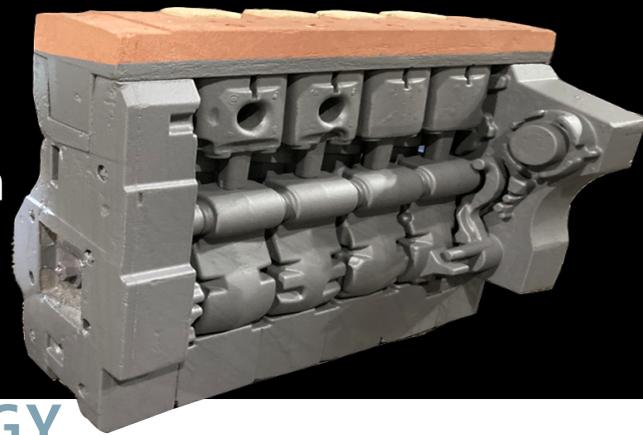


How TERRAPAIN CC coatings with colour change visualisation reduce energy costs and optimise the drying process



INNOVATION & TECHNOLOGY

THE CHALLENGE

The Erkunt foundry faced major challenges in its core shop. Specifically, the company needed to address the long core drying cycle time required to avoid gas-related defects and the difficulty of moisture control for dried core bundles resting on the transfer car.

FOUNDRY:

Erkunt is a company with a rich history, having been established in 1953. Committed to sustainable growth and always open to continuous development, Erkunt has achieved remarkable success and secured a place among the fastest growing companies in Turkey over the past decade. In fact, Erkunt has consistently ranked among the top 250 companies in the country in US dollar terms. With a vision that extends beyond its borders, Erkunt is a force to be reckoned with not only domestically, but also globally. The company has made great strides in the international market and today an impressive 80% of its production is exported to the world's leading automotive companies.

VESUVIUS

PARAMETER

Alloy: GG-25
Core Weight: 87 kg
Casting Temp.: 1390 °C
Poured Weight: 130 kg
Pour Time: 19 s
Moulding Process: HWS / Green sand

FOSECO PRODUCTS

TERRAPAIN* 3545 E CC coating
SEDEX* filters 50x50x22/20 ppi

OUR SOLUTION

We have optimised our core drying oven temperature and belt speed by utilising the colour changing characteristics of our TERRAPAIN coating. Depending on the type and size of the core package, we adjust the oven operating conditions by either reducing the temperature or increasing the belt speed.

KEY BENEFITS

- Energy saved by reducing oven operating temperature by 20 °C
- Increased productivity by increasing oven conveyor speed by 35 %

THE OUTCOME

The TERRAPAIN 3545 E CC color change coating application has enabled us to decrease the operating temperature of our drying oven, resulting in improved energy efficiency. Additionally, it has increased productivity in our core shop by accelerating the speed of the conveyor belt through the drying system.



Coated engine block in continuous oven

THINK BEYOND. SHAPE THE FUTURE.



VESUVIUS
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