



Asian steel plant achieves 425 heats in EAF Delta Roof Core with HASLE D1700A

An Asian steel plant had premature failure of their refractory lining in their EAF Delta Roof Core, which is exposed to extremely high levels of thermal shock and abrasion. The high alumina low cement castable they were using lasted only 388 heats.

After analysis by our experienced engineers, we suggested installing a trial of HASLE D1700A in the EAF Delta Roof Core. HASLE D1700A has a maximum grainsize of 5 mm, whereas alternative LCCs have a maximum grainsize of 12.5 mm. It has a low open porosity of only 12-13% at 1000° C, while other LCCs typically have an open porosity 15-20%. HASLE D1700A has very high thermal shock resistance, as well as very good abrasion resistance.

Casted with HASLE D1700A, the EAF Delta Roof Core achieved a great lifetime of 425 heats in the first trial installation, without needing any repair during service life. 3900 kgs of HASLE D1700A was used for the Delta Roof Core compared to 4800 kgs of the alternative high alumina low cement castable previously used for the same area. Because HASLE D1700A has a lower density, using HASLE D1700A will require 18.75% less material for relining, which along with the increased number of heats, will greatly reduce the cost of operating the EAF.

For more information, contact us at hasle@hasle-refractories.com.



Installation of HASLE D1700A



Installation completed