

## Dressings for gravity casting

TYPE	CHARACTERISTIC AND ADVANTAGES
HYDRO BLANC	Reduces the heat exchange, protects the dies from the sticking of metal.
HYDRO BLANC AI	Reduces the heat exchange, protects the dies from the sticking of metal. More adherent and resistant than the former.
HYDRO BLANC C-B	Reduces the heat exchange, protects the dies from the sticking of metal. Suitable for complex castings with thin sections.
HYDRO BLANC S	Reduces the heat exchange, protects the dies from the sticking of metal. Suitable for wide flat surfaces with thin section.
COULJET	Very insulating dressing suitable for feeder heads and runners.
COULJET G	Variant of the former, containing graphite that facilitates sliding and separation.
GLASSGRAPH HYDRO F 49 S	Graphite based heat conductive dressing. Best also for the protection of tools that contact on liquid metal.
GLASSGRAPH HYDRO F2 CS	Heat conductive dressing finer graphite than the former.
GLASSGRAPH HYDRO F2 BS	Heat conductive dressing based on micronised graphite.
GLASSGRAPH HYDRO CH 2	Heat conductive dressing based on graphite with balanced effects (insulation lubrication).
GLASSGRAPH HYDRO CEL	Dressing based on graphite for brass casting in manually tilted dies.
GLASSGRAPH HYDRO CEL S	Dressing based on graphite for brass casting in automatically and semi automatically tilted dies.

## THE HYDRO BLANC

### REFRACTORY DRESSINGS FOR GRAVITY DIE CASTING

We propose four HYDRO BLANC dressings with the purpose of making die casting easier, saving a lot of time, obtaining castings with good surface finish that do not need to be repaired. They carry out a double action:

- Protect the dies from the sticking of molten metal
- Reduce the heat exchange, allowing the alloy to maintain its castability for a longer time, thus making the filling of dies easier.

### CHOOSING THE PRODUCT

The type of HYDRO BLANC to use is chosen by the foundry man according to the characteristics of the casting: form, thickness, volume.

- HYDRO BLANC standard for series of relatively important castings, without details.
- HYDRO BLANC AI, highly insulating, more hard, adherent and resistant to erosion than the standard HYDRO BLANC.
- HYDRO BLANC C-B, it is a variant of HYDRO BLANC AI. Maintaining the high insulation power of HYDRO BLANC AI, it has the advantage to permit the casting of with very thin and complex pieces. The castings obtained have a smooth surface, without defects, with precise details.
- HYDRO BLANC S, a relatively rough dressing, essential for large flat surfaces and thin sections.

## **COULJET**

It is a highly insulating dressing designed for the application on runners and feeder heads surfaces. It permits to maintain the metal castability for a sufficiently long time in order to correctly feed the castings. Its effectiveness permits to minimize rejects.

## **COULJET G**

It is a variant of COULJET characterized by the presence of graphite that facilitates slip and separation.

## **GRAPHITE BASED HEAT CONDUCTIVE DRESSINGS FOR GRAVITY DIE CASTING**

Based on fineness of graphite used, we propose:

- GLASSGRAPH HYDRO F 49 S, standard, most used
- GLASSGRAPH HYDRO F2 CS, much finer

These dressing permit a very cheap use. They must always be diluted with no calcareous water (rain water can be used)

Furthermore GLASSGRAPH HYDRO F 49 S is particularly suitable to maintain efficient all the furnace tools (pouring spoons, skimmers, etc.). In facts it has a high capacity of adhesion and protects the tools facilitating the slip of the molten metal and avoiding the sticking of the same.

## **GLASSGRAPH HYDRO F 2 BS**

Concentrate dressing based on pure micronised graphite in suspension in an alkaline water solution. GLASSGRAPH HYDRO F 2 BS particularly suitable for difficult castings. It is used on hot dies and creates sliding surfaces for the metal.

It is also recommended for the lubrication of core pins, since it facilitates the sliding, avoiding any deformation.

## **SEMI CONDUCTIVE DRESSINGS FOR GRAVITY DIE CASTING**

### **GLASSGRAPH HYDRO CH 2**

GLASSGRAPH HYDRO CH 2 is a dressing with balanced effects, which slightly reduces the heat exchange. Particularly suitable for medium section and little surface castings.

### **USE OF GLASSGRAPH HYDRO CEL E CEL S IN BRASS DIE CASTING FOUNDRY**

### **GLASSGRAPH HYDRO CEL**

GLASSGRAPH HYDRO CEL is applied on manually tilted dies.  
GLASSGRAPH HYDRO CEL S is applied on automatically and semi automatically tilted dies.

## ANTIETAM PW

### ADVANTAGES OF ANTIETAM PW FOR GRAVITY DIE CASTING

ANTIETAM PW permits to solve a lot of problems that a foundry man has to face.

For example:

**Lubrication** of sliding parts of dies in order to avoid the hot sizing.

**Coating** of core pins and metallic cores with little taper and, in general, of die parts where the release of castings is difficult.

**Protection** of bolts and nuts exposed to the heat of the die.

The regular use of ANTIETAM PW also makes an efficient protection of the vents, keeping them clean. Gases escape easier, permitting better filling of the die.

### ANTIETAM PW IN ALUMINIUM ALLOYS AND ZINC ALLOYS PRESSURE DIE CASTING

ANTIETAM PW has the advantage that it does not dirty the dies, eliminating the loss of time for their cleaning.

It also permits to clean the dies previously dirtied by other materials; the castings produced become clear when dies it is perfectly clean again.

Thanks to this "self-cleaning" action the dimensional precision of castings is tightly maintained.

WITH A LOW CONSUMPTION ANTIETAM PW PERMITS  
TO SAVE TIME AND A GREATER EFFICIENCY

## POTEM C

It is a product used for the lubrication of slide-ways, punches, pins, and mobile parts.  
It is available in the form of paste and small sticks.  
The operator chooses the suitable form according to the type of opening of the die.

## POTEM MO

### 1. GRAVITY DIE CASTING FOUNDRY

#### **Anti seizing agent based on molybdenum disulphide**

The use of POTEM MO is recommended in any problems produced by continuous metal-metal friction that causes a rapid wear and the seizing of the parts in contact.

### 2. PRESSURE DIE CASTING FOUNDRY

#### **Lubrication agent**

POTEM MO is also used for the lubrication of plungers, and injection cylinders in manual pressure die-casting.

Thanks to his composition, based on molybdenum and natural 99% carbon graphite, POTEM MO assures a perfect coating of plungers and cylinders at high temperature.

## MOULNET

MOULNET is used to release the castings stuck to the dies without efforts. It is a vegetal non-toxic and very greasy product that permits to quickly remove any casting stuck to the die, reducing losses of time and allowing to maintain the rhythm of production.