

The Benefits and Potential of Anilox Control

As Flexo settles into the 21st century after surging ahead on the back of laser development, it is becoming more apparent that simply 'cleaning' the anilox is no longer good enough.

The process has reached a pivotal point with increased screen counts and laser engraved plates pushing flexo into a new era. However underneath the drive for improved print quality lies a fundamental issue – cleaning the anilox, safely, fully and consistently.

Flexo's new paradigm is 'Anilox Control'- ensuring the roll is used in such a way to deliver the very best results through stringent care, maintenance and management. But with cell walls now down to 2-3µ wide, the choice of how to achieve this is thinning.

What is actually meant by 'clean'? The word has such a wide scope. If the roll is not returned to 100% of it's full available volume, then it's not clean, pure and simple. 'Cleaning' is simply inadequate if we want to take full advantage of our high screen aniloxes. Why invest in a set of 1200lpi anilox rolls if you don't have the ability to get them 100% clean on a regular basis?

By keeping the anilox 100% clean you can gain control the process, the output and as such, the profit, a mantra that is simplistic but very true.

The process of flexo is found in the pre-press. If you control what goes into the press you inevitably control what comes out and by consistently rendering the roll 100% clean, 6 tangible, cost saving benefits will be achieved:

- No requirement to ever over-pigment inks (unless to compensate for a heavily worn anilox)
- Quicker and more consistent make ready times, leading to...
- Greatly reduced waste
- Higher and more consistent print quality
- Higher production run-hours
- Easier anilox inventory management (through the regular use of a quality control system such as Troika's AniCam)

All of the above lead to an improved ROI on the aniloxes, the cleaning system and the press.

The past 30 years has seen methods of anilox cleaning develop then disappear, not because they weren't producing results, but due to anilox technology itself changing. No sooner was a system produced that could clean e.g. 600lpi rolls the screen counts jumped to 1000lpi, which the system wasn't designed for. This happened with soda blasting and polymer bead blasting for example.

The same is occurring today with jet-wash systems and laser cleaners, as the requirements and standards in terms of cleaning performance, environmental/health and safety requirements of the industry simply cannot be met by these methods.

So, what about future Flexo?

In February 2020 a high-end press manufacturer carried out independent trials to determine what system delivered the best cleaning results on their aniloxes. Alphasonics came first, Laser came second and Flexowash third. These were completely independent results that confirm the above.

To overcome the issue of loss of process control Alphasonics have developed 'Alphasound,' 'Betasond' and 'Active Cavitation' technologies that have pioneered the safe and effective regular cleaning of aniloxes, no matter what the screen count, anilox manufacturer or regularity of cleaning. Gone are the days when anilox development can outstrip the ability to clean safely and consistently. Advanced ultrasonics is guaranteed to render the aniloxes 100% clean with complete consistency, is flexible, safe and effective across the whole screen count range, plus screen counts yet to come.

The anilox truly is the heart of the process. Look after your heart and it will pay you back tenfold.



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ADVANCED ULTRASONIC CLEANING SYSTEMS