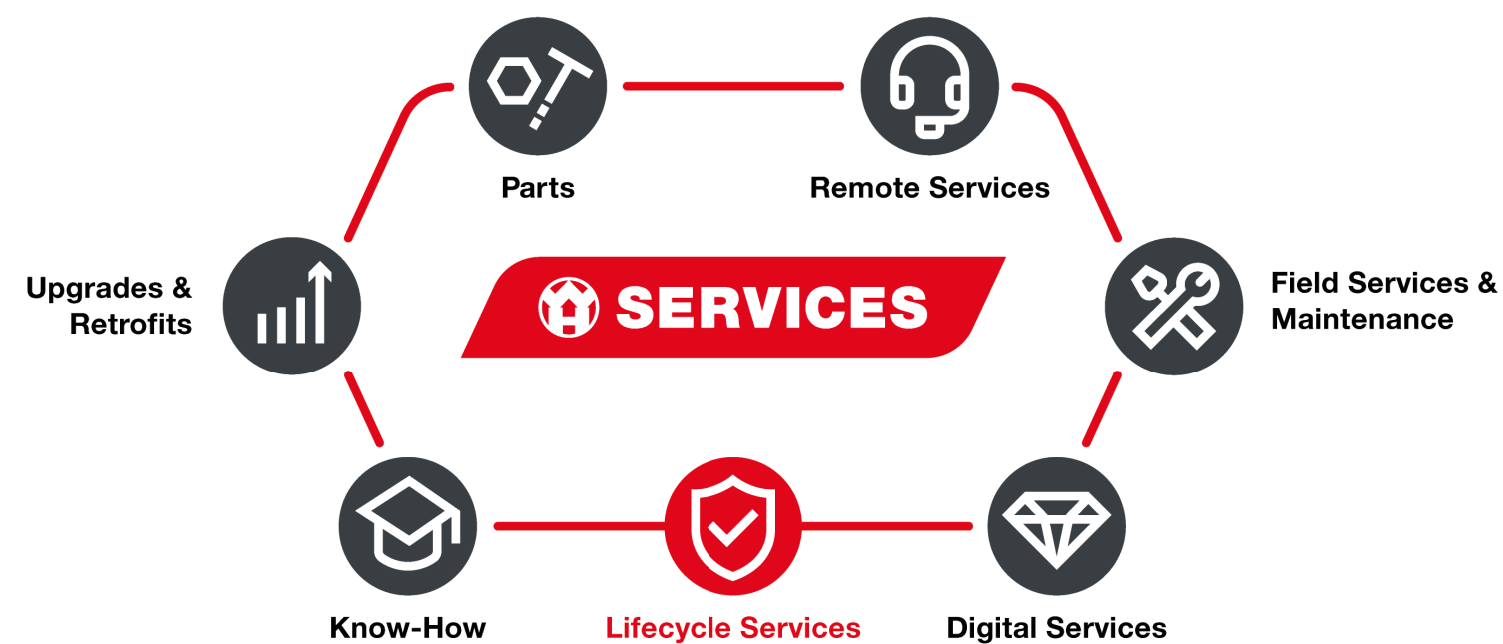


# CONSUMABLES FOR FLEXO PRINTING PRESSES



WINDMÖLLER & HÖLSCHER

SERVICES



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“ In particular, the individual consultation at our plant was helpful and qualified. We will continue to use the high-quality W&H Doctor Blade Chamber Seals in the future and can recommend them without reservation.

Andy Spengel  
Project Manager, Fibertex Personal Care AG

# CONSUMABLES FOR FLEXO PRINTING PRESSES



## Why Consumables?

Despite their often small sizes and costs, consumables have a big impact on production performance and product quality. There are major interdependencies between printing press, substrate and consumables such as ink, printing plates, doctor blades or doctor blade chamber seals. Choosing the right consumables therefore is crucial to get the most out of your printing machine.

W&H therefore offers a wide range of high-quality consumables for printing presses – originals as well as others especially adapted to W&H machines and the high demands of the printing process. In particular our portfolio includes consumables such as doctor blades and doctor blade chamber seals.

