



**MDC DOCTOR BLADES.**  
**THE ORIGINAL FOR THE PAPER INDUSTRY.**



**Daetwyler**  
IBO Tec

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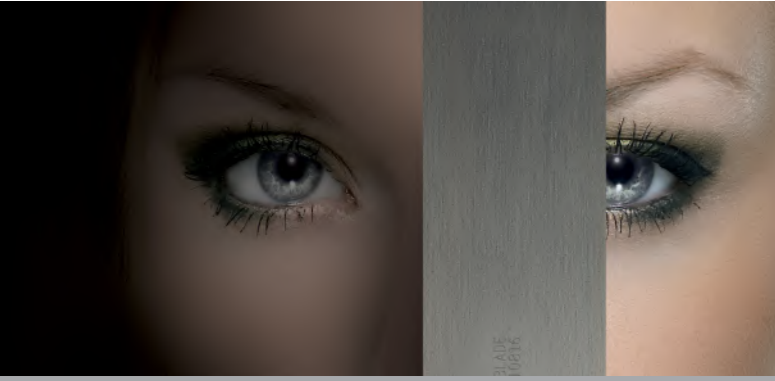
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## DAETWYLER SWISSTEC HEADQUARTERS.



### DAETWYLER SWISSTEC – THE MARKET LEADER

Daetwyler SwissTec – the innovative provider of high-quality doctor blades for any print application since 1972. The company headquarters in Bleienbach (Switzerland) is the competence center for both new and existing doctor blade technologies. As a globally active market leader in the printing industry, quality, innovation and a closeness to the customer are of prime importance at SwissTec.

### PRODUCTS

Daetwyler SwissTec develops and produces high-quality MDC doctor blades for all print applications. The diverse product range of coated and uncoated doctor blades and consumables offers advantages to customers from around the globe. The doctor blades meet the highest quality standards. Their development and production – particularly their coating – are among the core skills at SwissTec.

### ALWAYS ONE STEP AHEAD

Thanks to ongoing research and development, SwissTec is able to retain and further develop its leading position on the market. Our research center constantly strives to meet the increasing demands of the market.

With its commitment and tenacity in researching and developing new products, SwissTec aims to offer users maximum added value both now and in the future.

### AT YOUR SERVICE

With its trained specialists from the printing industry, SwissTec offers support to users on-site at their printing machine. In this way, print shops can receive the support they need when carrying out demanding orders – such as selecting the suitable doctor blade – in order to achieve perfect printing results.

Thanks to its expertise and commitment, SwissTec efficiently masters any challenge – including in your print environment.



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## DAETWYLER IBOTEC.



### DAETWYLER IBO TEC – A RISING STAR

Daetwyler IBO Tec in Lübeck is the research and development center of Daetwyler SwissTec. As market leader, we are constantly developing our company in order to continue meeting the needs of our customers.

Daetwyler IBO Tec is a rising star in the paper industry and specializes in doctor blades and paper knives. Thanks to the global distribution network of parent company SwissTec, the cleaning doctors developed in-house are available in all four corners of the world.

### IN-HOUSE DEVELOPMENTS

- The cleaning doctors developed in-house set our portfolio apart from the competition.
- We work out solutions together with the customer and our research and development department.

### COMPREHENSIVE PACKAGE

- In addition to the in-house developments mentioned above, we also cover standard applications and offer our customers added value accordingly.
- Thanks to our close ties with the printing industry, we have blades available for both longitudinal and cross cutters.
- Special products such as sealing blades for film presses or edge scrapers for coating machines are available.
- Training on doctor blades, cutting, cleaning and much more can be organized.
- We offer on-site support on your machine – worldwide.

### SERVICE

- Our specially trained, highly qualified technical staff are on hand to provide on-site support.
- We check the condition, parallelism, setting angle and operating angle of the beams and doctor blade holders.
- Assistance during the testing phase is guaranteed.

### ONGOING DEVELOPMENT

- Investments are regularly made in the machining and processing of composite materials and metals.
- Metal blades with high-performance ceramic coatings, ceramic/metal composites and tungsten carbide will be launched on the market in the near future. The finishing process is well established.
- We carry out finishing of our products in-house.

## DAETWYLER IBO TEC PRODUCTION AND DISTRIBUTION.



### HEADQUARTERS BLEIENBACH | SWITZERLAND

PRODUCTION | SALES | QM | HQ

Daetwyler SwissTec produces doctor blades for all applications seen in the printing industry. Only flawless raw materials are used when manufacturing our doctor blades. In our optimally equipped metallurgical laboratory, we examine and assess all steel qualities – all incoming and outgoing goods are inspected by specialists. This ensures that only doctor blades of the highest quality are delivered.

