Gold Star Powders

GS Shoe Cast

For the casting of aluminium shoe mould plates

Gold Star Shoe Cast is specifically designed for the manufacture of aluminium shoe mould plates for the production of shoe soles. This method of manufacture is used to produce soles for many of the leading names in the training shoe industry.

A typical master shoe model is constructed from wood, metal, or plastic. Silicone is then poured over the master model and left to cure. Once set, the Silicone mould is stripped from the master, Gold Star Shoe Cast slurry is poured into it and allowed to set.

The Gold Star Shoe Cast plaster model is removed from the silicone mould and dried out in the furnace. The plaster model is then set into a frame and molten aluminium is poured over it, the metal is left to cool and the plaster is removed from the aluminium casting.

Mixing Instructions

Shoe Cast is to be mixed at a recommended slurry temperature of 21°C, adjust the water temperature to achieve this.

Add the powder to the water at a ratio of 40:100 and mix for 4 minutes, vacuum the mixing bowl for 1 minute and pour around the pattern. Vacuum for a further 1 minute and then top off the pattern frame. To aid the removal of air bubbles gently vibrate during vacuuming. Total work time is 10 minutes.

The mould must be allowed to set for a minimum of 2 hours before being loaded into a drying oven at ambient temperature. The drying oven is to be ramped up to a temperature of 280°C at a rate of no greater than 100°C per hour. The mould must be held at 280°C for between 5 and 12 hours depending upon the size of the mould.

Once the cycle is complete, the drying oven may be switched off and allowed to cool to ambient temperature. The molten metal may then be cast into the mould and allowed to cool, at which point the plaster is removed.

Gold Star Powders

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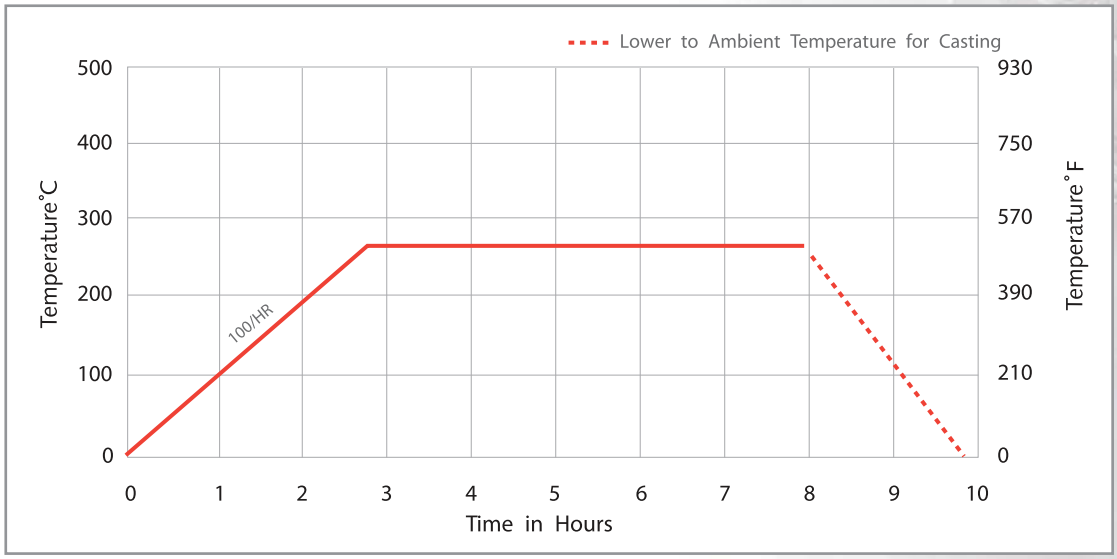
Mixing Instructions

Water : Powder Ratio	Conventional Mixing
	40 : 100

Conventional Mixing	Min.
Weigh out water & powder	-
Add powder to water and mix	4
Vacuum the bowl	1
Pour flasks and vacuum the flasks	3
Total time taken	**8**

- Leave for 90 minutes to stand before burnout.

Recommended Burnout Cycles



Note: Do not remove flasks from furnace to cast until they have been held at casting temperature for a minimum of 1 hour. If held for less than 1 hour, the core of the flasks will be at a much higher temperature than the digital temperature display states, and may result in metal mould reaction.

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