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Product Datasheet - Non Ferrous Coating

DYCOTE[®]

Dressings for Gravity & Low Pressure Die Casting .

General description

Gravity die casting involves introducing metal into the die under gravity while in low pressure die casting molten metal is displaced upwards from a sealed holding furnace through a stalk into a bottom gated die. DYCOTE is a generic name for FOSECO Die Lubricants that are used to protect the accurately machined die and core faces in both the processes to control solidification to give the best surface finish and casting release and to ease die operation and prolong die life. Dycotes are normally applied either by brushing or spraying on to the hot die.

Benefits

Foseco DYCOTE's are formulated.

1. To control heat flow to obtain optimum directional solidification leading to soundly fed castings.
2. To control heat flow to ensure that metal reaches all parts of the die with the correct amount of superheat thereby eliminating the formation of cold shuts etc.
3. To facilitate easy strip of the castings to ensure dimensional accuracy.
4. To impart the best possible surface finish and reduce the cost of secondary cleaning operations.
5. To provide longer coating and die life to increase rate of production.

Instructions for use

Foseco Dycotes are supplied either in the paste or ready for use liquid form. Pastes are to be suitably diluted before application. The application technique (spraying or brushing, the dilution and coating thickness development are also very important for

getting the optimum performance, once a Dycote is chosen for a particular application. Foseco Solution Executive helps in arriving at the optimum conditions of application for getting the best results.

Standard packing

Dycotes are supplied in 25 polybuckets.

Product range

In order to achieve the above properties, a careful choice of Foseco's insulating or lubricating die dressing is necessary. Insulating dressings are recommended where the rate of heat extraction from the metal is high, in order to retain fluidity and to encourage desirable directional solidification of the casting. Lubricating dressings are recommended mainly to lubricate or ease die operation to facilitate easy strip of the dimensionally accurate castings.

Characteristics of typical Foseco Die Dressings

Sr. No.	DYCOTE Range	Role	Recommended for	Alloys
01	DYCOTE-6	Insulating dressing.	Insulating property with fine surface finish.	Aluminium alloys.
02	DYCOTE-34	Good insulating property and excellent metal flow.	1. Large flat surface areas of thin cross section. 2.. A 50/50 mixture with DYCOTE-140 is used for the protection of low pressure stalks.	Light alloys.
03	DYCOTE-39	Insulating and high refractory dressing.	1. Finest possible surface finish with a good stripping power. 2. Medium to thick casting sections. 3. Slush casting.	Light alloys and as base coat for copper.
04	DYCOTE-140	General purpose high insulating dressing extensively used in all sectors.	1. Excellent insulation and fairly good surface finish. 2. Feeders and headers.	Light alloys.
05	DYCOTE-36	Insulating and lubricating.	1. Medium insulation. 2. Excellent metal flow and strip.	Most suitable for light alloys.
06	DYCOTE	Insulating and	Good surface finish with	Aluminium alloys.

	14ESS	high refractory dressing.	a good stripping power.	
07	Dycote EP8922	Insulating and high refractory dressing.	Good surface finish with a good stripping power.	Aluminium alloys.
08	DYCOTE 976 A	Insulating dressing.	Refractory coating for protection purpose	Specially designed for low pressure die casting stalks.
09	DYCOTE-11	Lubricating dressing with semi colloidal graphite.	1. Areas where rapid cooling or better strip is required. 2. Coreprints, slides die mechanisms etc. 3. Top coat application on insulating dressing to aid release.	1. Light alloys. 2. Billet and stick casting of copper base alloys.

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Foseco India Ltd. Sanaswadi, Pune 412 208. Ph:(02137) 568100, Fax: (02137) 568160

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