## Your advantages

- ✓ High-quality consumables especially developed for W&H printing presses
- ✓ Individual expert advice for your optimal consumables package
- ✓ Technical support for your production and printing related challenges
- ✓ Increased productivity and product quality
- ✓ Reduction of downtimes and set-up times

## Original W&H Consumables



### W&H Doctor Blade Chamber Seals

- Especially for W&H machines
- Highest quality
- For various requirements and applications



### W&H Doctor Blades

- Suitable for all machines
- Highest quality standards
- For various requirements and applications

## Individual advice

To ensure that you use the most efficient consumables for your needs, we will be happy to advise you personally. Simply contact your local sales manager or get in touch with our experts directly.

@ [consumables@wuh-group.com](mailto:consumables@wuh-group.com)



## Our advice includes

- ✓ In-depth expert analysis with reference to your machine, jobs, quality and productivity
- ✓ Identification of open potentials
- ✓ Compilation of an optimally harmonized consumables package
- ✓ Optimization of machine settings and the printing process
- ✓ Tips for professional machine operation
- ✓ Support with printing and production-related questions
- ✓ Improvement of productivity and product quality



Together we identify the optimal consumables for your W&H printing press to improve your performance and quality!



# W&H DOCTOR BLADES

High-quality doctor blades for optimum printing quality



### Why W&H Doctor Blades?

For optimum printing results, it is important to adapt the consumables to the requirements of the printing process and the machine.

While the doctor blade ensures clean ink application on the print substrate, it also has a sealing function. Only with the right specifications for each color deck you can avoid leaks and ensure first-class printing quality even at high speeds and long runtimes. This requires not only the selection of the right materials and dimensions, but also the correct grinding of a doctor blade.

W&H doctor blades meet the highest quality standards and are suitable for flexographic printing presses from various manufacturers. Our portfolio includes doctor blades for a wide range of applications. They are available in different materials and specifications - either as rolls for

### Your advantages




- ✓ High-quality doctor blades for different requirements
- ✓ Reduction of leaks
- ✓ Increased lifetime and productivity
- ✓ Clean ink application and consistent printing quality
- ✓ Individual consulting
- ✓ Pre-cut doctor blades

manual cutting or pre-cut to fit the most common working widths. This way you are optimally equipped for the challenges in your daily production.

### Advantages of pre-cut doctor blades

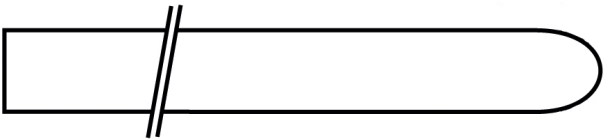
With the perfectly pre-cut doctor blades, you save the work process for manual cutting and can install the doctor blade directly into your machine. In this way, you ensure optimum interaction between the doctor blade, chamber end seals and anilox roller, and avoid problems such as leakage caused by incorrect cutting.

## Product overview

			
	<b>PREMIUM CARBON STEEL</b>	<b>CERAMIC COATED</b>	<b>STAINLESS STEEL</b>
Inking system	Solvent based inks	Abrasive inks Solvent based inks Water based inks	Water based inks Aggressive inks
Lifetime	● ● ● ○ ○	● ● ● ● ●	● ● ● ○ ○
Printing quality	● ● ● ● ○	● ● ● ● ●	● ● ● ● ○
Corrosion resistance	● ● ○ ○ ○	● ● ● ● ●	● ● ● ● ●
Available dimensions	35 x 0.15 mm 35 x 0.20 mm 35 x 0.25 mm 35 x 0.30 mm	35 x 0.15 mm 35 x 0.20 mm 35 x 0.25 mm 35 x 0.30 mm	35 x 0.15 mm 35 x 0.20 mm 35 x 0.25 mm 35 x 0.30 mm
Available grindings	Rounded Lamella	Rounded Lamella	Rounded Lamella

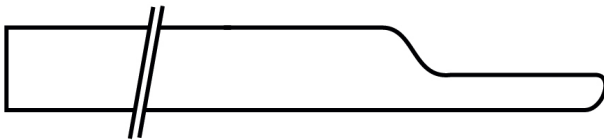
### Available grindings

In addition to the selection of the right material, the correct grinding of the doctor blade is also important. The grinding of the working edge controls the ink application and has a significant influence on the printing quality.



