

ALUMINUM CAST-HOUSE/FURNACES

Fluxes - FUSED FLUXES FOR ALUMINUM ALLOYS



Description:

RODABELL provides a range of Fused Fluxes for the nonferrous molten metal industry. These fluxes ensure a high yield, defective free metal, with great mechanical strength.

These compounds are usually inorganic and may often melt to form a liquid when used. They can be added manually or can be automatically injected. They can also be performed individually or in a combination of various (degassing, cleaning, alloying, oxidation, de-oxidation, or refining).

In aluminum melting, oxide formation and nonmetallic impurities are common. Impurities appear in the form of liquid and solid inclusions that persist through melt solidification into the casting. Fluxing provides a treatment technique to the melt containing such impurities and inclusions and facilitates the agglomeration and separation of such undesirable constituents from the melt.

Some materials that are being used as fluxes for aluminum are:

- Aluminum chloride, AlCl_3
- Aluminum fluoride, AlF_3
- Borax, $\text{Na}_2\text{B}_4\text{O}_7$
- Calcium chloride, CaCl_2
- Calcium fluoride, CaF_2
- Carnalite, MgCl_2KCl
- Zinc chloride, ZnCl_2
- Cryolite, 3NaAlF_6
- Lithium chloride, LiCl
- Magnesium chloride, MgCl_2
- Potassium chloride, KCl



Application:

Fused Fluxes for molten Aluminum cleaning, cover, drossing, and refining.

Advantages:

- Prevents inclusions
- Provides a higher mechanical strength to the final product
- Fluxes can be customized upon customer specifications