



TENSEO X-MATT

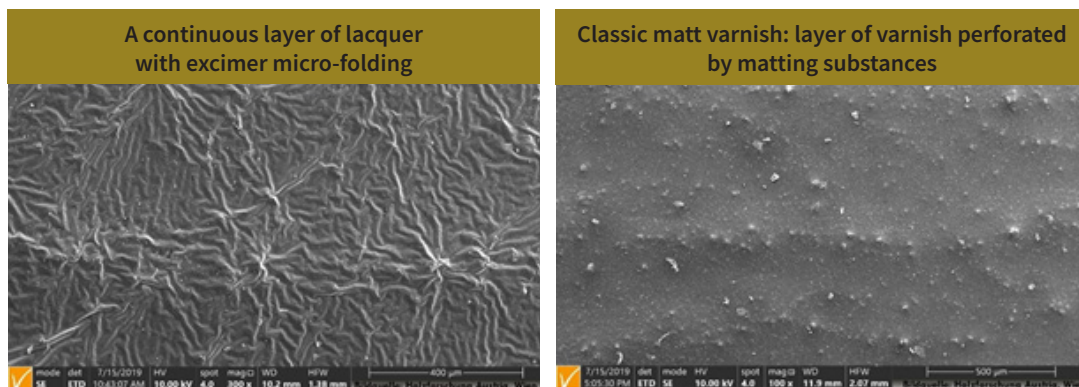
UV matt lacquer with excimer matting technology
highest surface quality | extremely scratch resistant



SCHEUCHER®

Scheucher's UV matt lacquer surface using excimer technology

The practical use of the new TENSEO X-MATT surface is characterized by its excellent chemical and exceptionally good microscratch resistance. It is practically maintenance-free, offers an anti-footprint effect and also has minimal changes in color caused by sunlight. In addition, PUROTEC is resistant to disinfectants and cleaning agents used in hospitals. Due to its ideal frictional properties it is also suitable for the use as a sports floor ex works. TENSEO X-MATT hat den gleichen Glanzgrad wie unsere bisherige TENSEO MATT Oberfläche. TENSEO X-MATT has the same gloss level as our previous TENSEO MATT surface.



All of this is possible using a technology that is unique in the parquet industry: the inert excimer matting.

Excimer lamps emit light in the short-wave UV range at a wavelength of 172 nm, below the UV-C range. This light, which is invisible to our eyes, has a particularly high-energy emission. But since it has such short waves, the penetration capacity is very low and it can only penetrate a few µm deep into the liquid paint. The paint film, specially developed with our supplier Bona, only hardens completely on the surface and a skin forms like ice on a lake. This wafer-thin film shrinks very strongly when it hardens, which leads to micro-folds. Since the UV lacquer underneath is still liquid, it is cured to the full layer thickness together with the shrunk and micro-folded lacquer skin by subsequent classic UV lamps.

This micro-folding scatters the impinging light in all directions (diffuse reflection), which our eyes perceive as a deep matt look. To stick with the example with the lake, the main difference to matting with matting substances should also be explained briefly and boldly: While a continuous film is present with a micro-folded excimer matting, the light scattering at classic matting is achieved by matting agents, which are like footballs shot in a lake that float on top and are fixed by the freezing of the lake - just like it happens when drying with UV lamps. If many ice skaters drive around on this lake now, they slit open the protruding parts of the footballs, then they are torn out by sliding with the runners or rolled smooth by the ice resurfacer. All of this also happens on your parquet floor with various mechanical exposures such as moving chairs, micro-scratches from street shoes or cleaning with cleaning machines. All footballs that are no longer there reduce the refraction of light, which corresponds to the poor behavior of matt lacquers against polishing. The missing footballs in the lake are weak points in the ice, which explains the reduced chemical resistance of matt lacquers, for example.

Our excimer matt lacquers do not have any of these disadvantages!

This has been proven by accredited test institutes, so the requirements for the highest level C of suitability for objects, scratch resistance, suitability for castors, various friction and sliding resistance tests, suitability for sports floors and of course chemical resistance and fire behavior are met in the best possible way.

Table tested characteristics TENSEO X-MATT

TENSEO X-MATT	UV matt varnish with excimer matting technology
Gloss level	9 ±1,5 °GU under 60 ° angle of incidence
Object suitability	Highest object suitability level C according to Önorm C2354
Surface hardness	2.8 N according to Erichsen Scratch Test Önorm EN 438-2
Chemical resistance	1B according to Önorm EN 12720
Resistance to hospital chemicals	TENSEO X-MATT is resistant to antibacterial and antiviral surface and wipe disinfectants in hospitals, tested by Holzforschung Austria Vienna
Emissions	Scheucher parquet treated with TENSEO X-MATT falls below the legal requirements of all common systems by far - even the current strictest emission requirements of the LEED system. Tested according to EN 16516 and EN 16000-ff
Polishing / micro-scratch resistance	MSR-A1 and MSR-B1 according to EN 16094
Resistance against wheels of castor chairs	Suitable according to EN 425
Abrasion	> 2000 rotations according to the falling sand grit method according to EN 13696
Slip class	R9
Sliding friction	$\mu > 0.4$ (according to EN 14904 dry, without initial care), suitable for sports floors ex works
Sliding resistance	USRV > 100 (according to CEN TS 15676 dry, without initial treatment)
Fire protection class	Cfl-s1 for glue-down installations, otherwise Dfl-s1

Klaus Bauer, 30.11.2021
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