Sanicast MVV

Synthesegips Service

Moulding plaster for the sanitary-ceramic medium pressure casting process

Synthetic Alpha - Calciumsulphate - Semi-hydrate, with defined fineness of grain and extremely high purity, produced according to a patented special process.

Properties

- Good water squeezing-out and absorbing ability
- Outstanding surface properties
- Only slight expansion

Advantages

- Homogeneous porosity
- Only polishing of body surface required
- Limited abrasion (0.4 - 0.5 mm per 100 mouldings)
- Large quantity of mouldings are castable

Characteristic data

Appearance	white powder

Mixing ratio

powder : water	3.2 - 3.5 kg per litre
Processing time	app. 20 min
End of solidification	app. 30 min

Special instructions

- The temperature of SANICAST and the mixing water - before mixing - should be app. 20°C. Any material which was stored at a greatly deviating temperature should be allowed to become conditioned, in the course of several hours, to this temperature.
- Gypsum processing is carried out without any vacuum.
- Only clean containers and mixing tools must be utilized. (Impurities may, for instance, alter the setting time.)

Processing

a) Mixing

Sprinkle the respective quantity SANICAST in the appropriate quantity of water. Use suitable mechanical mixing devices for stirring. The speed of rotation depends on the nature of the stirring device. The stirring intensity is to be selected in such a way that it is ensured that no air is drawn into the mixture. Adjust during the final two minutes of the stirring time to a lower rpm in order to allow air, if any, to escape. The mixture must be poured within the period of processing stated.

b) Aeration

Distribution of porosity and size of pores are determined by the time when aeration begins. Overall porosity depends on the mixing ratio SANICAST : water.

We recommend to choose the moment beginning aeration - measured from the time of first contact of SANICAST with water - according to increasing of temperature in the mould. It amounts empi-rically 10 – 14° C in dependence on the chosen mixing ratio. New experiences show that a favourable residual humidity in the body is obtained if a mixing temp. of 20 – 22° C is observed.

With manual aeration the following process proved best:

- Start of blowing out the mould after increasing of temp. for 10 – 14° C (= 30 – 36° C when mixed with 20 – 22° C).
- Initial pressure 0.5 bars.
- Increase the pressure every minute by 0.5 bars up to a maximum final pressure of 4.5 - 5.0 bars.
- After having achieved the maximum value maintain this pressure for ten minutes, or until the final temperature in the mould of 55 – 60° C has been reached.

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An automatic aeration should be adapted as well as possible.

c) Treatment of the moulds before utilizing in the medium pressure casting plant

- After releasing from the original mould small defects are corrected with fine emery paper.
- Thereafter each half of the mould is moistened with approximately 5 l water to avoid fissures at higher temperatures. Do not blow out this additional moisture!
- Water the moulds after intermediate storage for app. 30 min. before introducing into the casting plant.
- When interrupting the production process at the medium pressure casting plant (e.g. during the annual shut down), the moulds must be moistened every second day in order to prevent a clogging of the pores.

Recommended Production Parameters

- Slip pressure 4.5 - 5.0 bars
- Formation time of body app. 20 min.
- Thickness of body 8 - 10 mm
- Air temperature for drying the bodies 65° C
- Pressure of drying air app. 1.3 bar
- Pressure time for drying of bodies app. 15 min.
- Pressure for removal from the mould app. 1.8 bars
- Period for removal from the mould app. 15 sec.
- Residual moisture content of body after removal from the mould 17 - 18 %

Packing

Paper bags with plastic liner 50 kg

Storage stability

For a minimum of one year in sealed packages which must be impervious to moisture. Storage beyond this period at temperatures above 35 °C will impair the storage stability.

The above recommendations are given to the best of our knowledge. We grant the quality of our products according to our specification. Any further liability cannot be accepted since the proper application of our products is outside of our control.

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