

# SuperCut Flexible Dies

Maximum precision for your labels







www.wink.de www.wink-us.com





## **FLEXIBLE DIES**

### **MAXIMUM PRECISION**

We are one of the world's leading manufacturers of cutting tools for the graphic industry. With our SuperCut flexible dies, you are able to perfectly cut almost any conceivable narrow web printing product – from simple rectangles to multi-layer booklet labels.

#### Decades of know-how

For over 25 years, we have used state-of-the-art CNC technology to manufacture high quality steel flexible dies for the graphic industry. We manufacture your flexible dies precisely according to your requirements and adapt them to your particular application. At the same time, we guarantee uncompromisingly high quality standards, precision and durability.

#### Perfect dimensions and maximum flexibility

The SuperCut quality meets the highest standards. The cutting edge height and angle are individually adjusted to your specific needs. As well as kiss-cutting and through-cutting, special applications are no problem. Our evenly milled cutting edges guarantee minimum wear and tear.

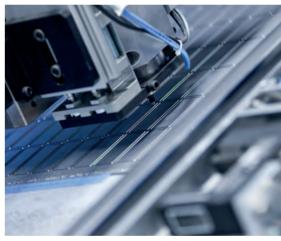
#### **Die-cutting experts**

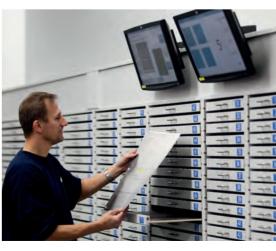
Our colleagues guarantee our success. All of them put our "You cut, we care" philosophy into practice every day and are driven by our common goal, which is to satisfy our customers. By means of regular training initiatives, we are continuously developing their knowledge, so that we will be fully equipped for all future market developments.

We make sure that you are able to die-cut without any problems.



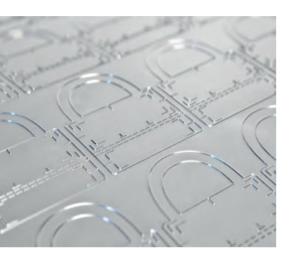


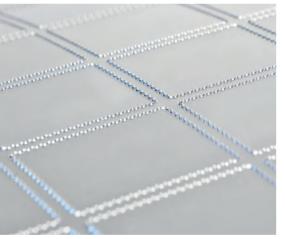


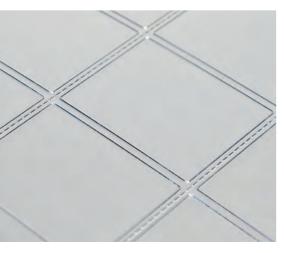


## **DIE-CUTTING SOLUTIONS**

### PERFECTION IN ALL AREAS







Our flexible dies are just as varied as the labelling sector and its applications. Every die is a unique item, adapted with microscopic precision to your special application. Because we know what die-cutting is all about.

#### **Diversity of applications**

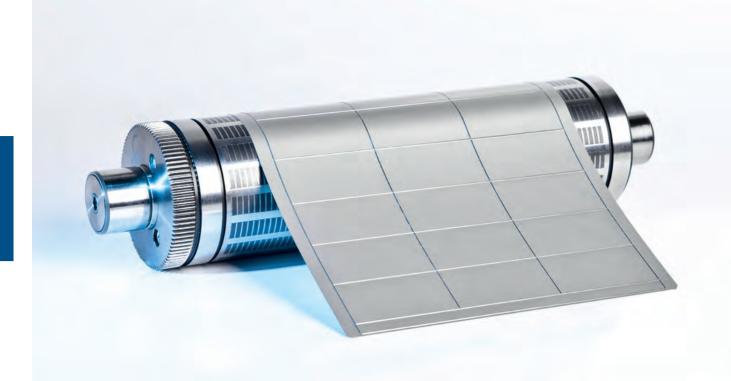
A major proportion of our SuperCut dies are used for the manufacture of self-adhesive labels in all conceivable forms and variations. However, many other narrow-web products are also successfully cut with Wink dies, e.g. in-mould labels, booklets, folded boxes, tickets, tear-off coupons and hang tags.

