

### Rotary diversity

Many of our cylinders are used for manufacturing self-adhesive labels. However, various other printed items from paper, cardboard and foil are also die-cut using Wink tools, including packages, envelopes, folders, tickets, tear-off coupons and tags.

Our dies are also used for hygiene and medical products made from non-woven materials (e.g. diapers, sanitary towels, plasters and bandages), as well as for many other items (airbags, gaskets, self-adhesive die-cut parts, keyboard foils, etc.).

There is a great variety of cylinder applications, so that it is barely possible to list them all. We will be happy to advise you on realising your individual rotary cutting solution.

**Our philosophy: You cut, we care.**

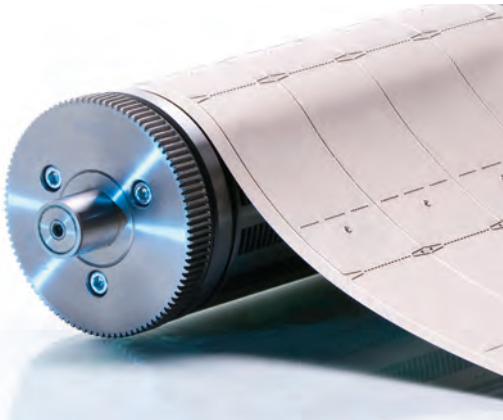






# BASIC EQUIPMENT

## MAGNETIC AND ANVIL CYLINDERS

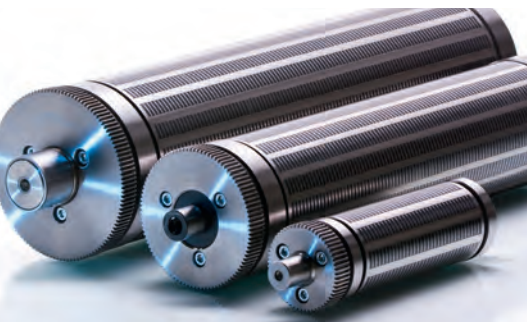


Excellent cutting results not only require an accurate flexible die. True-to-size magnetic carriers and anvil cylinders are equally vital. Only if all components are in flawless condition and perfectly adjusted, you will achieve premium cutting results. Wink provides you with all you need - with outstanding quality and fastest delivery times.

### Magnetic cylinders

We use the latest high-tech equipment to manufacture high quality magnetic cylinders in all standard dimensions, as well as special formats, if requested by our customers. Our magnetic cylinders stand out for their maximum precision, optimum adhesion and high durability.

In order to guarantee flawless cutting results, we strongly recommend to regularly have a check-up and gap measurement for all your magnetic cylinders. By using various grinding and repairing techniques, your cylinders can be restored to their original condition in many cases.



### ProMount aligning tool

Quite often, positioning of the flexible dies precisely onto the magnetic cylinder presents a challenge. However, using the compact aligning tool ProMount, the perfect installation of your flexible dies is made easily and quickly. Seven ProMount standard types are available for the most common narrow web machines and working widths.



### Magnetic flat-bed bases

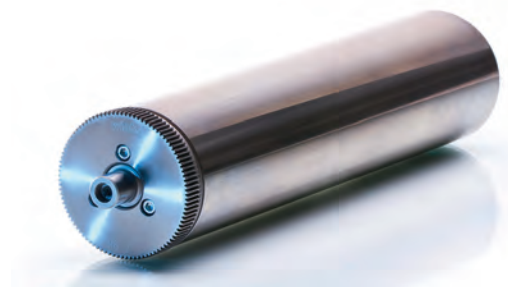
Like our magnetic cylinders, Wink magnetic bases are also precision-made using advanced CNC technology. Together with standard formats for normal flat-bed units, we also manufacture special formats on request. The extremely strong magnets guarantee perfect dimensional accuracy and prevent the flexible die from slipping.





## Anvil cylinders

Our anvil cylinders are characterised by their exemplary hardness and running accuracy. Whether you use a standard, plus or minus cylinder to compensate for a wide range of liners, thanks to its precision and ultra-fine surface condition, every Wink anvil cylinder is a quality tool that guarantees success. Anvil cylinders are available for all standard machine types and special designs are of course also possible.



### SmartGap® - Adjustable anvil cylinder

The variety of materials and thin liners are very demanding for all die-cutting components. By using the adjustable anvil cylinder SmartGap®, you become more flexible and will be able to adjust the gap to your specific needs with highest precision.

- gap adjustment by two scaled adjusting elements, mounted to the frame of the cutting unit (adjustment also possible during production)
- separate adjustment on both sides, e.g. to compensate for one-sided wear or tool inaccuracies
- very stable system (solid and supported cylinder body)
- no resonance/vibrancy problems
- no temperature increase in the cylinder
- cutting-through possible without problems



# MAXIMUM POWER

## POWERCUT® SOLID DIES

For many applications in narrow web printing, solid rotary dies continue to be the first choice, e.g. for cutting very thick labels, cardboard packaging and non-woven fabrics. Our PowerCut® cylinders are convincing because of their precision and long life. Each cylinder is manufactured using the latest CNC technology and adapted precisely to your individual requirements.

