

ECO-ALTi5B1 RODS / COILS

(GRAIN REFINER - MASTER ALLOY)

PRODUCT DATA SHEET

General Description :

ECO-ALTi5B1 Grain Refiner is an integrated part of any aluminium casting unit to improve and enhance the grain structure, homogeneity and properties in Aluminium and its alloys. The crystallization of aluminium into coarse columnar, equiaxed or dendritic grains is undesirable. Coarse particles tend to cluster and lead to poor feeding characteristics and lower tensile strength and wear resistance properties.

ECO-ALTi5B1 addition helps overcome these problems by refining the grain structure of the metal with the help of titanium and boron.

Uses :

- Improves mechanical properties by reducing grain size
- Improves feeding characteristics
- Improves chemical Homogeneity of the product
- Ensures freedom from cracking in rolled and forged products
- Improves surface finish and response to anodizing
- Avoids centerline separation and reduces central porosity.
- Simple environmental friendly addition method.

Instructions for use :

1. Prepare the required alloy composition. Follow the normal fluxing and cleaning procedure as recommended.
2. Degas the melt with tablet ECO - DEGASER or by mobile degassing unit and dross off by using small quantity of ECO - COVERFLUX.
3. After the degassing operation, add ECO-ALti5B1 grain refiner at an application rate of 0.20 to 0.40 by weight at temperature between 700-750 Deg C.
4. Rabble the melt to ensure homogeneity, wait for 5 to 10 min. then use.
5. In case of ECO-ALTi5B1 in coil form, the addition is done in the launder close to furnace spout.

Specifications:

ECO-ALTi5B1

ELEMENT	TI	FE	B	SI	AL
STANDARD CONTENT	4.9-5.1	0.2 MAX	0.9-1.1	0.2 MAX	BALANCE

ALTi5B1 Stick : Dia = 9.5 mm, L= 0.5 mm

ALTi5B1 coil : Weight = 180 ± 20 kgs, Int. Dia = 350 mm