Production of the paper knives and doctor blades is carried out at company headquarters in Switzerland.



### LÜBECK | GERMANY

RESEARCH AND DEVELOPMENT

As market leader, we are constantly developing our company in order to also be able to meet the needs of our customers in future. We have opened a research and development center in Lübeck in order to drive the innovation process forward. Daetwyler IBO Tec also specializes in paper knives and doctor blades for the paper industry.

Thanks to the global distribution network of parent company SwissTec, the paper knives and doctor blades are available in all four corners of the world.



● Daetwyler sites

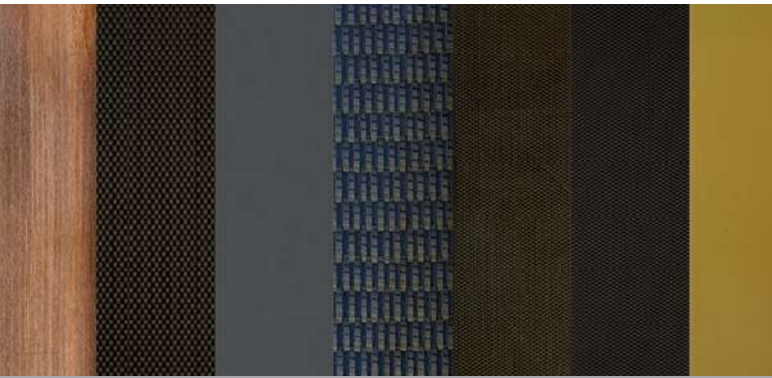
● Sales partners

Addresses can be found at: [www.daetwyler.com](http://www.daetwyler.com)

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## MDC DOCTOR BLADES FOR THE PAPER INDUSTRY.

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### IBO-CHQ

- 100% carbon-fiber fabric in a specially developed, tailored thermoset matrix
- Temperature-resistant to 160 °C
- Satisfies the highest demands
- Optimal wear resistance
- Optimal scraper performance
  
- Thicknesses: 1.50 mm / 2.00 mm
- Maximum length: 3,600 m



### IBO-CP

- 100% carbon-fiber fabric in a specially developed, tailored thermoset matrix
- Temperature-resistant to 160 °C
- Satisfies the highest demands
- Optimal wear resistance
- Optimal scraper performance
- Optimal cleaning performance with outstanding service life
- Market launch 2016
  
- Thicknesses: 1.50 mm / 2.00 mm
- Standard width: 76.0 mm



### IBO-GC02D

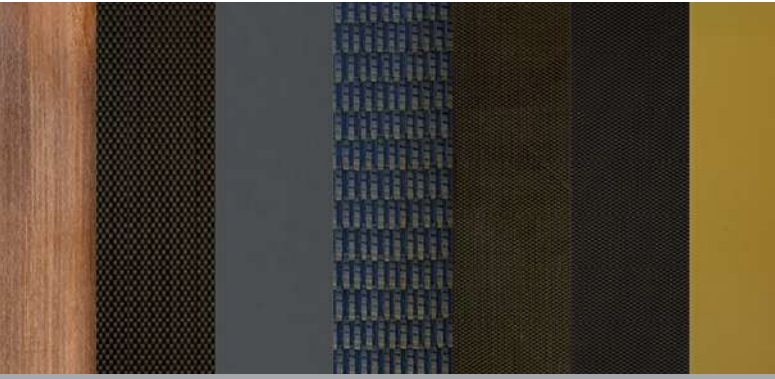
- Several layers of glass fiber and various thicknesses of carbon-fiber fabrics in a thermoset matrix
- Temperature-resistant to 160 °C
- The mixture of inlays achieves a very good cleaning effect
- High wear resistance
  
- Thicknesses: 1.50 mm / 2.00 mm



### IBO-GA

- 100% glass-fiber fabric combined with special abrasive particles in a thermoset matrix
- Temperature-resistant to 160 °C
- The particles are distributed evenly over the entire contact surface
  
- Thicknesses: 1.50 mm / 2.00 mm

## MDC DOCTOR BLADES FOR THE PAPER INDUSTRY.



### IBO-G

- Very fine glass-fiber inlay in a thermoset matrix
- Temperature-resistant to 160 °C
- Good cleaning effect
- Low friction
  
- Thicknesses: 1.5 mm / 2.00 mm



### IBO-GC04

- Four layers of carbon-fiber fabric and several glass-fiber layers in a thermoset matrix
- Temperature-resistant to 160 °C
- Even better wear resistance through higher carbon inlay
  
- Thicknesses: 1.50 mm / 2.00 mm



### IBO-BRONZE

- Best quality
- Carefully manufactured to ensure flatness and straightness
- Optimal results in terms of cleaning and run time in the dryer section
  
- Thickness: 1.25 mm



### IBO SEALING BLADE FOR FILM PRESS

- Slots instead of holes – laser-cut
- Precisely manufactured, absolutely burr-free
- Rounded edges
- Eliminates risks to the roll cover
- Suitable edge seals optionally available



Riveting according to customer wishes

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## CASE STUDY IBO-CHQ.

