THE EXPERTS IN INK TRANSFER TECHNOLOGIES

DOCTOR BLADES FOR FLEXO WIDE WEB APPLICATIONS

Doctor blade life on modern flexo presses, with their combination anilox roller/doctor blade inking systems, is of great importance. The cleanest possible wipe requires minimal doctor blade pressure to prevent excessive blade and anilox wear.

Equally important for blade life is the relationship between cell configurations (shape / count) and the blade tip thickness. Daetwyler manufactures a wide variety of doctor blades to meet your specifications and applications.

Daetwyler

STANDARD

This special design of our European steel is the most commonly used product for wide web applications. Tips Available : Lamella / Radius

BLUESTAR

This blade is made of special, heat treated steel. It is most often used in wide web applications when printing process color. The special tip design gives both stability and durability to the blade making it idea for medium run lengths.
Tips Available : Multiblade

ROTOSTAR

This low costs, coated doctor blade offers a great costs versus performance ratio. The special coating provides extended life as well as clean doctoring for both process and line print. The coating is also corrosion resistant making it an excellent selection for both solvent and water based inks.

LONGLIFE

The doctor blade choice for fighting print defects, such as streaking. It is commonly used for abrasive inks and coatings. This hardened coating significantly lengthens blade life, therefore reduces the amount of steel contamination in the ink. Fewer blade changes are needed, resulting in reduced downtime and waste.
Tips Available : Lamella / Radius / Multiblade

OPTILIFE PLUS

The newest development from MDC is a high-tech coating that guarantees the longest service life for flexo printers. This doctor blade is particularly well suited for all abrasive and white inks, water-based inks, lacquers, and coating applications. This blade is very gentle on the anilox rollers thanks to a reduced coefficient of friction from the nickel coating and 100% corrosion resistance. Great cost to performance ratio from the Daetwyler coated line of high-performance products.

GAMUTSTAR

A new coating designed to extend blade life and reduce anilox scoring, while providing the cleanest possible wipe. This is specifically suited when blade changes need to be predetermined (such as in ECG printing). This allows the blades changes to occur at specific times, eliminating unnecessary downtime.
Tips Available : Radius / Lamella

CONTAINMENT BLADES

Daetwyler offers multiple solutions for doctor blades used for containment purposes.

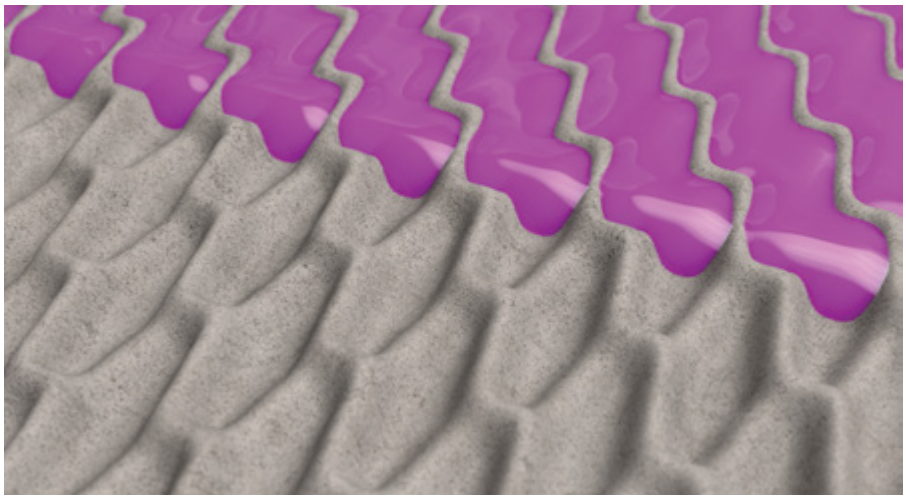
PolyPro – Available in thicknesses of .007", .015" and .020". These are the most common and cost effective containment blades.

OptiPro Plus – Often used in combination with longer lasting coated blades such as Longlife, Starlife or GamutStar. A good fit for ECG printing and also for abrasive inks and coatings

PearlStar – This blade has a proprietary coating that repels ink. This repelling property added together with low friction values make it ideal for customers experiencing back doctoring issues.

