

HOBEN

INTERNATIONAL LTD

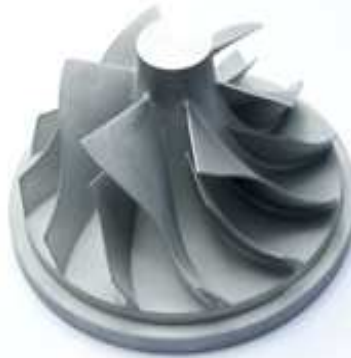
Technical Data Sheet

Non Ferrous Foundry Plaster

Product Description

Hoben Foundry Plaster is a gypsum bonded investment formulated for casting non ferrous metals (Aluminium and Zinc) by the Rubber Plaster Mould (RPM) process using a reclaimable pattern of silicone rubber.

The highest purity raw materials are used in conjunction with optimised particle sizing to suit the requirements of the product, in this demanding environment, these are subjected to exacting quality control procedures. Hoben Foundry Plaster combines excellent green and fired strengths with closely controlled thermal expansion characteristics. It is due to these high standards that Hoben Foundry Plaster has been used for many years by leading foundries specialising in turbocharger compressor wheels and rapid prototyping processes.



Typical Foundry Plaster Applications

- To produce precision and premium quality Aluminium and Zinc castings
- For aesthetic applications where appearance is critical
- Prototyping – to assist engineering in debugging design before committing to hard tooling
- For low volume applications where quantities do not justify die cast tooling
- For high volume applications of complex or unusual shapes
- For castings with thin walls or where weight is critical
- To simulate die castings for prototype and pilot production
- Tooling is low cost and allows ease of modification
- To reduce “time to market” on new products and evaluate market potential
- To reduce time for machining and secondary operations

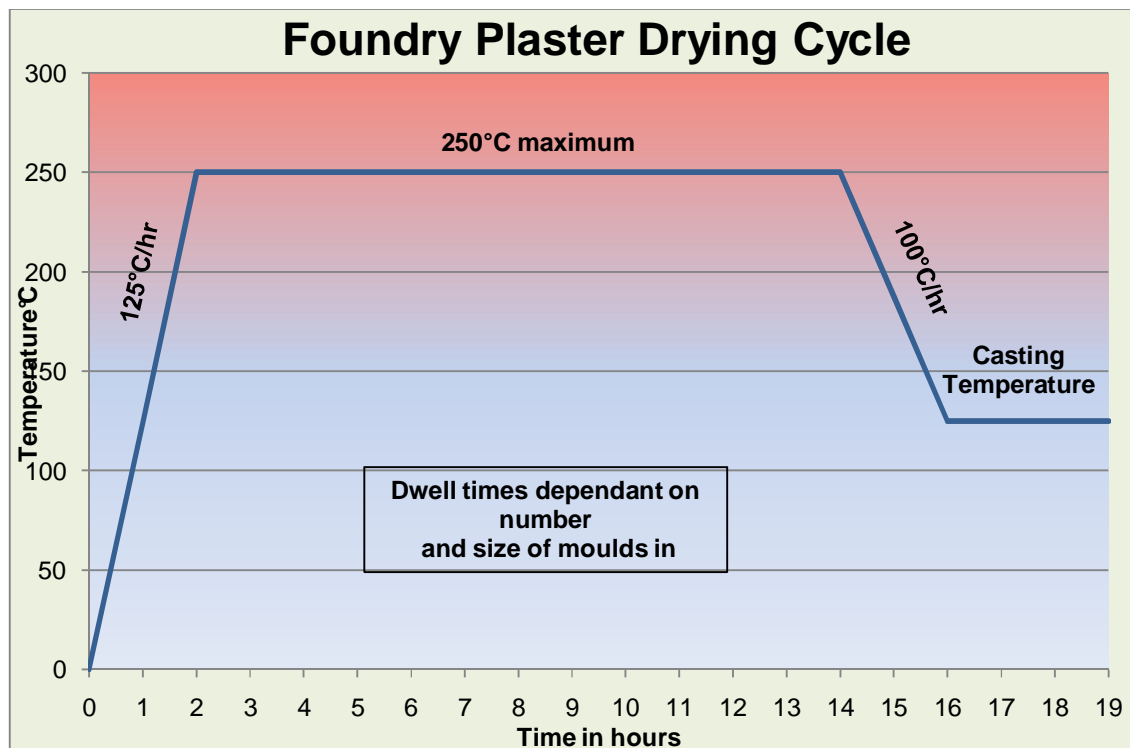
Typical Foundry Plaster Advantages Over Other Mould Materials

- High permeability solid mould plaster
- Cools slowly following casting promoting uniformity of structure and mechanical properties
- Ideal for prototyping as well as high volume production
- Produces an excellent surface finish with no mould breakdown reducing post cast finishing
- High definition and close dimensional accuracy
- Ideal for thin walled castings
- Ease of removal from casting
- Can be used as a single part or multiple part mould
- Consistent batch to batch set times, strengths, expansions etc
- Slurry characteristics can be adjusted to suit individual customer requirements

Typical Foundry Plaster Mixing Instructions

Mixing Under Vacuum	Time (Minutes)
Weigh out water and powder	0
Add powder to water	0
Mix under vacuum	1
Pour over patterns	1
Total time taken	2
Remove / Strip patterns after 20 minutes	

Typical Foundry Plaster Burnout Cycle



Typical Foundry Plaster Technical Information

Powder/Water Ratio	123%
Work Time @ 22°C	1 minute
Initial Set Time	3 minutes
Setting Expansion @ 2 hours	0.025%
Thermal Expansion @ 200°C	0.17%

Packaging and Storage

Hoben Non Ferrous Foundry Plaster is available in 25kg paper sacks or big bags up to 1500kg. Keep dry and use in rotation.

Health and Safety

Hoben Non Ferrous Foundry Plaster is an inert and incombustible powder.

This information is typical data and does not constitute a product definition.