SuperCut flexible dies can be used rotary and flat. The cutting lines of the dies are perfectly adapted to their requirements, while kiss-cutting and cutting through, (micro) perforation and creasing can also be combined on one tool as required, so that you can efficiently execute even complex die-cutting tasks.

#### Proven quality and fast delivery

The very multifaceted range of applications makes the greatest demands on flexible die production. That is why only the most up-to-date machines are employed for exposure, etching, engraving and finishing the dies in our manufacturing. Added to this is the wealth of experience and the dexterity of our competent team. Our DIN ISO 9001-certified quality management guarantees a perfect and consistently high quality in our products as well as reliable dispatch with the fastest delivery times.













## **FINISHINGS**

### MAXIMUM OPERATING PERFORMANCE

Our SuperCut dies make convincing products because of their very high operating performance even in the basic versions. For certain materials and applications, however, it makes sense to increase the lifetime of a tool even further through special types of finishings.

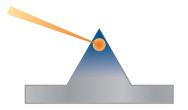
#### **Protection against wear**

In the die-cutting process, a flexible die is sometimes exposed to extreme stresses. Friction against the material makes the cutting edges blunter with time, so that flawless die-cutting is no longer possible. This applies, in particular, to abrasive materials (e.g. thermal paper, opaque white, fluorescent inks) and to large quantities. Our special coatings MCR and MC Plus considerably reduce these symptoms of wear

A high degree of wear also occurs with the cutting-through of materials, because the cutting edge hits the anvil cylinder directly. Wink laser hardening is recommended here to increase service life. A specially developed computer-controlled laser procedure produces a hardness of 66-68 HRC in the tip of the cutting edge.

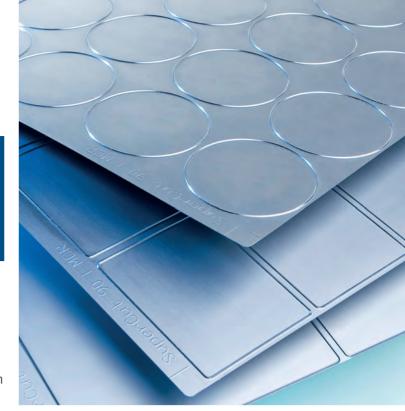


Coating (MCR, MC plus)



Laser hardening





#### **Overview of variants**

Our finishing options for flexible dies enable you to achieve maximum efficiency. The flexibility, tolerance and magnetic adhesion of the dies remain fully preserved with all coatings and hardening processes.

Finishing	Typical application	Quantities	Production time (die incl. finishing)	
Laser	Cutting through of filmic materials	medium - long runs	12 - 24 h	
MCR (Micro Chrome)	Kiss-cutting of very abrasive mate- rials (thermal paper, opaque white, fluorescent inks, etc.)	(very) long runs	24 - 48 h	
MCR + Laser	Kiss-cutting and cutting-through of very abrasive materials	(very) long runs	24 - 48 h	
MC Plus	Kiss-cutting and cutting-through of particularly abrasive materials with acute cutting angle (<70°)	very long runs	5-7 WD	

## **NON-STICK COATINGS**

### A NEAT SOLUTION FOR "STICKY" SITUATIONS



Wink Non-Stick coatings for flexible dies minimise adhesive and ink residues on the cutting edge and die surface, ensuring an uninterrupted manufacturing process. The flexibility and magnetic adhesion of our dies are not at all impaired by our Non-Stick coatings.

#### **Advantages**

- adhesive and ink residues on the cutting edge are minimised
- perfect and clean die-cutting results
- time saving due to less cleaning efforts
- longer tool lifetime
- can be combined with MCR coating and laser hardening on flexible dies (apart from Non-Stick Silver)

# Important information for the use of dies with Non-Stick coating:

Flexible dies with Non-Stick coating require a "running in" phase whereby the Non-Stick coating is removed from the very tip of the cutting edge. During this "running in" phase the cutting/stripping result may not be perfect, but this is only temporary. After this process completely normal operation of the flexible die is assured.



