

REFINAL™

FUSED REFINING FLUXES

The **Refinal™** range of fully fused magnesium chloride – potassium chloride refining agents has been developed for efficient removal of alkali metals such as Na, Ca and Li and oxide and boride inclusions from molten aluminium. **Refinal™** provides an environmentally safe alternative to chlorine fluxing reducing emissions by over 96%. **Refinal™** is produced only from virgin raw materials then manufactured using continuous thermal fusion.

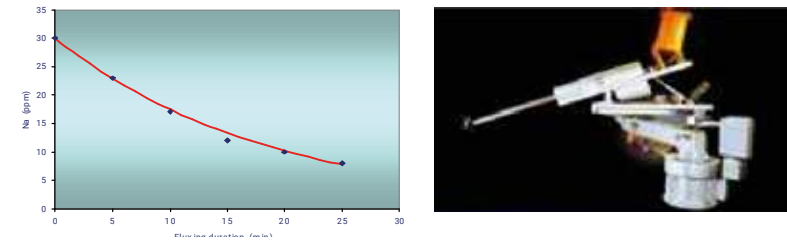
Advanced continuous manufacturing



Product Benefits

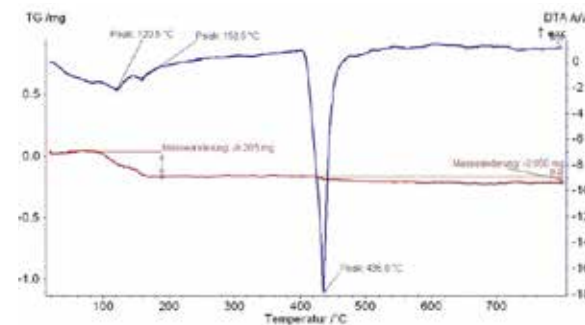
- Consistent high quality manufacture to European standards
- 1-3mm Granulometry ideal for use with RFI Rotary flux injector
- Low melting point eutectic product with sharp melting point (<480°C)
- Reduces sodium to ≥ 1 ppm
- Eliminates edge cracking when rolling Mg containing ingots
- Increases extrusion speed and die life when extruding profiles
- Reduces breaks in continuous casting
- Reduces incidence of pin holes black line defects and tears in thin sheet products

RFI Rotary Flux injector and typical sodium removal curve



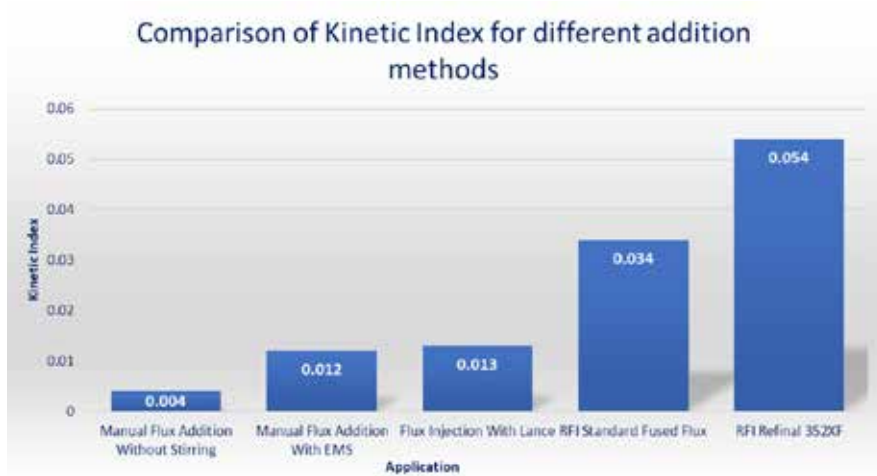
Refinal™ compositions are based on a binary eutectic and provide a precise low melting point.

RFI Rotary Flux injector and typical sodium removal curve



Extensive research has led to the development of enhanced performance products. **Refinal™ 352XF** and **Refinal™ 565XF**, with higher kinetic index resulting in improved sodium removal efficiency. Measurement of kinetic index; **Refinal™ 352XF** has a kinetic index of -0.054 compared to -0.034 for standard compositions

REFINAL™



RFI Rotary Flux injector and typical sodium removal curve

- Reduce consumption by at least 10%
- Shorten treatment times
- Cope with higher incoming sodium levels
- Achieve lower final sodium levels
- Achieve lower inclusion levels

The **Refinal™ 500** range is based on a ternary eutectic composition including sodium chloride to protect against future increases in the cost of potash.

Product	REFINAL™ 350		REFINAL™ 352XF		REFINAL™ 565XF	
Description:	Standard, fused granular refining agent		High efficiency, fused granular refining agent		High efficiency economical, fused granular refining agent	
Composition %:	MgCl ₂	35 – 45	MgCl ₂	35 – 45	MgCl ₂	40 – 50
	KCl	53 – 64	KCl	53 – 64	KCl	36 – 43
	F-		F-	1 – 2	NaCl	9 – 18
				F-	0.0 – 1.1	
Application rate:	0.25 – 1 kg/Mt		0.2 – 0.8 kg/Mt		0.2 – 0.8 kg/Mt	
Grain size:	Application by Rotary Flux Injector Grain Size: 0.6 – 3.0 mm					
	Application by bagged addition Grain Size: 0.6 – 3.0 mm					
	Application by Salt ACD Grain Size: 850µm					
Density:	2.17 g/cm ³					
Bulk weight:	1.0 kg/l					
Re-solidifying temp:	400 - 450 °C					
Packaging:	100 x 5kg, bags packed per 500kg heavy duty cardboard box, 2 boxes per 1100mm x 1100mm pallet.					
Shipping:	EXW, FOB, CFR, CIF, DAP, LCL, FCL					