

STAR Coating

-lower impurities in molten metal & lower dross adhesion

Prime Features

- Excellent non-wettability leading to low dross adhesion
- Low impurity leak into melt (Table 1)
- Low coating thickness (Fig.2)
- Low porosity, high density coat due to nano-scaled ingredients

Applications

- High purity aluminium metal (99.999%)
- Aluminium alloys
- Precious metal melting

Usage Instructions

- All types of crucibles
- All types of furnaces
- Installation and pre-heating procedures of coated crucibles remain unchanged

Physical & Technical Properties

- Colour: White
- Max. application temperature: 1000°C



Fig.1: STAR coated crucible

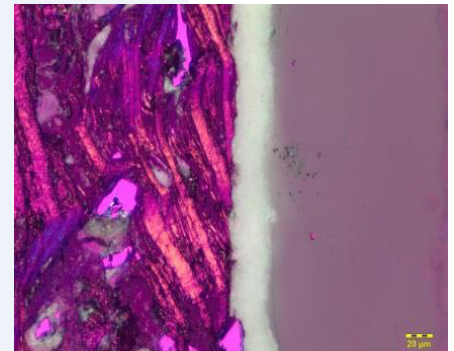


Fig.2: STAR Coating under the microscope

Table 1

Amount of impurity elements in aluminium metal 99.999% before and after melting at 710°C for 48h using STAR coated crucibles

Impurity Element	Before Melting	After Melting
Silicon (ppm)	0.8	4.4
Boron (ppm)	0.09	0.24

Quality

STAR Coating coated crucibles are manufactured from premium grade raw materials under an ISO 9001:2008 quality management system.

For more information, contact us today.

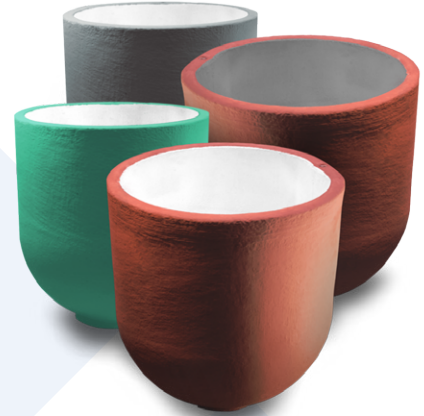
Please note that all values quoted are based on laboratory tests and may not reflect actual results. These values are not guaranteed in anyway whatsoever and should only be treated as indicative and for guidance only. Please consult your local provider for a personalised recommendation according to your custom application. 04.2014

Coated Crucibles

-enhanced crucible performance

Introduction

Functional coatings are a very fine layer of chemical compounds which can be applied on internal surface of crucibles to significantly improve performance, reduce impurities when melting and holding pure alloys. It also stops dross build up and makes clean up fast and easy.



Applications

Coatings can be used in aluminium applications, zinc distillation, precious metals and pure copper melting.

Coating Selection Table

Coating	Crucible Type	Alloy	Use	Max. Metal Temp.
PRO Coating	All types of crucibles	Al (99,999%) & Al alloys	Reduce dross adhesion	1600°C
		Zinc distillation	Limit metal contamination	
		Precious metals		
STAR Coating	All types of crucibles	Al (99,999%) & Al alloys	Reduce dross adhesion reduction in aluminium	1000°C
		Precious metals	Limit metal contamination	
ResCoat Coating	All types of crucibles	Cu & Cu Alloys	Increase erosion resistance	1600°C
		Precious metals incl. using fluxes	Limit metal contamination	
PureCoat Coating	All types of crucibles	Zinc distillation	Reduce dross adhesion	1500°C
		Pure copper melting	Limit metal contamination	