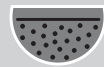




## FERROGEN\*



SCAVENGING AND CLEANING PRODUCTS FOR FURNACES AND LADLES

- + Easy dross removal
- + Cleaner linings
- + Consistent metal capacity
- + Increased energy efficiency
- + Improved refractory life and metallurgical consistency

# FERROGEN

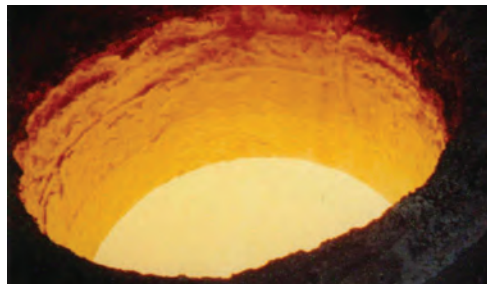
## Scavenging and cleaning products for furnaces and ladles

The increased use of unshotblast returns, variable scrap charge quality and reduced refractory maintenance intervals all contribute to increased slag levels in the furnace and ladle.

FERROGEN fluxes modify the melting point and viscosity of slag material in relation to the liquid iron promoting quick and clean separation of non-metallic inclusions inherent in the melt.

### Coreless induction furnaces – FERROGEN 8

The stirring action of induction melting that ensures a more homogenous microstructure, distributes the slag material throughout the melt and increases the risk of slag related defects. Slag build up on the furnace walls increases melting times and energy costs. Slag removal is an expensive and aggressive process and risks damaging the refractory lining.



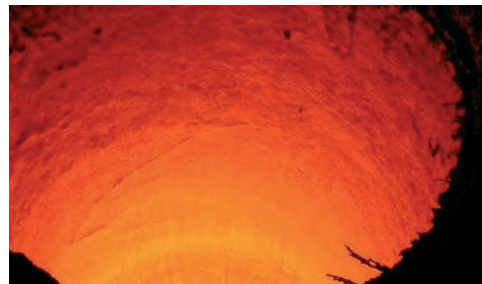
The furnace is ready for the second tap. Note the clean metal and lining surface.

### FERROGEN 8:

- + Fluidises oxides and prevents adhesion to furnace walls
- + Coalesces non-metallic particles suspended in the melt

### Benefits:

- + Reduced mechanical cleaning and easier dross removal
- + Consistent metal capacity
- + Increased energy efficiency
- + Prolonged refractory life
- + Improved metallurgical consistency



25 tonnes furnace after 4 weeks operation. 2000 tonnes have been melted. Note the clean lining.

### Treatment and transfer ladles – FERROGEN 53

High slag levels in the ladle increase the risk of slag related defects and premature blocking of filtered running and gating systems. Excessive slag build up on the ladle walls increases downtime due to maintenance, and aggressive slag removal procedures can damage the lining and reduce working life. As slag levels in the ladle increase over time, magnesium yield reduces, therefore magnesium treatment becomes more expensive.

### FERROGEN 53:

- + Fluidises oxides and reduces adhesion to ladle walls
- + Coalesces non-metallic particles suspended in the melt
- + Has no impact on Mg content or SG iron microstructure
- + Is suitable for sandwich, tundish cover, cored wire and GF convertor processes

### Benefits:

- + Easy dross removal
- + Cleaner linings and spouts
- + Improved refractory life
- + Reduced risk of slag related defects
- + Improved metallurgical consistency
- + Reduced risk of filter blockage
- + Facilitates the use of finer porosity filters



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