

PPG Profiles

Agricultural and Construction Machinery Manufacturer

Case Study



Ultra-Durable Powder Coating Combines Sustainability and Efficiency

Agricultural and construction manufacturers rely on high performance coatings to protect their equipment from corrosion and their brands by keeping machinery looking good longer with lasting colorfastness and gloss.

With global demand in this sector increasing, protecting the complex parts of heavy duty machinery from UV damage, corrosion and wear and tear is more important than ever.

Compiling data for a Global Market Insight report, Wallenius Wilhelmsen, a global shipping company, predicts that construction machinery sales will grow 9% and agricultural machinery by 10% in 2022. In the U.S., 80% of members in the Association of Equipment Manufacturers anticipate rising demand for construction and agriculture equipment in 2022, according to a survey conducted last fall.

For one leading agricultural and construction equipment manufacturer, long-curing times required of ultra-durable, standard bake powder coatings were problematic.

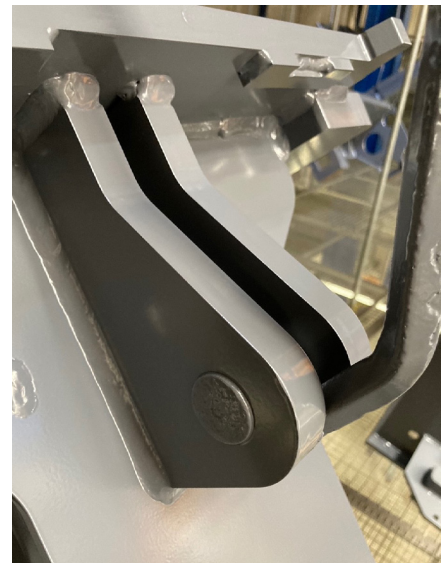
The plant's powder coating line was creating a bottleneck in overall machinery production, requiring the factory to add shifts and weekend work to keep up with demand, increasing company overtime expenses and employee workloads.

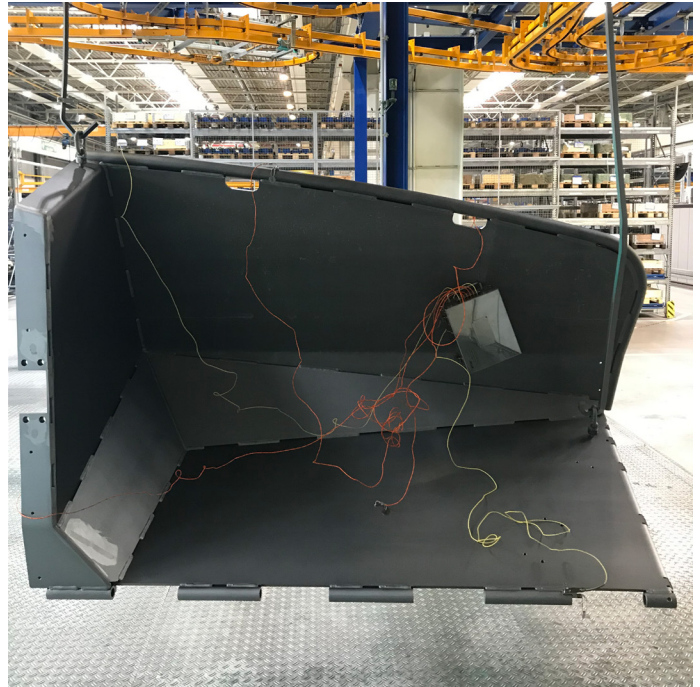
The PPG Solution

To offset these challenges, the company sought a new powder coating with a significantly shorter curing time that offered the same level of quality and resistance to fading and damage. Additionally, the paint had to provide a uniform, even coat on all components, regardless of varying thicknesses and metal substrates.

The company specified new PPG ENVIROCRON® *UltraX*™ powder coatings. Envirocron *UltraX* is an ultra-durable, low-cure polyester powder coating that produces a high quality finish with excellent UV fastness.

With a wide processing window, Envirocron *UltraX* is conducive to high process stability for thin- and thick-walled components, retaining important product features for all metal gauges. In this industry, the driver's cab in an agricultural or construction machine is typically an aluminum substrate, while the crane boom and chassis are made with steel.



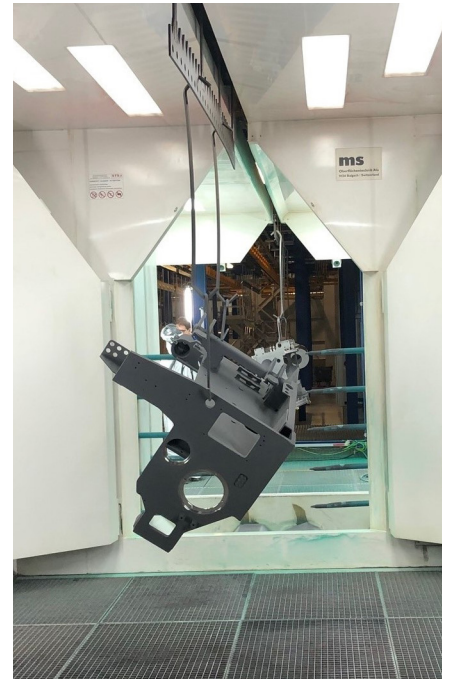


In all cases, Envirocron *UltraX* delivers a high quality, fade resistant even finish and is formulated without CMR substances. While many low temperature systems create performance losses, Envirocron *UltraX* delivers the same performance features as standard ultra-durable cure powders and shows a very good storage stability.

For this end user, the low-bake system improved their powder coating processes by reducing oven curing times by 25% and cooling times by up to 20%.

The company was able to eliminate a work shift, and fewer employees are needed for weekend work. In addition, the *UltraX* powder coating also lowered heating costs per coated m², making it possible to reduce stoving temperature at a lower workload and reduce energy consumption.

To learn more about PPG *UltraX* and the entire range of PPG industrial coatings and paints, visit ppgindustrialcoatings.com or call 1-800-258-6398.



To learn more about PPG Coatings Services business and PPG's fully integrated line of primer and powder coating solutions, visit www.ppgindustrialcoatings.com or call 1-888-774-2001.