

Case Study #7

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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
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Case Study 7 - REDUX EF40L
Objective: Clean slag build-up from
Steel Pouring ladles



**REDUX EF40L at International Foundry “G”
that produces steel castings**



Redux EF40 Test Conditions

- Tapping Temperature in MS grade is 1635°C (2,975°F)
- Pouring 1600°C +/- 10°C (2912°F)
- Redux 40 Trial in 500 kgs Ladle Capacity



Ladle Condition Before Redux Trial



Trial Details

AFTER 1ST APPLICATION



AFTER 2ND APPLICATION



- Added 0.05% Redux 40 to the ladle and filled ladle
- After approximately 3 to 4 minutes of reaction time, metal was poured back into the furnace or pit mold, and then a 2nd application of Redux EF40 L was made with the same procedure allowing time for cleaning reaction.
- Foundry G was very satisfied with the ladle cleaning action of Redux

