

Shri Krishna Minerals Corporation

REFINING THE FUTURE OF
STEELMAKING





Composition – SKMC Allmix (P)

Component	Percentage
AL,SiC	15-20%
SiO ₂	08-10%
Al ₂ O ₃	65-68%
CAO	03 -05%
MGO	05-10%
LOI	1.5 - 02%



INTRODUCTION

THE PRODUCT OF SKMC ALLMIX PRIME

SKMC Allmix Prime is a next-generation metallurgical flux engineered through years of practical steel-plant experience and modern process chemistry.

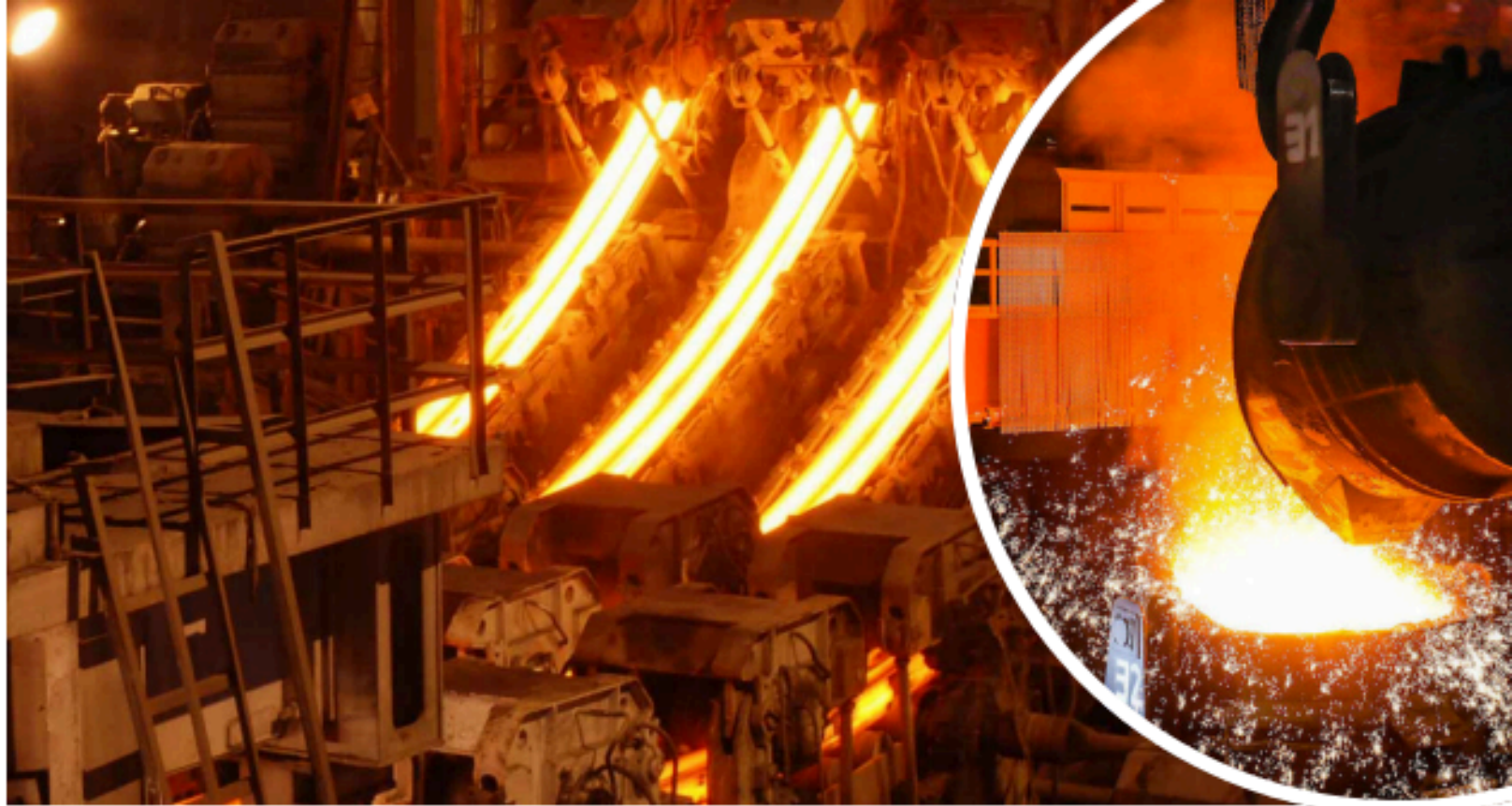
It is designed to maximize yield, minimize energy losses, and stabilize molten-metal composition in induction and arc-furnace operations.

Developed using a unique thermochemical formulation, SKMC Allmix Prime ensures rapid slag formation, superior inclusion absorption, and precise oxygen control.

The result — cleaner metal, smoother casting, and fewer rejections.

In conventional steelmaking, oxygen and oxide inclusions lead to defects such as blowholes, porosity, and nozzle choking.





SKMC Allmix (P) directly counters these issues with an intelligent reaction mechanism that refines metal, promotes efficient desulphurization, and improves deoxidation balance without disturbing alloy recovery.

It is not just a flux — it's a performance enhancer that redefines the way steel plants achieve productivity and metallurgical perfection.

SOP (SYSTEM OF PROCESS / PROCEDURE)

During melting, steel scrap releases oxides and gases that destabilize the bath.

