

ICAD® configured P-LED-lamp from EFSEN

Replaces Mercury-lamp in the automatic putty machine at the global leader in cutting-edge flooring solutions, Tarkett. The installation was carried out by EFSEN with Tarkett and AkzoNobel as partners in a new UV LED project.

With the start of September 2019, Tarkett has initiated a 12-week evaluation of their new ICAD® controlled P-LED-lamp in the automatic putty machine

The plastic foil, which is used to push the putty down in the recesses, ages quickly with curing using conventional mercury UV lamps, which results in a high consumables cost. By using a very controlled setting of LEDs instead of mercury, Tarkett expect to achieve significant savings due to reduced foil consumption and will also benefit from the energy savings of LED technology. Their cost structure would be improved, and this installation would become the benchmark for future projects involving this technology. The ICAD® controlled P-LED technology is also a good upgrade option in wood- and furniture coatings lines, which gives good opportunities for Tarkett to transition into energy efficient UV in their coating line in the future.

Tarkett decided to choose EFSEN's P-LED system incorporating ICAD®

The patented ICAD® measuring system provides a state-of-the-art solution which is unique in the market, providing complete UV control at all times. This setup allows ICAD® to control each segment of the EFSEN P-LED, a crucial function to maintain the optimized output level along the full width of the foil, keeping the balance to ensuring minimal foil degradation and enough putty cure. EFSEN has utilized the expertise of both application specialists and mechanical engineers to ensure P-LED is specifically designed to meet the requirements of the process.

The UV-LED systems today feature a very high intensity, but it is still a challenge with the technology to ensure that coatings and putties are adapted to provide the same performance and price as the previous product that cured with mercury-based UV technology. The close cooperation with AkzoNobel, one of the leading manufacturers of wood coatings, ensured EFSENs technical capability was complemented with chemical expertise to make the project successful. As a result, AkzoNobel developed UV Filler APS 004 LED, to cure with EFSEN P-LED with ICAD®.

Achieved after 9 months of production

- 16 times less foil change.
- Savings 8.000€ (16x500€) per month.
- 30-50% Power setting (10-12kW) savings during production.



Tarkett offer one of the largest portfolios of flooring and sports surface solutions and share with their customers their expertise in multiple market segments.