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### IBO-CHQ – THE BEST DOCTOR BLADE ON THE MARKET

- The optimized matrix developed in-house and the special production parameters ensure an extremely long service life and excellent cleaning efficiency.
- The ideal choice for avoiding blade changes in virtually all blade positions. This results in reduced down-times and a lower risk of injuries. The efficiency of the machine increases.

### RESULTS SEEN IN PRACTICE

#### EXAMPLE 1

- Raw material: 100% secondary fibers
- Product: Liner, fluting 120–150 gsm
- Machine speed: 450 m/min

#### RESULT

- Service life increased approximately fivefold

#### EXAMPLE 2

- Raw material: 100% secondary fibers
- Product: Carton 350–800 gsm
- Machine speed: 300 m/min

#### RESULT

- Service life increased approximately fivefold

#### EXAMPLE 3

- Raw material: 100% secondary fibers
- Product: Folding box board, liner, fluting
- Machine speed: 900 m/min

#### RESULT

- Service life increased approximately threefold

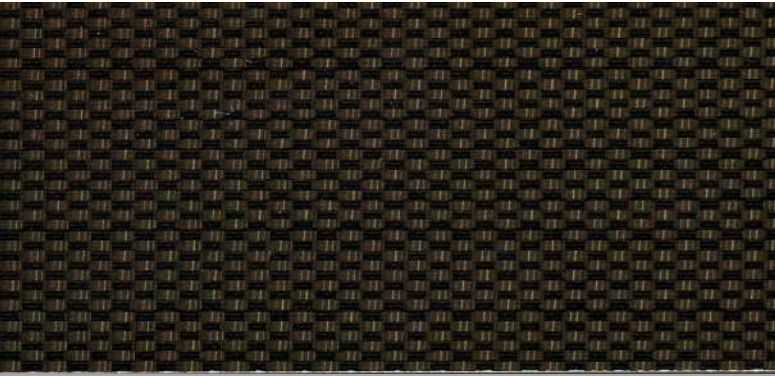




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## CASE STUDY IBO-CP.

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### IBO-CP – ANOTHER HIGH-PERFORMANCE CARBON CLEANING DOCTOR FROM DAETWYLER IBO TEC

#### PROBLEM

Splashing water gets underneath the cleaning doctor at certain positions. Water rings on the coater counter roll result in localized swelling of the paper web. In the worst case, the roll quality then suffers during winding.

The initial attempt to remedy the situation with IBO-CP was unsuccessful as the blade was too stiff.

#### SOLUTION

In order to solve the problem, the flexibility of the cleaning doctor in the cross-machine direction had to be increased whilst leaving the thickness of the scraper unchanged. A special bevel geometry was developed. Moreover, special finishing was also used.

#### RESULTS

The adapted cleaning doctor seals immediately following application. A start-up time as seen on other solutions is not necessary. Thanks to the material composition and retaining the scraper thickness, the geometry remains for a long period. The blade only has to be replaced after five to seven days when water rings begin to appear. Standard scrapers last for one day in operation, while special solutions from other manufacturers last for three days.



Wood-pulp printing paper is pre-coated on this coating unit (width 7,420 mm). The counter roll is cleaned with a spray bar and scraper system.

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## CASE STUDY IBO SIZE LIMITER.

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### SOLUTIONS FOR COATING-FREE EDGES / COATING COLOR RECOVERY

#### EXAMPLE 1 – PAGENDARM COATING

##### PROBLEM

The functional coating is pre-dosed with an application roll. A coating-free edge must be ensured for this coating composition, otherwise the edges of the finished roll will stick together.

##### SOLUTION

A penetrating scraper cleans the application roll and defines the coating width. The scraper holder can be moved. The bevel on the scraper ensures a defined return of the coating color back into the container. 100% carbon ensures a very long service life and excellent wear resistance. This guarantees a defined, consistent return of the coating color.



Example 1

#### EXAMPLE 2 – COATER COUNTER ROLL

##### PROBLEM

The rubber-coated counter roll on the coating system is soiled by residues from the expensive functional coating color.

##### SOLUTION

Scrapers developed in-house are used to clean the counter roll. The funnel feeds the coating color back into the container. The very thin scraper has a bevel, is coated and is absolutely burr-free. The corners are rounded off.



Example 2



# Daetwyler

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