The Non-Stick coating is applied to the entire surface of the flexible die.



The top of the cutting line will be free of the coating after a short "running" in period.



#### **Four Non-Stick variants**

We offer you four different Non-Stick coatings, which are optimised for specific applications.

It is also possible to apply our Non-Stick coating on solid rotary dies and equipment (e.g. ink trays, guide rollers).

# NON II STICK

Variant	Typical application (Recommendation)	Non-Stick vs. adhesives	Non-Stick vs. ink	Production time
Black	Standard labels	•••	Ο	24 h
Grey	Standard and multi-layer labels, hotmelt adhesives	••••	•	24 h
White	Multi-layer labels, hotmelt adhesives	••••	• •	48 h
Silver	Protection plates (sheet- fed offset), ink trays	••	••••	24 h



## **PROSHIFT**

## LESS PRESSURE, MAXIMUM EFFICIENCY

Very often, labels include a high percentage of crosslines, e.g. rectangles. These shapes are fundamentally disadvantageous for die-cutting, however, and often cause problems in the die-cutting of lines across web direction. Help is at hand here with our ProShift® technology.

#### The ProShift® principle

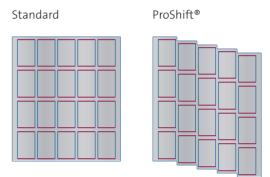
In a conventional, symmetrical arrangement of labels, the fact is that the greater the number and length of the crosslines, the more pretension is needed for these lines to be cut cleanly. With ProShift® flexible dies, however, the impressions are staggered in web direction. This reduces the length of the simultaneously cutting crosslines, so that the cutting pressure can be considerably reduced.

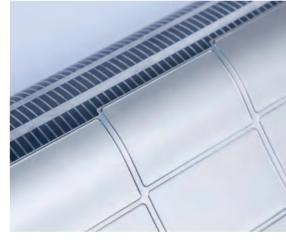
#### **Advantages**

The advantages of the ProShift® principle are not just in die-cutting. The staggered structure of the labels also has a positive influence on the printing results and increases overall efficiency:

- perfect cutting results with minimum pretension
- simple and stable matrix stripping
- considerable reduction in cutting noise
- longer lifetime of flexible dies and other machine parts
- shorter setup times due to simple adjustment of cutting pressure
- lower dot gain in printing and reduced "bouncing" of printing cylinders
- higher production speeds possible in many cases









## **ACCESSORIES**

## **OPTIMUM COMPLEMENTS**



We provide not only high-quality flexible dies for various areas of application, but also the corresponding accessories in outstanding quality. Because only with a perfect interaction of all components you will achieve the desired optimum die-cutting results.

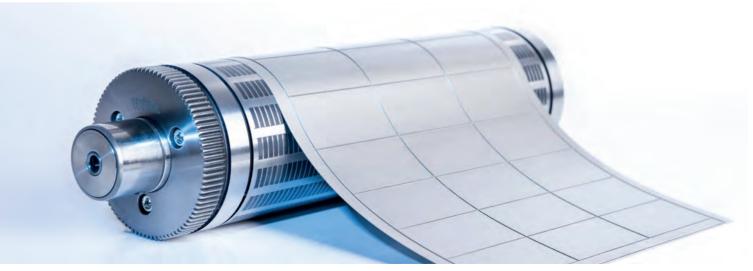
#### Magnetic cylinders and base plates

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



#### **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. ProMount fitting holes come as standard with ProShift® flexible dies and are available as an option for all new flexible dies.





#### FlexAir®

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.

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.