#### Rounded

The rounded grinding on the working edge ensures an optimal angle to the anilox roll and prevents problems such as back-doctoring and scoring lines. The increased lifetime offers cost advantages at high doctor blade consumption.



#### Lamella

The lamella doctor blade is the most commonly used doctor blade in flexo printing. The fine step ensures an optimal contact zone of the working edge with the anilox roller and guarantees highest printing quality.

# W&H DOCTOR BLADES MADE OF PREMIUM CARBON STEEL

The solution for solvent based inks



### Why a premium carbon steel doctor blade?

The multi-purpose doctor blades made of high-quality carbon steel are the optimum solution for the use of solvent based inks. They are gentle on the anilox roller and have a longer lifetime than conventional standard doctor blades. Thanks to their fine material structure, they protect the ink system from contamination and ensure consistently high printing quality.

### Your advantages

- ✓ Increased lifetime
- ✓ For solvent based inks
- ✓ Reduced anilox roller wear
- ✓ Short start-up times
- ✓ High printing quality
- ✓ Reduced waste

## Product overview

### 35 x 0.15 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.15 mm	100 meters	35083704	35083996
880 x 35 x 0.15 mm	60 pieces	35083984	35083997
1060 x 35 x 0.15 mm	60 pieces	35083985	35083998
1330 x 35 x 0.15 mm	60 pieces	35083986	35084012

### 35 x 0.20 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.20 mm	100 meters	35083705	35084022
1330 x 35 x 0.20 mm	60 pieces	35091849	35091858
1510 x 35 x 0.20 mm	50 pieces	35091851	35091860
1530 x 35 x 0.20 mm	50 pieces	35091852	35091861
1710 x 35 x 0.20 mm	40 pieces	35105004	35105010
1730 x 35 x 0.20 mm	40 pieces	35091853	35091862

### 35 x 0.25 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.25 mm	100 meters	35091612	35091613
1330 x 35 x 0.25 mm	60 pieces	35091854	35091863
1510 x 35 x 0.25 mm	50 pieces	35091855	35091864
1530 x 35 x 0.25 mm	50 pieces	35091856	35091865
1710 x 35 x 0.25 mm	40 pieces	35105009	35105011
1730 x 35 x 0.25 mm	40 pieces	35091857	35091866

### 35 x 0.30 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.30 mm	50 meters	35083707	35084023

# W&H DOCTOR BLADES WITH CERAMIC COATING

The solution for long runtimes and abrasive inks



### Why a ceramic coated doctor blade?

The ceramic coated doctor blades are characterized by a very high wear resistance. They are therefore particularly suitable for the use of abrasive inks such as white, silver or gold. They can also be used for both solvent based and water based ink systems. With their homogeneous surface, they ensure consistently high printing quality.

### Your advantages

- ✓ Very long lifetime
- ✓ For abrasive inks
- ✓ For solvent based and water based inks
- ✓ Reduced downtime
- ✓ High printing quality
- ✓ Reduced waste

### Abrasive inks

Abrasive inks have a high proportion of insoluble particles. They therefore cause particularly high wear on the doctor blade. In addition, coarse anilox rollers are often used for abrasive inks, which further increase wear. Therefore, we recommend the use of durable ceramic-coated doctor blades for abrasive inks.

