Raw Material Solutions
for Refractory and Steel Mills

Chromite Sand

Iron chromite sand is used in the steel industry for the manufacturing of shaped refractory products. Mag-chrome bricks, produced by combining chrome sand with magnesite, have excellent thermal shock resistance and are used to line ladles and furnaces.

PYRITEMAX®

PYRITEMAX® is used in the steel mill industry to increase sulfur content in all grades of metal. It improves efficiency by eliminating the need for foundries to source various grades of scrap metal. PYRITEMAX® can be added directly into furnaces and ladles. Prince offers a coarse grade of PYRITEMAX®.

Olivine Sand/Flour

Olivine's physical characteristics make it ideal for use in many high-temperature applications, such as refractory bricks. Olivine products are available in varying mesh sizes. Common applications for Olivine products are slag conditioning, tundish linings, and refractory bricks.

Magnesite – Dead Burned

Dead Burned Magnesite (MgO) is used in the production of tundish and gunning mixes to protect tundish from molten steel. Magnesite is also used as a slag conditioner to neutralize the pH of steel slag, thereby protecting furnace linings. Prince supplies a range of high grade MgO for these applications.

Zircon Sand

With high bulk density and high thermal conductivity, zircon extends ladle lining life by reducing erosion and resisting reaction with molten metal and slag. Prince sells the highest quality grades of zircon sand and flour.

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Spodumene

Spodumene is a cost effective alternative source of lithium (compared to lithium carbonate) as a raw material. It acts as a lubricant or fluxing agent for the steel/refractory industry.

Bauxite

Bauxite is a reliable and durable EBT furnace taphole sand. Bauxite's low levels of silica make it a logical choice when making steel grades that require low aim SiO_2. Bauxite lessens the wear rate on taphole sleeves and end blocks. Bauxite also benefits alumina killed steels due to its alumina units used for making ladle slag (EBT sand dropped from the tap gate).

Bauxite is also used as a slag conditioner/additive. High purity bauxite, with low SiO_2 levels, is effectively used for slag conditioning applications in steel mills. At the ladle refi ning furnaces and stations, our bauxite products provide operators with consistent and predictable results in both slag conditioning and in steel grade aims.