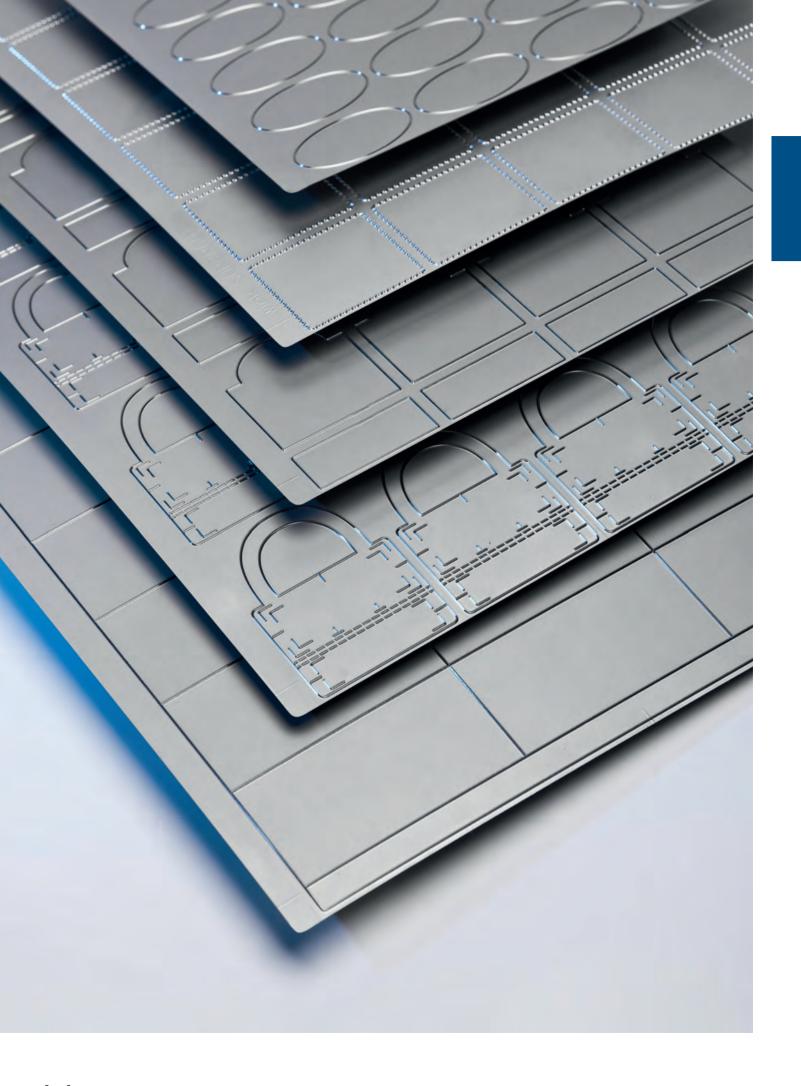




# Care products "Iso pro" und "Protec"

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.

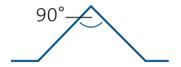
Our care products do not damage your cutting tools, which therefore last longer.



# **SUPER** CUT

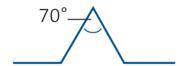
### **SPECIFICATIONS**

#### **Versions**



#### SuperCut 90

Standard adhesive papers, thermal papers



#### SuperCut 70

Films such as PE 85, PP, PET; also paper materials



#### SuperCut Special

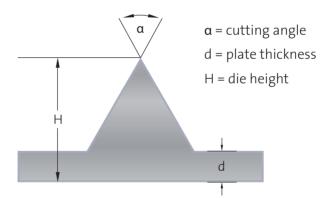
Special films and other materials which are difficult to die-cut

#### Technical data

■ Height tolerance: ± 0.002 mm

■ **Die height:** 0.32 - 1.50 mm (Euro norm: 0.440 mm)

 Cutting angle: 30 - 110° (depending on material)



### **Applications**

#### Rotary or flat usage:

kiss-cutting

cutting through

creasing

perforations

microperforations

## can be combined in one tool

#### For all common materials:

- adhesive papers and thermal papers
- PE, PP, PET, PVC, Tyvek etc.
- thin cardboard
- sandwich material / multi-layer materials

#### **Finishing options**

- Laser hardening
- MCR coating (Micro Chrome)
- MC plus coating
- Non-Stick coating (Variants: Black, Grey, White, Silver)



### **Contact**