## Product overview

### 35 x 0.15 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.15 mm	100 meters	35084024	35084040

### 35 x 0.20 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.20 mm	100 meters	35084037	35084053
1330 x 35 x 0.20 mm	60 pieces	35091867	35091877
1510 x 35 x 0.20 mm	50 pieces	35091869	35091880
1530 x 35 x 0.20 mm	50 pieces	35091870	35091881
1710 x 35 x 0.20 mm	40 pieces	35105012	35105014
1730 x 35 x 0.20 mm	40 pieces	35091871	35091891

### 35 x 0.25 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.25 mm	100 meters	35091616	35091617
1330 x 35 x 0.25 mm	60 pieces	35091873	35091893
1510 x 35 x 0.25 mm	50 pieces	35091874	35091894
1530 x 35 x 0.25 mm	50 pieces	35091875	35091896
1710 x 35 x 0.25 mm	40 pieces	35105013	35105015
1730 x 35 x 0.25 mm	40 pieces	35091876	35091897

### 35 x 0.30 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.30 mm	50 meters	35084038	35084054



# W&H DOCTOR BLADES MADE OF STAINLESS STEEL

The solution for water based inks



### Why a stainless steel doctor blade?

The stainless steel doctor blades are the optimal solution for the use of water based inks. With their special steel quality, they prevent corrosion and ensure consistently high printing quality even over long runtimes. In addition, they are also suitable for the use of aggressive inks with extreme pH values and guarantee clean ink application.

### Your advantages

- ✓ Corrosion resistant
- ✓ For water based inks
- ✓ For aggressive inks
- ✓ Increased lifetime
- ✓ Clean ink application
- ✓ High printing quality

## Product overview

### 35 x 0.15 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.15 mm	100 meters	35084055	35083810

### 35 x 0.20 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.20 mm	100 meters	35084068	35083807
1330 x 35 x 0.20 mm	60 pieces	35091898	35091909
1510 x 35 x 0.20 mm	50 pieces	35091899	35091910
1530 x 35 x 0.20 mm	50 pieces	35091901	35091911
1710 x 35 x 0.20 mm	40 pieces	35105016	35105018
1730 x 35 x 0.20 mm	40 pieces	35091902	35091912

### 35 x 0.25 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.25 mm	100 meters	35091618	35091620
1330 x 35 x 0.25 mm	60 pieces	35091904	35091913
1510 x 35 x 0.25 mm	50 pieces	35091905	35091914
1530 x 35 x 0.25 mm	50 pieces	35091907	35091915
1710 x 35 x 0.25 mm	40 pieces	35105017	35105019
1730 x 35 x 0.25 mm	40 pieces	35091908	35091917

### 35 x 0.30 mm

Dimensions	Quantity	Material number	
		Rounded	Lamella
35 x 0.30 mm	50 meters	35084069	35083808

# W&H DOCTOR BLADE CHAMBER SEALS

High-quality doctor blade chamber seals specially developed for W&H machines



## Why W&H Doctor Blade Chamber Seals?

For optimum printing results it is essential to adapt the consumables to the printing press and the requirements of the printing process. The doctor blade chamber seals in particular have a significant impact on the efficient operation of the color decks.

Original doctor blade chamber seals from Windmüller & Hölscher are manufactured with the highest precision and are specially developed for use on our high-quality flexo printing presses. We use only qualified and high-performance materials, which also ensure the high requirements for mechanical explosion protection. This ensures safe operation of your printing press and, at the same time, optimum ink application without leakage. And that even at high printing speeds and long runtimes.

Our consumables portfolio includes a wide range of end seals for various applications. This way, you are optimally equipped for all challenges in your daily production. Our product range includes not only seals for the current W&H machine portfolio, but also for older printing presses.

## Your advantages







- ✓ Preventive explosion protection
- ✓ Optimally matched to W&H printing presses
- ✓ Increased stability of the doctor blade chambers
- ✓ Prevention of leakages
- ✓ High-quality seals for various applications
- ✓ Increased uptime and productivity
- ✓ Individual advice

“ The seals provided by W&H are of high quality. They ensure high performance with remarkable sealing capability. We also appreciate the qualified technical support and continuous help of the W&H team.

