

SUCCESS STORY 103

Paint Supplier Solves Customer Paint Cure Issues



KEY FACTS

Customer's End Product
Oven profiles as part of after sales service support

Max Temperature Reached
93–177°C (200–350°F)

Duration of Process
Typically 20 to 40 mins

PRODUCT AND BENEFITS



- Easy to use, robust 6 channel datalogger ET6061, for quick and reliable profiling
- TB0250 barrier with spare heatsinks allows multiple back to back oven runs
- Lightweight, easy to carry, and capable of profiling 3 ovens in a single visit (protects 2 hours @ 200°C/392°F)
- MicroMag probes easily and quickly attached to steel products provide accurate surface temperatures
- Fully certified and traceable validation reports in simple .pdf format for verification that operation is working to specification

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How can I identify why my painted agricultural equipment is cured on one day and not the next with changing weather conditions, when my oven controller suggests that the oven is working fine?

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Situation and background

Valspar is a global provider of industrial paint and powder coatings. Matt Beattie, an account manager for Valspar® USA, uses the EasyTrack®2 oven profile system to help customers maximize their paint cure operations and performance of the Valspar coatings supplied. In one case, a Valspar customer painting large agricultural machinery was experiencing intermittent cure problems, which appeared to be in some way weather-related. Despite the fact that the oven controller showed consistent oven performance on these days, paint cure was found to be unsatisfactory. Batches of products needed to be re-cured, creating losses in time, energy and production.

The winning solution

- The EasyTrack2 system was run 30 times through the process over a three day period, identifying an intermittent cold spot in the oven.
- From the profile graph, the exact location was tracked down to a section of the oven running outside between two buildings.
- Close inspection of the suspended oven (9m/30ft high) identified a rusted-through section of the oven floor. High velocity cold winds (-6°C/22°F), if blowing in a certain direction, were shown to create a temperature drop in the lower oven section of 38°C/100 °F, compromising the paint cure. The cold spot was undetected by the oven control thermocouple.
- After repairing the oven, the EasyTrack2 system was run to confirm that the corrective action was successful and that paint cure was achieved irrespective of weather conditions.

Benefits

- Services provided are maximized and customer loyalty is maintained.
- Process validation service is used to add value to the coatings supplied.
- Waste is eliminated and product quality is guaranteed.
- EasyTrack2 is a compact oven profiling tool designed for the travelling paint rep, providing up to six measurement points and allowing accurate measurement of paint cure against suppliers specifications using either "time @ temperature" or DataPac® Value calculations.
- Profile overlay tool and pdf reports provide an easy comparison of current and archive runs to identify process changes and locate/correct oven problems.