



PYROFLUX GRANULATED (GR) FLUXES

FOR ALUMINIUM CASTHOUSES

Pyroflux Granulated (GR) Fluxes are formulated to improve molten metal cleanliness, reduce metal losses to dross and increase cast quality for all casthouse operations.

These fluxes offer many advantages over powder fluxes, and are more efficient in most applications. Their heavier granules promote less furnace entrapment and filter clogging, and the salts melt and spread as a liquid instead of vapourizing at the dross surface and forming harmful (and toxic) gases.

Several recipes of Pyroflux GR flux are available to accommodate specific casthouse processes. Each recipe is a blend of high-quality salts whose carefully controlled grain size makes them ideal for injection.

For more information about flux use and selection, see Pyrotek's [Flux Guidelines: Definitions and Guidelines for Use of Flux](#) datasheet. Consult a Pyrotek technical expert to choose the correct flux recipe for your operation.

USE INSTRUCTIONS—MANUAL DROSSING APPLICATIONS

The typical addition rate of Pyroflux GR fluxes is 0.5–1.0 kilograms (1.1–2.2 pounds) per metric tonne of metal charge. More flux is normally required if the charge contains dirty or fine scrap. Other addition rate factors are the furnace's surface area (particularly for dross treatment), the alloy being treated, and the furnace conditions.

1. Spread the flux evenly over the dross surface.
2. Allow three to four minutes for the flux to heat.
3. Stir the flux into the dross using a rake or a skimming boom in a pendulum motion. Avoid distributing the liquid metal, which reintroduces metal to the dross.
4. When the dross is light and dry, carefully remove it from the furnace using a coated skimming tool. Take care to not disturb the melt.

USE INSTRUCTIONS—INJECTION APPLICATIONS

It is important to monitor the carrier gas pressure and rotor speed if a rotary injector is being used. Pressures and speeds that are too high will create more dross and reintroduce it to the melt.

Add fluxes to the hopper only when the dross is ready for treatment, and do not leave any residual material in the hopper or injection lines.

BENEFITS

- Used at rates of up to 50 percent less than powder flux
- Reduces dust and fines emissions in furnace return systems (particularly regenerative burners)
- Injection compatible
- Uniform and optimized grain size and chemistry for consistent performance
- No component segregation during handling or storage

AVAILABILITY

- 1, 5 and 25 kg (2.2, 11, 55 lb) bags
- 1000 kg (2205 lb) pallets
- Additional sizes available upon request

STORAGE

- Store in the original packaging
- Keep the packaging sealed in a cool, dry space
- Unusual storage conditions (high temperature or humidity) can reduce the product's life

WARNING: Keep the product in the original sealed bag until use to avoid moisture absorption.

HEALTH AND SAFETY

Prior to use, refer to the product safety data sheet for proper handling and required personal protective equipment.



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CASTHOUSE FLUXES

Product Name	Use Category	Applications	Suggested Alloys and Flux Features	Application Temperatures
Pyroflux GR DR18	<ul style="list-style-type: none"> • Dross Drying • Inclusion Cleaning 	<ul style="list-style-type: none"> • Dross drying in melting and holding furnaces 	<ul style="list-style-type: none"> • Sodium tolerant alloys, mildly exothermic 	>730°C (>1346°F)
Pyroflux GR DR110		<ul style="list-style-type: none"> • Small reverberatory furnaces • Induction furnaces 	<ul style="list-style-type: none"> • Sodium tolerant alloys • Mildly exothermic 	>680°C (1256°F)
Pyroflux GR DR113		<ul style="list-style-type: none"> • Melting Furnaces • Holding Furnaces 	<ul style="list-style-type: none"> • Sodium tolerant alloys 	680 -750°C (1256-1382°F)
Pyroflux GR DR115		<ul style="list-style-type: none"> • Reverberatory furnaces • Induction furnaces 	<ul style="list-style-type: none"> • Sodium tolerant alloys • Mildly exothermic 	>630°C (1166°F)
Pyroflux GR DR116		<ul style="list-style-type: none"> • Reverberatory furnaces • Induction furnaces 	<ul style="list-style-type: none"> • Sodium tolerant alloys • Mildly exothermic 	>685°C (1265°F)
Pyroflux GR DR120		<ul style="list-style-type: none"> • Reverberatory furnaces • Induction furnaces 	<ul style="list-style-type: none"> • Sodium tolerant alloys • Mildly exothermic • Fluoride free 	>620°C (1148°F)
Pyroflux GR DR211		<ul style="list-style-type: none"> • Melting Furnaces • Holding Furnaces 	<ul style="list-style-type: none"> • Sodium free • Alloys with 1-5% magnesium 	>730°C (1350°F)
Pyroflux GR DR212		<ul style="list-style-type: none"> • Reverberatory furnaces • Induction furnaces 	<ul style="list-style-type: none"> • Sodium and calcium free • Alloys with 1-5% Mg • Highly exothermic • Compatible with PROMAG™ 	>708°C (1306°F)
Pyroflux GR DR215		<ul style="list-style-type: none"> • Reverberatory furnaces • Induction furnaces 	<ul style="list-style-type: none"> • Sodium and calcium free • Alloys with 1-5% Mg • Mildly exothermic • Compatible with PROMAG 	>700°C (1292°F)
Pyroflux GR DR217		<ul style="list-style-type: none"> • Large melting furnaces • Holding furnaces 	<ul style="list-style-type: none"> • Sodium and calcium free • Mild exothermic 	700-800°C (1292-1472°F)
Pyroflux GR CL320	<ul style="list-style-type: none"> • Reverberatory furnaces 	<ul style="list-style-type: none"> • Sodium tolerant alloys • For reclaiming swarf, skimmings and turnings 	<ul style="list-style-type: none"> • Sodium tolerant alloys 	>640°C (1184°F)

Note: All Pyroflux recipes above are available in powder form, upon request.