### POWERCUT®

#### Dimensions

- PowerCut® cylinders are hardened on principle and can be repeatedly reworked and resharpened.
- All common working widths and diameters are available, special sizes on request.
- Standard height of cutting lines is 1.2 mm, of course other heights and several cutting depths on one cylinder are also no problem.

#### Versions

- The **D2** version is made from tool steel and is well suited for kiss-cutting of standard papers and films and smaller runs.
- Made from high-quality tool steel, the **D3** variant comes with a significantly increased lifetime, especially suited for kiss-cutting and cutting-through in long runs.
- The **D4** version made of special tool steel meets the highest standards and is the ideal choice for very long runs and particularly abrasive materials (e.g. thick PVC or metal foils).

#### Wear protection: „Pro“ Coating

Our **Pro** coating against wear significantly increases tool life. In addition, we also offer other special coatings, which are adapted to particular customer requirements.







### Non-Stick coating

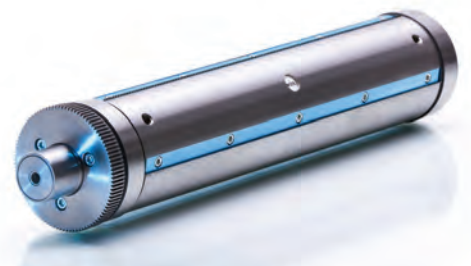
If desired, all PowerCut® cylinders are available with non-stick coating, which provides highly effective protection against ink and adhesive residues and thus makes for a smooth production process.

**NON ■ STICK**

### Sheeter and slitting cylinders

Wink also offers multifunctional cutting cylinders, e.g. for accurate perforating, cutting or kiss-cutting in various formats. Our sheeter cylinders are available for all common machine types and, of course, also in special designs. The well-established Wink clamping system guarantees cost-effectiveness, as the knives can be replaced and individually adjusted quickly, accurately and without any problems. We also stock replacement knives for all common designs.

In addition, we offer slitting cylinders in many versions. The wheels for slitting or perforating are adjustable across the web in a very easy and convenient way. Our slitting cylinders are also perfectly suited for punching holes, like used in continuous forms.



# KEEP IT CLEAN

## AIRTEC ROTARY DIES



The Wink AirTec system consists of rotary dies with a compressed air connection. The cut-out waste can be blown via air passage holes positioned around the cylinder, directly into the extraction unit which is attached to the vacuum system. This procedure guarantees that no waste is left stuck in the cylinder cavities or in web.

### Save waste removal

Wink AirTec cylinders are especially recommended for cutting difficult or thick materials. It is also possible to combine different cutting heights for simultaneous cutting-through and kiss-cutting.

AirTec cylinders are specially hardened by default to provide maximum durability. Our cylinders can be re-worked and re-sharpened several times.



## AirTec

### Specifications

- Material: high quality fully hardened tool steel ( $60 \pm 2$  HRC)
- Format: working width max. 510 mm (20")  
overall width max. 1.000 mm  
diameter min. 80 mm, max. 210 mm  
weight max. 200 kg  
shaft diameter min. 22 mm  
*Special sizes and dimensions on request*
- Air supply: through shaft, capacity min. 6 bar
- Cutting lines: standard height 1.2 mm; other heights and several heights per cylinder possible
- Tolerances: concentricity (true running accuracy)  $\pm 3 \mu\text{m}$
- Finishings: optionally with non-stick coating







## Accessories / Scope of delivery

### Basic package

- AirTec cylinder incl. gear (available in all common gearings and qualities)
- standard moment regulator for adjustment of air outlet [1]

### Additional components

- comfort variant of air moment regulator with fixing unit for air lance [2]
- vacuum system (incl. funnel, deflection roller and mounting material) [3]
- compressed air service unit (incl. air pressure regulator) [4]









# FLEXIBLE OPTION

## FLEXAIR® MAGNETIC CYLINDERS

The Wink FlexAir® system combines the advantages of solid die air systems with those of flexible dies. Air passage holes on the surface of the FlexAir® magnetic cylinder align exactly with the holes in the corresponding flexible die, so that the cut-out waste can be blown directly into the extraction unit which is attached to the vacuum system.

### Simply clevAir

This system is particularly beneficial for extended run applications where the additional extra cost is soon offset by the savings made on the cutting tools. When the cutting edge is worn you only have to replace the flexible die. This is considerably less expensive than removing the solid die and either repairing or replacing it.

