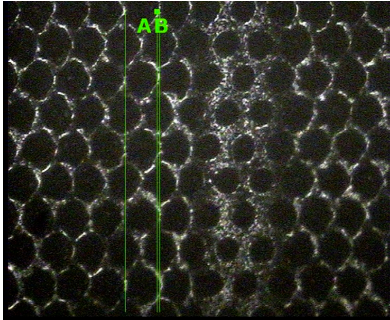


SCORE LINES



Score lines appear as shiny rings across the circumference of the Anilox roll surface. At high magnification we can see these lines are actually worn areas of cells. This wear is mainly caused by particles of steel that are worn or chipped from the doctor blades. These metal particles become lodged between the doctor blade and the Anilox subsequently destroying rows of cells.

However, score lines can also be caused by other sources: If the amount of ink pumping through the doctor-blade chambers is low, then dried ink particles from the pumping system will not be adequately flushed from the roll surface; ceramic particles chipped from the anilox edges may also score the Anilox surface.

Main causes of score lines and prevention guidelines:



Steel Particles from Doctor blades. Doctor blades are designed to wear, thus filters and magnets in the ink-delivery system are necessary to trap the metal particles that wear from the doctor blades. Extremely strong magnets are available for common ink-pump sizes. To work properly these filters and magnets must be kept clean.



Chipped edges. Bumping anilox ends against press frames, roll racks, or other items, causes ceramic to chip off the edges. Once started, chipping continues to put large damaging ceramic particles in the ink. Also when the doctor blade runs against this rough surface wears severely putting some large pieces of metal into the ink. Large chips on the Anilox should be repaired immediately using a plastic steel epoxy.

Please contact a member of our technical sales team for full instructions.

Incorrect mounting of blades will accelerate wear. Blades should never be mounted in blade chambers with any of the holding bolts missing. Blade holders should be thoroughly cleaned of all dried ink or other contaminants before installing new blades.

Uneven wear is a clear indication that blades have been mounted in this incorrect manner.

When new blades are installed, the chamber pressure must be reset. If the chamber is not readjusted for the new, longer blade, over pressure occurs when engaged with the anilox and this will accelerate its wear.

Over-pressured doctor blades will distort the blade causing wear on the side rather than the tip. As the side of the blade wears through, the tip breaks away in the form of a long metal sliver which will score the Anilox surface.



Never rotate a dry Anilox against the doctor blade, Enough volume of ink must be pumped through the doctor-blade chambers, to adequately lubricate both the top and bottom blades, as well as to provide enough flow to wash away any metal particles that become trapped at the nip of the doctor blades and Anilox roll.

Do not keep using worn doctor blades as they will be more prone to wear and damage your roller.