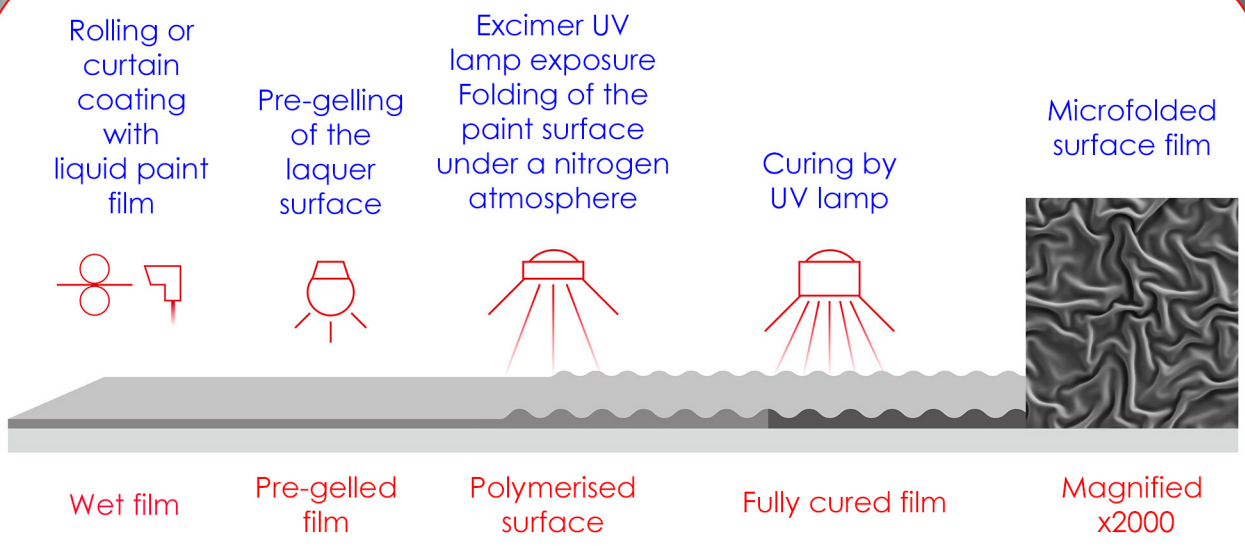
The principle of Ecximer painting leads to deep matt and highly resistant surfaces: At the beginning of the process, the paint is applied to the substrate using a rolling or casting process. Gelling using UV, PAC or LED technology also influences the feel of the paint after curing.

Additional properties such as a soft-touch surface or an anti-fingerprint effect can be achieved in this way.

Once the gel coat has been applied, it is exposed to an excimer radiation lamp (a very high-energy emission) which starts a polymerisation process in the top part of a layer of UV-curable lacquer. However, the penetration depth of the excimer UV emission is comparatively low, so this process only leaves a thin film on the liquid paint without curing deeper layers of paint. This film formation leads to shrinkage of the paint, and so the paint film near the surface develops micro-folds or wrinkles. These can be cured in the final phase using conventional UV, LED or ESH technology with the entire paint to the full layer depth.

The result is a deep matt, mechanically and chemically highly resistant surface.



Excimer surface treatment process
Used to create the PerfectSense TM9 surface properties