

Case Study #8

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The following series of slides document the results of using Redux EF40L fluxes at 15 International Foundries to eliminate slag buildup on refractory walls of coreless induction furnaces, extend refractory life and clean ladles. Additional details on increases in refractory life are presently not available because of the COVID-19 pandemic.

By
Forace Polymers / ASI
International Ltd

Case Study 8 - REDUX EF40L
Objective: Clean slag build-up from
Coreless Induction furnace walls



**REDUX EF40L at International Foundry “H”
Producing Grey and Ductile Iron Castings**



Redux EF40 Test Conditions

- Inductotherm Induction furnace - Coreless melting unit, Crucible No - 2
- Furnace capacity - 8 Metric Tons.
- Number of heats taken before trial - 38
- Addition rate @0.05%, i.e. 4.5kg/heat
- 5 heats made with Redux additions
- Addition procedure - With charge material

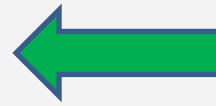


Furnace Condition Before Trial



Trial Results with Redux

First Heat after Redux Treatment



Second Heat after Redux Treatment

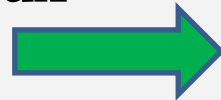


Trial Results with Redux

**Third Heat after
adding Redux**

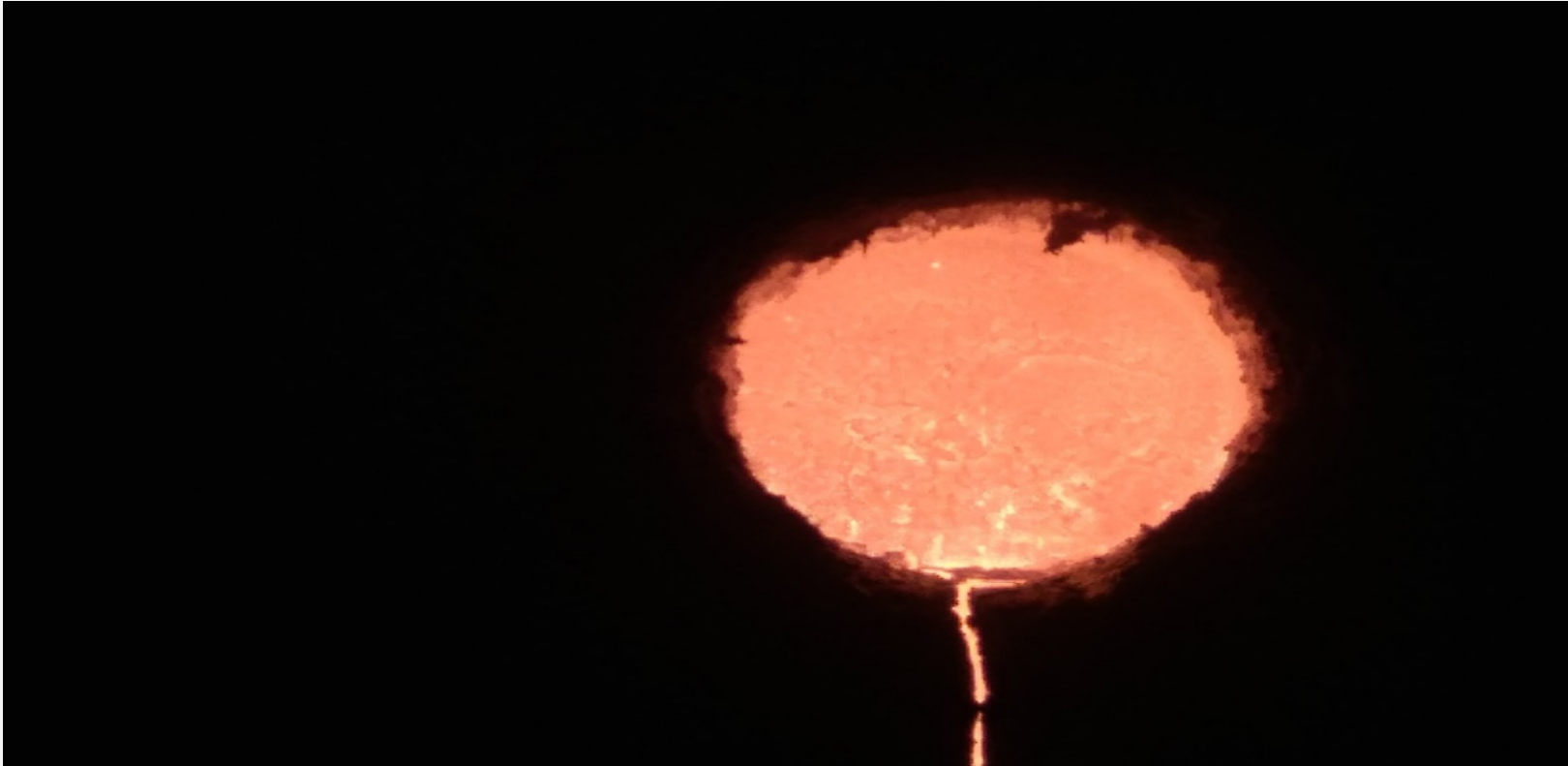


**Fourth heat after
adding Redux**



Trial Results with Redux

Fifth Heat after adding Redux EF 40L



Trial Results – Very positive and successful, furnace was totally cleaned of adhering slag build-up without any chipping or scraping

