



Setting new standards for quality and sustainability in heavy-duty vehicle manufacturing

SCHEUERLE Fahrzeugfabrik GmbH, Pfedelbach, Germany

SCHEUERLE Fahrzeugfabrik GmbH is rooted in south-west Germany, where it has specialised in the development and manufacture of heavy-duty transport solutions for over 150 years. Vehicles that lift even the largest and heaviest goods (rotor blades over 100 metres long, bridge components, spacecraft, oil platforms, aircraft, houses, ships and much more) with high precision, bring them safely to their destination and set them down with millimetre precision. The TII SCHEUERLE brand has experienced increasing customer requirements and considerable growth in recent years. With the introduction of new vehicle models with state-of-the-art manoeuvring technology, complexity increased as did the pressure on the production line. To meet the ever-growing demand for configurable vehicle solutions with short delivery times, SCHEUERLE implemented a new two-layer coating scheme based on patented Avantguard® technology to boost efficiency and increase throughput in their manufacturing line.

“This innovative coating system from Hempel provides us with superior corrosion protection and has enabled us to streamline the coating process for each vehicle and considerably reduce both application and waiting times. On top, we have cut energy costs by up to 25%.”

Christoph Fabig, head of the paint shop at TII SCHEUERLE

Innovative coating system offers superior corrosion protection and helps to reduce energy costs in the application process

As a pioneer in the heavy-duty transport industry, TII SCHEUERLE demanded a coating solution with superior durability, faster processing times and a positive impact on their sustainability goals compared to their previous conventional coating scheme.

The aim was to replace the conventional three-layer coating system, consisting of a zinc-based epoxy primer, a polyurethane intermediate and a high-solids polyurethane topcoat, with a more efficient two-layer coating system, enabling greater efficiency and faster throughput.

The solution: Streamlining production with innovative 2-coat corrosion protection

Following a “Line Improvement Survey”, where the process flow and potential areas of improvement were mapped, Hempel proposed a 2-coat system based on the award-winning and patented Avantguard® anti-corrosion technology and a high-gloss topcoat. After more than 2.5 years of extensive testing, TII SCHEUERLE decided to switch from the old 3-layer coating scheme to Hempel’s innovative 2-coat system for all commercial vehicles in summer 2021.

With support from Hempel’s global technical service team and coating advisors, a large number of subcontractors in various countries were trained in the use of Hempel products to ensure uniform coating quality.

“The new coating system that we have introduced for the TII SCHEUERLE heavy-duty vehicles is very easy to apply. It dries quickly and we don’t have to wait long before applying the top coat.”

Applicator at TII SCHEUERLE

The results: Superior corrosion protection with a reduced environmental impact

TII SCHEUERLE benefits from an optimised, lean process in which the time required for applying the coatings has been significantly reduced. The success of the new coating system is largely due to its simplified application process, fewer layers, less rework, and the relatively fast curing time.

In addition, TII SCHEUERLE has achieved significant cost savings of up to 25% in energy consumption and a 25% reduction in VOC (volatile organic compound) emissions from the coating process.

With these improvements TII SCHEUERLE can continue supplying its customers around the world with high-quality vehicles, now boasting superior corrosion protection and a reduced environmental impact.

At a glance	
Customer	SCHEUERLE Fahrzeugfabrik, Pfedelbach, Germany
About TII SCHEUERLE	Manufacturer of heavy-duty vehicles for various industries and record holder for a large number of heavy-duty projects.
Coating system	Hempaprime Shield 820 An activated, zinc-epoxy primer based on the patented and award-winning Avantguard® technology offering superior corrosion protection, improved levelling, improved crack resistance and higher processing tolerance.
	A Hempaxane Light 55030 high-gloss two-component polysiloxane topcoat with very high solids (>80% by volume) and outstanding chemical and wear resistance as well as excellent gloss and colour stability.

