

MAGREMOVER -POWDER

(Flux to remove Magnesium from Aluminium Alloys)

PRODUCT:

Pressure Die Casting Alloys are indeed to keep "Magnesium" at low percentage. Higher percentage Magnesium in PDC Alloys creates Embrittlement, Poor Fluidity and brittleness problem. To avoid these problems Magnesium percentage in these Alloys should be kept at low percentage. Magnesium percentage mainly depends on Magnesium present in the recycled scrap. To reduce the magnesium to required percentage Magremover- Powder is recommended.

PURPOSE:

Magremover –Powder flux decomposes when heated to 740–760°C to release products that react with magnesium and remove it from the melt.

Magremover –Powder is a combination of Halides and exothermic base flux. Chemical affinity between Mg and fluorides compound at normal Molten Aluminum operating temperature leads to Thermo-dynamic reaction. Fluorides liberated during the reaction reacts with Mg to form MgF_2 and MgO and forms a liquid phase. As the liquid phase is less dense than molten aluminum, it raises to surface and can be removed as dross.

APPLICATION :

The addition rate of Magremover-Powder is vary and depend upon the initial Level of Mg content and % of magnesium to be removed. Spread Magremover- Powder flux on the molten metal surface uniformly. During addition rabble the Melt uniformly along-with Magremover Powder. After complete addition of flux hold material for 20 minutes in the furnace keeping burner on low flame. After completion of reaction again rabble the melt uniformly remove the dross and analyse the melt for Mg content, and carry out further treatment if necessary.

It is recommended to add 7-10 kg Magremover Powder to remove 1 kg of magnesium from molten metal, for melt having initial Mg content 0.5% and above.

To remove Mg from molten metal having lower percentage of Mg i.e below 0.4%, Magremover –Powder addition increases and it may goes up to 10-14 kg to remove 1 kg of magnesium from molten metal. This can be further assisted by lancing the melt with Nitrogen / Argon. Magremover-Powder can also be injected below the molten metal surface to further improve the efficiency of the treatment.

However during bulk usage it is observed that requirement of Magremover Powder varied from 8-25 kg to remove 1 kg Mg. Shop floor conditions , skill of operator, molten metal temperature and treatment process are not in our control. End user to standardize their process to get best output from our product.

APPLICATION TEMPERATURE: 740-760°C

BENEFITS –

Can be used as Surface treatment or with Flux Injection Machine.

Free from pungent smell and heavy smoke.

Environmental friendly.

25-30% reduction in dross formation compared to Chlorine based tablet form Mg removal products.

STANDARD PACKING: 5kg Polyethylene bags packed in 50 kg HDPE bags.

10kg polyethylene lined HDPE bags.

25 kg polyethylene lined paper bags.

STORAGE: Store in cool and dry place and away from direct heat.

SHELF LIFE: 12 months from date of manufacturing.

PRECAUTION: FLUX IS HYGROSCOPIC IN NATURE SO STORE IT IN DRY ATMOSPHERE.