At temperatures above 1540 °C, oxidation accelerates, increasing FeO content in slag and reducing metal recovery.

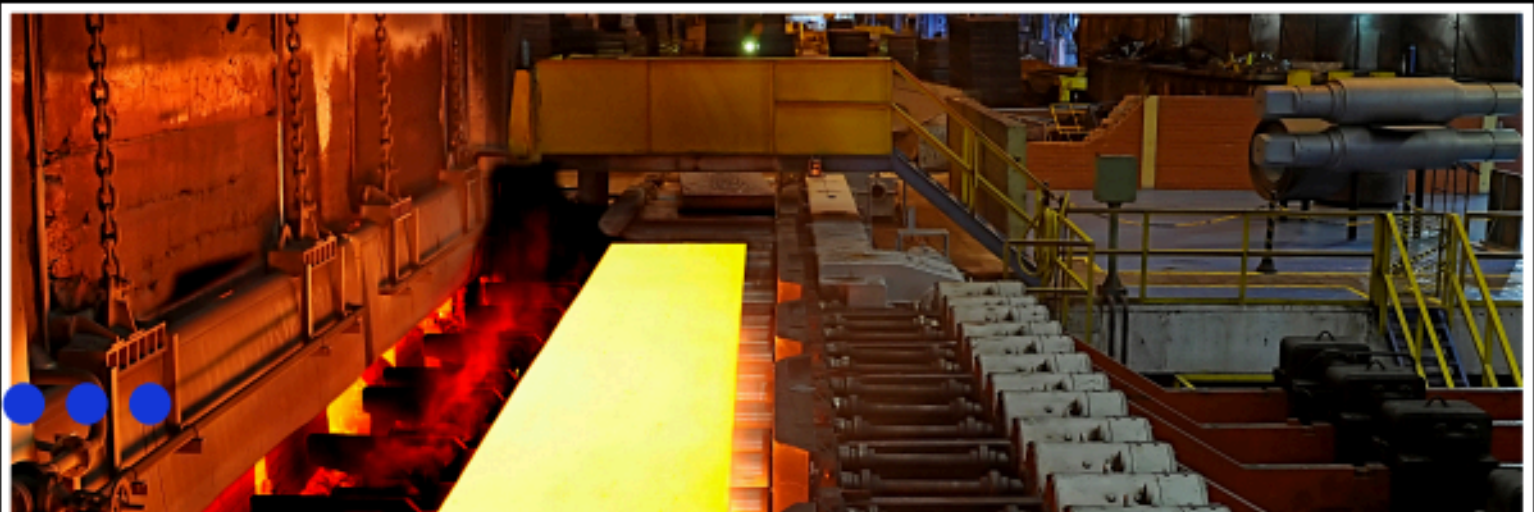
SKMC Allmix prime reacts instantly with FeO and other oxides, capturing impurities and binding them into a light, foamy, easily detachable slag layer. This leads to smoother slag-metal separation, reduced energy demand, and a cleaner furnace lining.



SOP (SYSTEM OF PROCESS / PROCEDURE)

PROCESS GUIDELINES FOR USE

- Add 2.0 – 2.5 kg of SKMC Allmix (P) per ton of molten metal (adjust for furnace capacity).
- Ensure metal temperature ≥ 1600 °C before addition.
- Add prior to Si-Mn charging and mix evenly.
- For de-oxidation, ensure full mixing before alloy additions.
- Deduct 1.0 – 1.5 kg Si-Mn per ton accordingly.
- Remove Ferro Silicon ~200 g/ton if added earlier.
- For slags rich in FeO, increase dosage slightly for optimal results.





KEY BENEFITS OF SKMC ALLMIX PRIME



- Minimizes billet corner cracks and other mould-related surface defects.
- Eliminates oxide inclusions, resulting in purer, denser steel.
- Prevents blowholes and porosity in continuously-cast billets.
- Enhances TMT core quality with superior bonding strength.
- Saves 1 – 1.5 kg Si-Mn per ton of liquid metal through improved recovery.
- Produces light, easily removable slag for efficient refining.
- Increases Fe metallic recovery by reducing FeO content in slag.
- Reduces Mn losses during ladle refining.
- Drops Sulphur and Phosphorus levels by controlled neutralization.
- Removes dissolved oxygen (O₂), extending tundish and refractory life.
- Achieves higher metal yield, smoother casting flow, and longer furnace campaigns.

OUR OTHER PRODUCTS

- ✓ SKMC HIGH INSULATION REDEX
- ✓ SKMC ALLMIX SUPREME
- ✓ SKMC NFC
- ✓ SKMC ALLMIX POWDER
- ✓ SKMC CASTABLES 60 & 90

ABOUT US

With 25 years of experience, SKM CORP stands as one of West Bengal's leading manufacturers of Monolithic Refractories and advanced metallurgical solutions.

Driven by innovation and supported by an expert technical team, SKM CORP has built a reputation for precision engineering, consistent quality, and technological advancement.

Our products are manufactured using the finest raw materials and tested under stringent quality parameters to guarantee performance in every heat, every pour, every batch.

From refractory design to flux chemistry, we provide complete metallurgical support to help our clients increase productivity, reduce downtime, and enhance overall steelmaking efficiency.

We don't just supply materials – we deliver trust, durability, and unmatched industrial performance that keep your furnaces running stronger for longer.

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