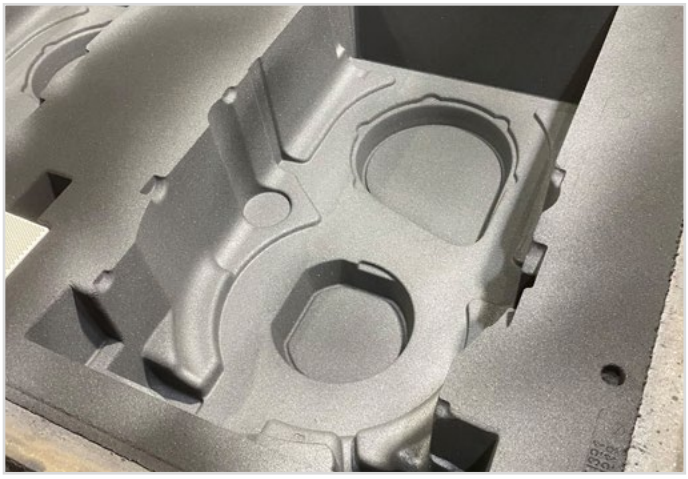
Innovative HARDCOTE* SF800 coating improves surface finish of green sand moulds

PRESS RELEASE
January 2024

In response to increasing demands for superior surface smoothness and precise detail, Foseco addresses the evolving needs of the industry, by the launch of HARDCOTE SF800, a new coating designed to improve the surface finish of castings produced using green sand moulds. The challenge of producing flawless castings without post-production rework is driving the need for new technological solutions that are cost effective, improve productivity, and increase customer satisfaction.

Traditionally, green sand moulds have not generally been coated. However, the growing need for an effective coating solution to improve cast surface quality has led to the development of HARDCOTE SF800. Specifically designed for high-speed production lines commonly used in the manufacture of grey and ductile iron castings, and occasionally other alloys, this innovative product integrates seamlessly into the production environment, enabling the surface coating of moulds without compromising productivity.



Application of HARDCOTE SF800 coatings

Unlike traditional refractory coatings which require drying after application or use solvents that evolve VOC's, HARDCOTE SF800 is a newly developed water-based product. It is applied as a fine spray to the green sand mould surface and rapidly forms a protective layer that does not require drying and therefore does not disrupt the production process.

Key features and benefits of HARDCOTE SF800:

- Surface hardener and protective coating:
  - » Protects against erosion, burn-on and metal penetration defects while forming a carbon-based film to prevent sand adhesion to the casting surface and improving mould strip.
  - » Reduces cleaning, rework, blasting and improves the overall quality of castings.
- Effortless application:
  - » Applied by spray gun; ideally by an automatic/robotic system, to ensure consistency, but manual application is also possible.
  - » No costly equipment investment or need for drying ovens.
- Rapid absorption:
  - » Produces a thin layer (50 to 250 microns) that quickly absorbs into the green sand surface, ensuring no disruption to the casting process or reduction of productivity.
- Versatile application:
  - » Applicable in various green sand applications, including all types of iron, aluminium, and bronze castings; improving surface finish on components such as transmission housings, brake drums, valve bodies, differential housings, flywheels, and engine blocks.

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VISIT WEBSITE

For more information on our new HARDCOTE SF 800 coating visit our web site

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In comparison, traditional systems based on phenolic resin dissolved in solvents present environmental concerns and hazardous working conditions. These systems typically require post-application drying, which can lead to scabbing and loss of productivity.

Foseco's HARDCOTE SF800 provides an efficient, cost effective and environmentally responsible solution for improving the surface finish of green sand moulds.

About FOSECO
FOSECO, the Foundry Division of VESUVIUS plc, is a global leader in products and solutions for improving foundry performance. Our aim is to enable improved foundry performance by working alongside our customers to develop and apply products and services that produce better casting quality and higher productivity at lower costs in a safe and healthy working environment.

About VESUVIUS
VESUVIUS PLC is a global leader in metal flow engineering, providing a full range of engineering services and solutions to its customers worldwide, principally serving the steel and foundry industries.