ulmex®
THE HUMAN SIDE OF TECHNOLOGY

TKM

Doctor blades for rotogravure, flexo, offset and screen printing

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The best steel for the printing industry. Consistency, repeatability, durability and resistance are the characteristics that **TKM** doctor blades offer in even the most demanding printing processes.

TKM is the acronym for "The Knife Manufacturer": a company with a hundred-year history, always projected towards the future. Depending on the customer's requirement or needs, we have specific doctor blades: short runs, long runs, difficult, very abrasive, corrosive and very viscous fluids, printing problems or defects, anilox cylinder scratches.

The different types of doctor blades available

TKM MEYER PRINT®

It is the optimal doctor blade for short and medium runs, also used as a backup. Manufactured from quality carbon steels, it is a basic blade that guarantees a clean work, even at high speeds.

TKM OPTIPRINT®

Compared to the Meyer Print, this carbon steel blade has a higher percentage of chromium and a lower percentage of sulfide. This all translates into a longer-lasting blade with a longer life cycle.

TKM NIROPRINT®

Blade produced in stainless steel, it is the best solution for printing processes where oxidation and corrosion could be generated by water-based fluids or highly aggressive and abrasive fluids.

TKM MICROPRINT®

Innovative, precise and patented blade obtained by quenching special steel for tool. This special micro-structured blade guarantees long runs and is suitable for any type of ink, water-based, solvent or UV ink.

TKM POWER PRINT®

It is a doctor blade produced using a special alloy steel and enjoys excellent wear resistance properties and achieves the best compromise in terms of doctor blade, quality and durability.

TKM CERAPRINT®

Produced through an advanced technological process, this blade is coated with ceramic particles, so it is possible to reduce the doctor blading pressure and resolve any printing defects.

TKM CERAFLEX®

This is an evolution of the Ceraprint model and it is capable of further increasing its life cycle. Ceramic is applied through nanotechnology. Suitable for any ink and any type of printing.

TKM DUROBLADE®

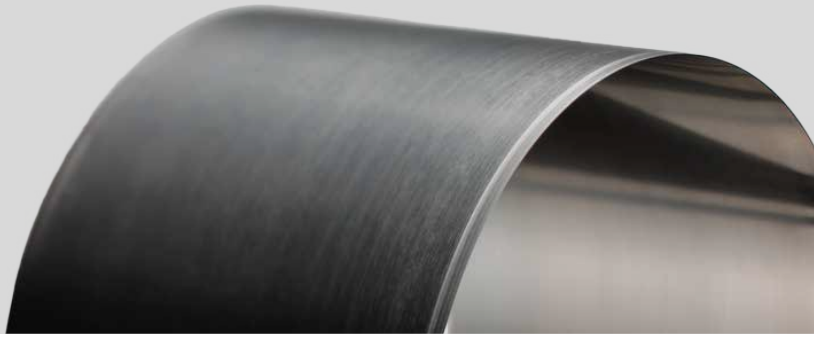
Available in two models, it is the latest patent from TKM Meyer. It is a blade ceramized through a plasma system which gives a life cycle at least 12 times longer than average performing blades.

TKM POLIPRINT®

Used as a containment blade in flexography or coating in the corrugated cardboard world, this line of polyester doctor blades reduces injuries and problems with cylinder scratches, especially when using water-based inks.

TKM SCREEN PRINTING®

Doctor blade used specifically in rotary screen printing, offers excellent mechanical resistance to wear and elasticity. It is suitable for any type of ink, whether UV, solvent or water-based.



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MORE THAN 25 YEARS SINCE 1999

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TKM offers patented surface treatments that further improve the performance of the doctor blade. For example:

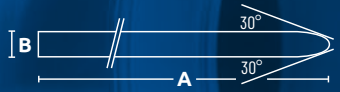
ESP® Treatment: electrolytic treatment that improves very smooth lapping on the lamella contact point, avoiding micro-fragmentations of the steel. Suitable for flexo printing, this treatment is suitable for minimizing production waste and protecting the anilox cylinders from scratches.

Protect® Treatment: special nickel-plating treatment which increases the life cycle of the blade and generates a lubricating effect on the cylinder. It allows to significantly reduce the pressures between the doctor blade and the anilox and has a corrosion barrier function.

Types of doctor blade profiles

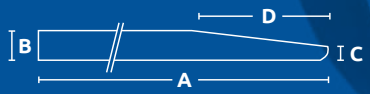
Lamella

FlexoTip

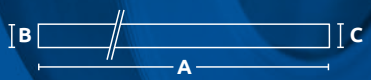


Step

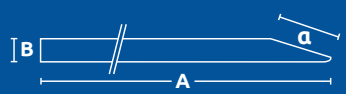
Stable 2°



90° Squared



Blunted



Dimensional details

A (blade width)	From 10 mm to 70 mm	**C** (profile thickness)	55 µ - 125 µ	**E** (coating thickness)	55 µ - 10 mm*
B (blade thickness)	From 0,1 mm to 1,6 mm*	**D** (profile width)	From 1 mm to 1,7 mm	**α** (angle)	5°, 15°, 30°, 45°, 60°

*According to the type of profile and model

The benefits of the TKM Meyer doctor blades are:

- Perfect blade, even at high speeds, uniform contact area
- Consistency and constant quality over long runs
- Reduction of starting times and waste
- Excellent anti-wear and anti-corrosion characteristics
- Reduction of machine downtime
- Lubricant effect on the contact area
- Less cylinder consumption
- Drastic reduction in doctor chamber pressures
- Defects eliminated in flexo printing: no ink spitting, dot gain, tonal differences or scoring line
- Defects eliminated in rotogravure printing: no hazing

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