Sigma-E Plus

Introduction

Sigma-E Plus is the latest variant of crucibles launched by Morgan. It is a high quality; clay-bonded, silicon carbide graphite range of crucibles manufactured using precise Isostatic pressing technique. It is a new variant of Sigma HT crucibles, developed for low temperature applications. It gives excellent oxidation resistance, good product life and improved energy efficiency. These advantages lead to better 'value' of ownership for end customer.

Applications

- Al and its alloys melting in electric resistance and fuel fired furnaces
- Zinc and its alloys in electric resistance and fuel fired furnaces

Typical Operating Temperature

- 450 900 °C
- Please follow Morgan recommended pre-heating cycle

Performance Characteristics

- High oxidation resistance
- Consistency and repeatability of performance
- Good mechanical strength
- Good erosion resistance
- Excellent thermal shock resistance
- Higher TBS strength for higher breakage strength
- Higher density offer better conductivity and lower energy consumption

Identification

Sigma-E Plus crucibles are finished with a GREY colour and the top rim is painted Parrot Green

Quality

Sigma-E Plus crucibles are manufactured from selectively blended high quality export grade raw materials, under ISO 9001:2015 quality management system.





Sigma HT

Introduction & Application

Sigma HT crucibles are the premium quality, clay bonded, silicon carbide - graphite range of crucibles offered by Morgan. These are manufactured with the world acclaimed Iso-Static Pressing technology. These are specially developed for high temperature application like zinc distillation and copper alloy melting. They also find application in cast iron melting in small sized crucibles in coke, oil and gas fired furnaces

Typical Metal Casting Temperature

• 900°C - 1600° C

Performance Characteristics

- High erosion resistance at elevated temperatures leading to longer product life
- Faster melting through consistently high thermal conductivity, resulting in better energy efficiency
- Non wettability due to higher product density and use of special quality graphite in manufacturing
- Consistent performance and repeatability
- High mechanical strength
- Good resistance to chemical attack

Identification

Sigma HT comes in dark grey color and the models are suffixed with letters 'HT'

Quality

Sigma HT crucibles are manufactured from selectively blended high quality export grade raw materials, under ISO 9001:2015 quality management system.





BNI Crucibles

Introduction

BNI crucibles are manufactured with world renowned Isostatic Pressing Technology, using high quality imported raw materials. The recipe, which is specially developed for Aluminum scrap melting in fuel fired furnaces, imparts very high mechanical strength and excellent erosion & oxidation resistance to the crucibles. These crucibles have been peculiarly shaped for high resistance to flame attack and also for excellent flame rotation.

Applications

 BNI crucibles are used for Aluminum scrap melting and other fuel fired applications.

Typical Metal Casting Temperature

• 700 - 1400 C

Performance Characteristics

- Very good thermal conductivity, meaning faster metal melting and higher energy efficiency.
- Non-wettability due to the use of special quality imported graphite
- High mechanical strength because of higher crucible density
- Excellent resistance to chemical attack
- Very high bottom erosion resistance due to the unique ISO pressed design.
- Excellent oxidation resistance for maintaining thermal and mechanical properties of the crucible for longer life

Identification

BNI crucibles are supplied in dark Grey color and models are prefixed with letters 'BNI', e.g. BNI 500

Quality

BNI crucibles are manufactured from premium grade imported raw materials, under ISO 9001:2015 quality management system.