Mohamed Taghian  
Electrical Maintenance Engineer  
Coveris Flexibles Egypt Limited


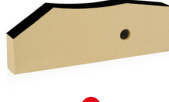




# W&H Doctor Blade Chamber Seals for MIRAFLEX, MIRAFLEX´´, VISTAFLEX CL and VISTAFLEX´´ L

For anilox rollers with 159 mm and 200 mm diameter

						
	CSL 350	CSS 600	CSC 800	CSE 1000 S	CSE 1000 H	CSF 600
Material number	30103442	30108856	30302468	30329510	30304040	30108130
Inking system	Solvent based	Solvent based	Solvent based	Solvent based Water based	Solvent based Water based	Water based
Maximum speed	350 m/min	600 m/min	800 m/min	1000 m/min	1000 m/min	600 m/min
Sliding property	●○○○○	●●●○○	●●●●○	●●●●●	●●●●●	●●●○○
Lifetime	●●○○○	●●●○○	●●●●○	●●●●●	●●●●●	●●●○○
Elasticity	●●●●●	●●●●●	●●●○○	●●●●○	●○○○○	●○○○○

# W&H Doctor Blade Chamber Seals for VISTAFLEX CX and VISTAFLEX´´ X





For anilox rollers with 250 mm diameter

						
	CSL 350	CSS 600	CSC 800	CSE 1000 S	CSE 1000 H	CSF 600
Material number	30185572	30201376	30302471	30281811	30281812	30273787
Inking system	Solvent based	Solvent based	Solvent based	Solvent based Water based	Solvent based Water based	Water based
Maximum speed	350 m/min	600 m/min	800 m/min	1000 m/min	1000 m/min	600 m/min
Sliding property	●○○○○	●●●○○	●●●●○	●●●●●	●●●●●	●●●○○
Lifetime	●●○○○	●●●○○	●●●●○	●●●●●	●●●●●	●●●○○
Elasticity	●●●●●	●●●●●	●●●○○	●●●●○	●○○○○	●○○○○






# W&H Doctor Blade Chamber Seals for NOVOFLEX™

For anilox rollers with 159 mm and 200 mm diameter

				
	<b>TURBOSEAL CSL 600</b>	<b>TURBOSEAL CSC 800</b>	<b>TURBOSEAL CSE 1000 S</b>	<b>TURBOSEAL CSF 600</b>
Material number	30270211	30326380	30294174	30292046
Inking system	Solvent based Water based	Solvent based Water based	Solvent based Water based	Water based
Maximum speed	600 m/min	800 m/min	1000 m/min	600 m/min
Sliding property	● ● ● ○ ○	● ● ● ● ○	● ● ● ● ●	● ● ● ○ ○
Lifetime	● ● ● ○ ○	● ● ● ● ◐	● ● ● ● ●	● ● ● ◐ ○
Elasticity	● ● ● ● ●	● ● ● ○ ○	● ● ● ● ○	● ○ ○ ○ ○

# W&H Doctor Blade Chamber Seals for NOVOFLEX C



For anilox roller with 178 mm and 200 mm diameter and asymmetrical chamber profiles\*

			
	<b>CSL 350</b>	<b>CSS 600</b>	<b>CSC 800</b>
Material number	30008282	30067181	30327946
Inking system	Solvent based	Solvent based	Solvent based
Maximum speed	350 m/min	600 m/min	800 m/min
Sliding property	● ○ ○ ○ ○	● ● ● ○ ○	● ● ● ◐ ○
Lifetime	● ● ○ ○ ○	● ● ◐ ○ ○	● ● ● ● ○
Elasticity	● ● ● ● ●	● ● ● ● ●	● ● ● ○ ○

\*for NOVOFLEX C series presses with new doctor blade chamber, the MIRAFLEX and VISTAFLEX CL series chamber seals can be used.




