DATA SHEET

Graphite Die Coating

Graphite Coating for Gravity and Low Pressure Die-Casting

Description

Graphite Die Coating is a homogeneous liquid consisting of carefully selected graphite's, which have undergone thermal and chemical treatment in order to achieve maximum efficiency in the field of gravity- and low pressure die-casting.

The prime function of a graphite die-coat is that of lubrication. **Graphite Die Coating** accomplishes this objective, as it is comprised of a highly heat-resistant graphite matrix, which resists oxidation at elevated temperatures and maintains its adhesive qualities. In this way an above average number of castings can be produced without the need for continuous re-spraying.

The two other important functions of a graphite die-coat are those of producing a smooth casting surface finish and preventing cold flow. The graphite matrix contained in **Graphite Die Coating** consists of a particle size distribution, tailor-made to achieve these two functions.

Applications

Graphite Die Coating in diluted form may be applied to:
die cavities (to be sprayed on top of refractory coating) cores and moving parts of the machine

Dilution Ratio and Mode of Application

Graphite Die Coating should be diluted with tap water prior to use at a ratio of 1:5 to 1:12 depending upon the velocity of the spray system used in the application. Some agitation is required during the dilution process.

Once diluted, **Graphite Die Coating** should be applied by means of a suitable spray gun. The metal surface to which the diluted **Graphite Die Coating** is to be applied should be pre-heated to at least 100° C (approx. 200° F)

Frequency of Application

die-cavities	every 3 to 10 cycles depending upon weight and taper of casting
cores	every 2 to 10 cycles depending upon weight and taper of cores
moving parts	average 2 applications per working shift

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Chemical and Physical Data

Appearance	Dark grey, creamy paste
Solids	Chemically and physically treated graphite
Smell	Ammonia
Carrier	Water
pH- value	9 - 9,5
Density 20° C	1.2 - 1,24 g/cm³