## FlexAir®

### Specifications

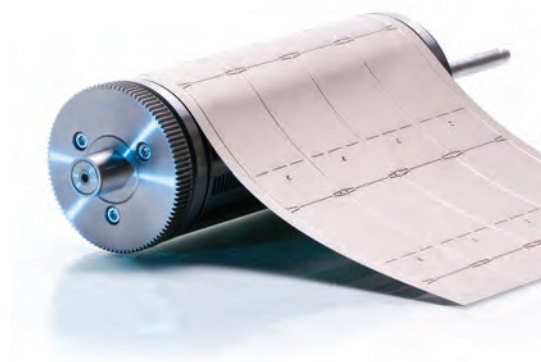
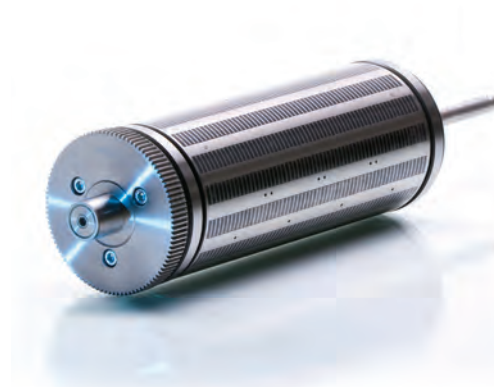
#### FlexAir® magnetic cylinder

- Dimensions: shaft diameter min. 22 mm  
minimum 85 teeth (1/8" CP)  
*Special designs on request*
- Air supply: through shaft, capacity 4-8 bar

#### FlexAir® dies

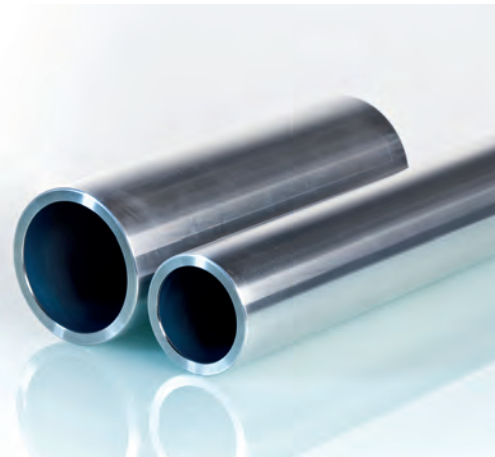
- Die height: 0.44 - 1.00 mm  
(depending on material and shape)
- Positioning: with aligning pins,  $\varnothing$  3 mm
- Cutting lines: tolerance  $\pm 2 \mu\text{m}$ , cutting angle 30-110°
- Finishings: laser hardening, MCR, MC plus,  
non-stick coating

For accessories, see AirTec system (page 9)



# IMPRESSIVE

## PRINTING AND HOT STAMPING CYLINDERS



### Printing cylinders

Print cylinders form the basis of every printing machine. We produce them with the greatest care and strictly adhering to OEM specifications, in close cooperation with the machine manufacturers. State-of-the-art CNC technology guarantees optimum fit and run-out accuracy.

- cylinder body made from aluminum
- available for all common narrow web machines, special designs possible based on drawings or samples
- positioning marks can be added (axial and radial) for easy mounting of the printing plates
- larger cylinder types also available as extra-light version which guarantees trouble-free installation
- optional hard anodized layer for increased service life
- gears available in all modules and qualities: DIN 8/9 (milled) or DIN 5/6 (ground), both versions optionally hardened

### Sleeve technology

In narrow web printing, sleeve technology has become very popular in recent years. In many new printing presses, the specially produced sleeves can easily be put onto the machine's carrier system with compressed air.

- sleeve cylinders made from aluminum, as an optimized version to conventional plastic sleeves
- very high and consistent accuracy, even when frequently changing sleeves, making it possible to print continuously without a seam
- minimum circumference 104 teeth (1/8" cp)
- optionally available hard-anodized

It is also possible to change over older machines to sleeve technology. For this purpose, we provide you with the suitable mounting unit for quick and easy sleeve mounting, so that changeover times are reduced to a minimum.





## Hot stamping cylinders

In addition to our printing cylinders, we provide a wide range of high-precision embossing cylinders for processing your labels and other products. Our hot stamping cylinders for gold and silver foils are manufactured with state-of-the-art CNC technology, thus ensuring most filigree contours and texts.







## ACCESSORIES & SERVICE

### Wink care sets

When cleaning and taking care of your cutting tools, we recommend that you use only Wink care products, which we have developed with the Fraunhofer Institut. Our care products do not damage your cutting tools, which therefore last longer. The Wink „Iso pro“ special cleaner removes ink and adhesive residues from flexible dies and cylinders, while Wink „Protec“ anti-corrosive can be used for oiling your tools before storing them away.



### ForceControl pressure gauges

Wink pressure gauges for adjusting and recording cutting pressure for rotary cutting tools provide you with an effective and controlled process for all cutting tasks. The pressure gauges can be easily positioned immediately after changing jobs using the quick snap lock system.

### Cylinder check and repairs

Frequent or incorrect handling of magnetic cylinders may change the standard gap and damage the bearers or anvil cylinder. This has a lasting detrimental effect on the cutting result. Rotary dies should also be examined regularly, in order to guarantee flawless production.

Solid dies as well as magnetic and other cylinders can be restored to an as-new condition. We recommend to have these revisions and repairs checked and done by Wink experts.

We can provide you with a detailed inspection of your cylinders' overall condition and dimensional accuracy. You will receive a measurement certificate with appropriate recommendations for each cylinder inspected. This service enables you to monitor the technical condition of the equipment and prevent quality losses.





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**wink®**  
*You cut, we care.*