# W&H Doctor Blade Chamber Seals for NOVOFLEX X

For anilox roller with 159 mm diameter and asymmetrical chamber profiles

		
	<b>CSL 350</b>	<b>CSS 600</b>
Material number	70322773	30098104
Inking system	Solvent based	Solvent based
Maximum speed	350 m/min	600 m/min
Sliding property	● ○ ○ ○ ○	● ● ● ○ ○
Lifetime	● ● ○ ○ ○	● ● ◐ ○ ○
Elasticity	● ● ● ● ●	● ● ● ● ●

# W&H Doctor Blade Chamber Seals for ASTRAFLEX, NOVOFLEX X and PRIMAFLEX

For anilox roller with 178 mm and 200 mm diameter and asymmetrical chamber profiles

			
	<b>CSL 350</b>	<b>CSS 600</b>	<b>CSC 800</b>
Material number	70322679	30066287	30332331
Inking system	Solvent based	Solvent based	Solvent based
Maximum speed	350 m/min	600 m/min	800 m/min
Sliding property	● ○ ○ ○ ○	● ● ● ○ ○	● ● ● ◐ ○
Lifetime	● ● ○ ○ ○	● ● ◐ ○ ○	● ● ● ● ○
Elasticity	● ● ● ● ●	● ● ● ● ●	● ● ● ○ ○

# W&H Doctor Blade Chamber Seals for ASTRAFLEX

For anilox roller with 178 mm diameter and symmetrical chamber profiles



Material number	70322677	30082287
Inking system	Solvent based	Solvent based
Maximum speed	350 m/min	600 m/min
Sliding property	● ○ ○ ○ ○	● ● ● ○ ○
Lifetime	● ● ○ ○ ○	● ● ½ ○ ○
Elasticity	● ● ● ● ●	● ● ● ● ●

# W&H Doctor Blade Chamber Seals for ASTRAFLEX

For anilox roller with 220 mm diameter and asymmetrical chamber profiles



Material number	70322776	30067180	30332085
Inking system	Solvent based	Solvent based	Solvent based
Maximum speed	350 m/min	600 m/min	800 m/min
Sliding property	● ○ ○ ○ ○	● ● ● ○ ○	● ● ● ½ ○
Lifetime	● ● ○ ○ ○	● ● ½ ○ ○	● ● ● ● ○
Elasticity	● ● ● ● ●	● ● ● ● ●	● ● ● ○ ○

# CONSUMABLES RECOMMENDATIONS FOR A HIGH PERFORMANCE

## MIRAFLEX, MIRAFLEX'', VISTAFLEX CL and VISTAFLEX'' L



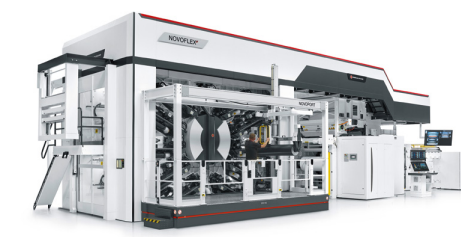
	Solvent based inks	Water based inks	Abrasive inks
Doctor Blade Chamber Seals	CSC 800	CSF 600	CSE 1000 S
Doctor Blades	Premium carbon steel 35 x 0.25 mm rounded	Stainless steel 35 x 0.25 mm rounded	Ceramic 35 x 0.25 mm rounded

## VISTAFLEX CX and VISTAFLEX'' X



	Solvent based inks	Water based inks	Abrasive inks
Doctor Blade Chamber Seals	CSE 1000 H	CSF 600	CSE 1000 H
Doctor Blades	Premium carbon steel 35 x 0.25 mm rounded	Stainless steel 35 x 0.25 mm rounded	Ceramic 35 x 0.25 mm rounded

## NOVOFLEX''



	Solvent based inks	Water based inks	Abrasive inks
Doctor Blade Chamber Seals	TURBOSEAL CSC 800	TURBOSEAL CSF 600	TURBOSEAL CSE 1000 S
Doctor Blades	Premium carbon steel 35 x 0.20 mm rounded	Stainless steel 35 x 0.25 mm rounded	Ceramic 35 x 0.25 mm rounded



### Free test package

Convince yourself of our high-performance consumables and order a free test package for your W&H flexo printing press. We will be happy to advise you individually on selecting the optimum solution.

@ [consumables@wuh-group.com](mailto:consumables@wuh-group.com)



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