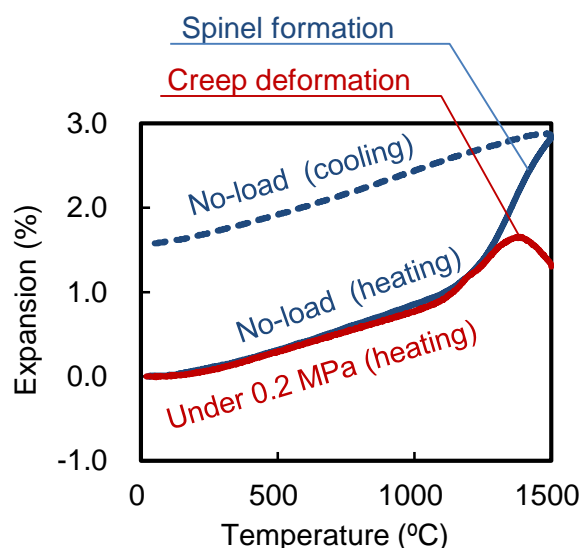


ALTIMA

High performance carbon-free unburned Al_2O_3 -MgO brick for steel ladle



ALTIMA is the unburned Al_2O_3 -MgO brick exhibiting unique high temperature properties as well as good corrosion resistance.



Carbon free composition of ALTIMA eliminates the risk of carbon pick up. An unburned structure enables in-situ spinel formation that strengthens the bonding structure along with volume increase. Thanks to appropriate creep deformation, further structure strengthening is achieved under restrained conditions.

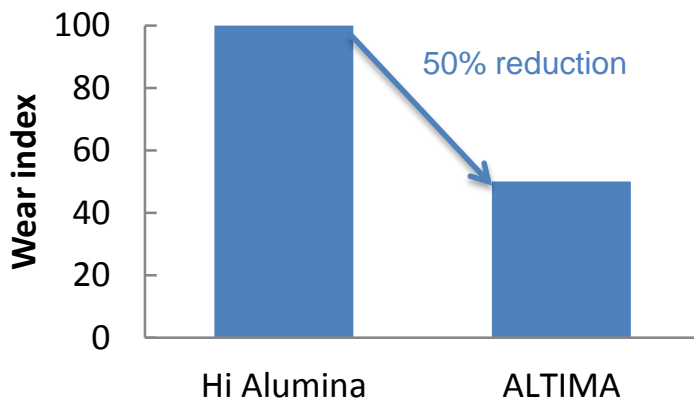
High durability

ALTIMA'S unique high temperature properties reduces wear rate.

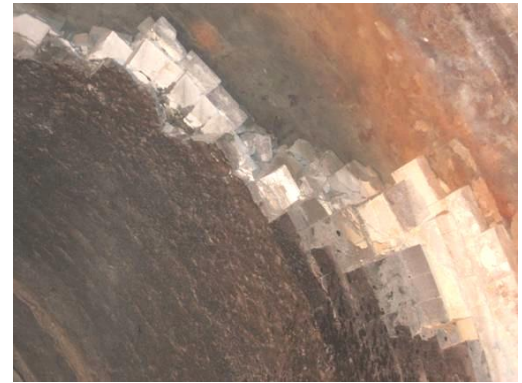
Volume increase induced by in-situ spinel formation prevents the joint openings and the steel infiltrations to joints.

Under restrained conditions, the microstructure strengthened by appropriate creep deformation improves corrosion and slag penetration resistance. It improves resistances to peeling-off and slag corrosion.

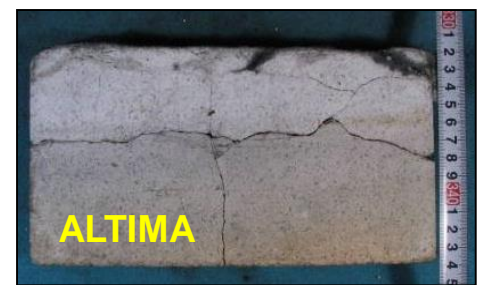
As a result, wear rate is drastically reduced by applying ALTIMA.



Wear rate if commercially operated steel ladle.



Demolishing of ALTIMA-installed steel ladle.



Cross sections of bricks used for clean steel ladle.

Heat loss saving

Low thermal conductivity of graphite-excluding composition enables to save heat loss.

While low wear rate is achievable by applying graphite-containing refractories, risks of carbon pick up and heat emission are increased.

By application of carbon-free ALTIMA, customer can save heat loss and subsequent energy cost with sufficient service life.