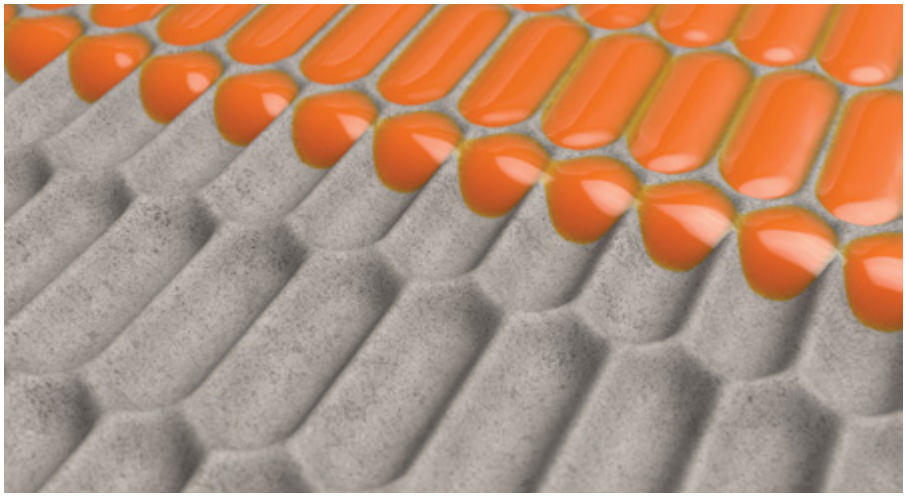
XPro with GamutStar

Improve Vignettes and Dirty Print



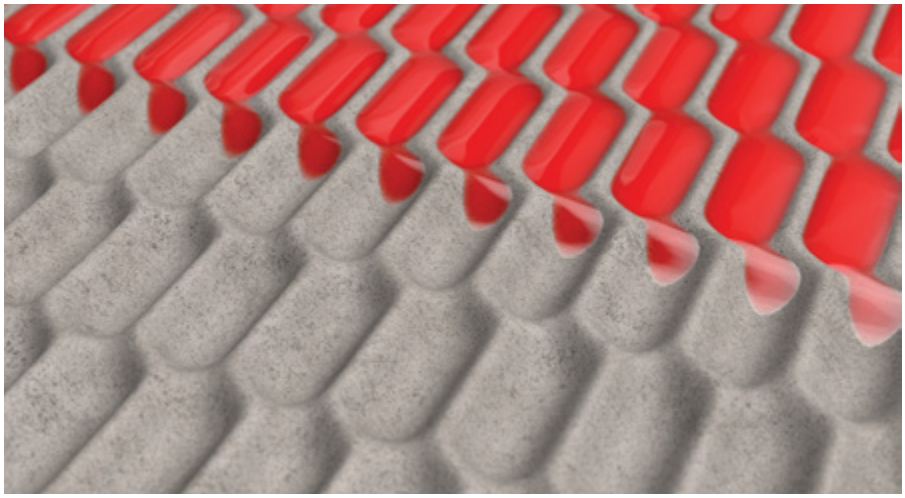
HVP with RotoStar

Reduce Anilox Engravings



Fluid FP with Optilife Plus

Improve White Ink Transfer

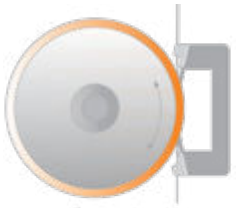


THE CORRECT PRESSURE

Minimum pressure ensures consistent blade wear and extended anilox life. The thinner the tip, the less pressure required to achieve a clean and brilliant printing result. It is recommended to use the same material on both sides of the chamber to eliminate uneven pressure. Increased pressure leads to a deflection of the doctor blade, resulting in a reduced angle and therefore in an increased contact area. The actual wiping is done by the back of the blade, leading to excessive anilox and blade wear.

THE INCORRECT PRESSURE

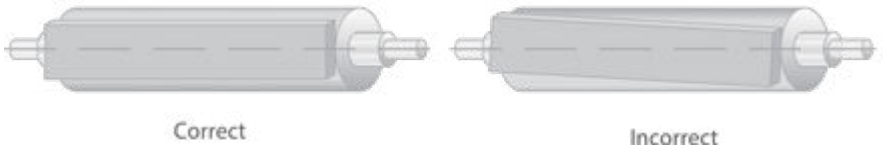
Or excessive blade pressure creates free floating metal slivers that contaminate ink systems. When a hard particle becomes trapped between the deflected blade tip and the anilox, this particle rides there, effectively destroying rows of cells. These rows of cells appear as thin bands running the circumference of an anilox and are commonly called score lines.



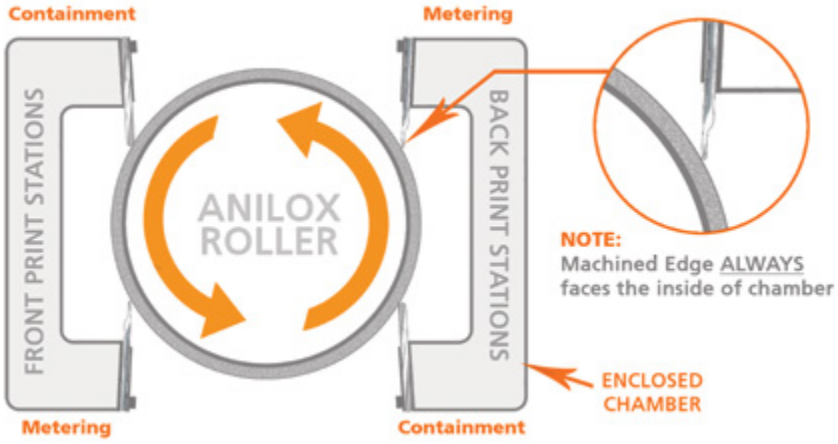
PROPER SYSTEM ALIGNMENT

For consistent ink metering, best print quality and optimized blade life, an enclosed chamber system requires perfect alignment (both horizontal and vertical) so that both blades have equal amounts of pressure. Incorrect alignment creates uneven blade pressure, blade wear and/or ink leakage.

A common error that results from correcting alignment problems is excessive blade pressure. This excessive pressure will lead to a variety of previously discussed problems, like score lines.



DAETWYLER PROPER MACHINED TIP INSTALLATION FOR ENCLOSED CHAMBERS



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