

Robotic spray application of water-based coating by the Installation of the ICU-Modular unit

INNOVATION & TECHNOLOGY

THE CHALLENGE

The customer's goal was to eliminate manual spray application of their no-bake core line in order to achieve a more consistent coating layer and reduce manual labour. The implementation of a robotic spray unit required a coating delivery system that would involve minimal manual labour.

FOUNDRY:

North American steel foundry that produces sideframes, bolsters and couplers for the freight rail and transportation rail markets.

PARAMETER

Alloy: Carbon Steel
Coremaking: No-Bake
Moulding Process: Greensand
Pouring Temperatures: 1,523 - 1,773°C
Pouring Weights: 500-770 kg

FOSECO PRODUCTS

ICU-Modular
HOLCOTE* coating
ISOMOL* coating
FERRUX* anti-piping compounds
KALMINEX* 2000 sleeves
KALMIN* sleeves

OUR SOLUTION

The ICU-Modular automates the process of measuring and controlling the dilution of refractory coatings to ensure the correct consistency is maintained.

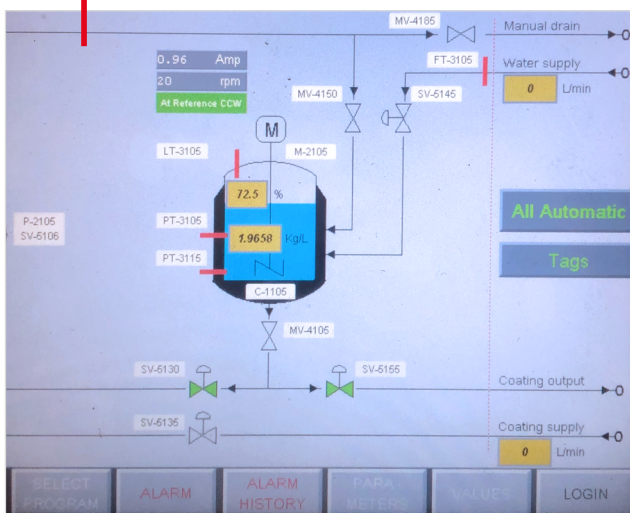
KEY BENEFITS

- Operator independent
- Accurate density control to achieve consistent coating layer
- Ability to utilise robotic spray application
- ICU almost maintenance free

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ICU-Modular PLC display screen



THE OUTCOME

Utilising the ICU-Modular unit the density of the coating is consistently accurate which produces a uniform layer thickness and reduces coatings waste. Manual labour is only required to change tote tanks when empty.

ICU-Modular unit located by spray line



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