

FLEXOTECH Article

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Anilox Laser Technology – Cell geometry

We continue to see great advancements within the Flexo print process and across all areas – plate technology, ink chemistry, tape construction and doctor blade manufacturing - this coupled with the OEM's building ever more intelligent machines designed to set up quicker, handle a wider range of substrates, printing with greater accuracy at ever increasing speeds needs carefully managed and accurately balanced delivery of ink, coating or adhesive – this is where the anilox plays its part in the process.

The Anilox is at the very heart of this and we have been striving at ALT over the last 6 years and have been continuously investing in the latest technology and managing our processes to ensure we are controlling the tolerances and volume to the strictest conditions and tightest tolerances to ensure we are offering stable and consistent geometry that is repeatable.

Although we still use standard cell geometry such as 60 degree we are seeing greater demand in our elongated range of geometry such as the NANO, Ani-Plus and Ani-Plus II as these cells allow us to push the screen count whilst still maintaining the desired level of ink/coating at the increased speeds ensuring improved lay down whilst offering enhanced graphic reproduction.

30 degree and 45 degree are still used but the finished cell structure is usually changed where the walls are interrupted/removed partially to help the flow and lay down.

The NANO and Ani-Plus II structures allow us to run at high speeds whilst maintaining cell evacuation and clean running cells that offer very high quality print definition.

The challenges we see daily as we see more FCP (Fixed Colour Pallet), ECG (extended colour gamut), increased opacity on whites required, tactile applications becoming more desirable and offering further brand enhancement, metallic/pearlescent finishes and fewer anilox changes has meant our anilox geometry has evolved to help in all these areas.

At Anilox Laser Technology we have a full range of geometry to cover all the applications and have recently had great success in a number of applications, these been firstly in the wide web solvent based industry and narrow web UV with both base whites and tactile – with the base whites we have

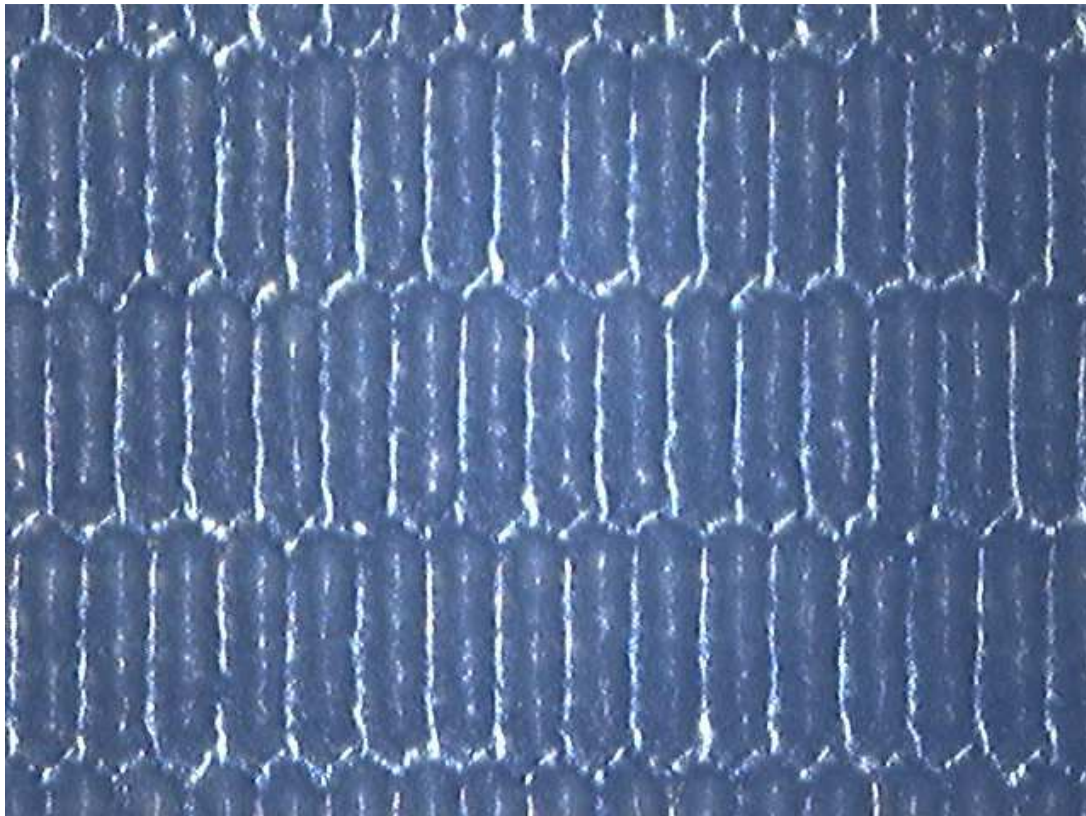
been helping customers increase run speeds, improve lay down, reduce pin holing and in some cases offer advantages on ink consumption.

The tactile projects we have worked on have offered greater brand enhancement (widely used in the drinks market) and solutions that are robust and manageable on press ensuring good production speeds.

Our NANO technology is ever growing in popularity as we see this has helped greatly with white applications, combination (tone/solid/text) printing, vignette, fixed colour printing, printing on uneven and absorbent substrates such as corrugated board and wine label stocks, and metallic/pearlescent applications where movement of the particle and limiting entrapment is key.

Two other key successes with the NANO have been with Matt varnish applications helping to keep the matting agent moving and controlling the lay down and in the corrugated sector helping improve the graphics whilst maintaining the desired lay down and coverage.

The unique NANO structure from Anilox Laser Technology:



We see more demand and call for the lower grammage recycled papers within the corrugated sector and the brand owners still require the coverage to be good whilst ensuring the print quality is of a good standard without compromising the integrity of the finished box – our NANO geometry has been proven within this field over the last 6 years and we have evolved the geometry to offer a great solution to a demanding and complex issue.

The Ani-Plus II from Anilox Laser Technology

