General application advice



Spinning application of ombran FT with MRT-technology

APPLICATION ADVICE

General: The manufacturer's specifications in the ombran FT technical data sheet, the general processing instructions and the equipment planner for hybrid silicate coatings as well as the manual for mechanical coating processes must always be observed. The following data are only supplements.

Only round manholes with max. DN 1000 can be coated. Do not use ombran MHP-SP 3000 together with ombran FT as a reprofiling mortar as it is not compatible with hybrid silicate coatings. Each application of ombran FT in a manhole must be considered as a single action. A progressive coating with ombran FT from manhole to manhole without cleaning the spinning equipment is not recommended. A replacement hose with couplings should always be available if stoppers occur in the hose.

Reprofiling: Before the hybridsilicate coating is applied by spinning, mineral reprofiling as a capillary breaking layer of at least 10 mm thickness with ombran MHP-SP must be carried out by spinning application with MRT. Inside corners have to be rounded by means of fillets, outside edges have to be rounded off. Spin-rough mortar surfaces of ombran MHP-SP do not require additional structuring.

Surface preparation: After approx. 1 day waiting and curing time the reprofiled manhole surface must be cleaned of all dirt and separating components by using the MRT blasting unit (automated combination of pressurized water and quartz-free granulate blasting). The distance between the nozzles and the wall should be as short as possible (optimally approx. 10 cm). At least 2 cleaning cycles (cycle = upward and downward movement) must be carried out with ≥ 400 bar water and granulate. In addition, at least one cycle for washing off the granulate must be carried out only with water.

In horizontal areas (manhole bottom, channel, etc.) or, if necessary, also in the cone area, a manually guided blasting nozzle must also be used.

Before overcoating with ombran FT, the re-profiling must be dry on the surface. Overcoating can be carried out after approx. 24 h at the earliest, better 72 h.

Processing: The application is done with the HS Coating Head in combination with the MRT Spinning Unit. The coating material mixed according to the manufacturer's specifications is pumped without the addition of air (dense phase method) using a suitable screw or diaphragm pump via the hose (25 mm inner diameter) to the spinning head. There, the material is accelerated by centrifugal force and thus torn open.

The speed of the spinning head and the pump output must be adjusted according to the temperature and the surface appearance achieved (recommended basic setting: centrifugal speed MRT Coating Head: 2,000 rpm at standard vertical speed 1.6 m/min, conveying speed Dittmann DP 8: stage 0.9).

The correct timing between mixing and processing speed (pumping) must be found in order to ensure continuous work progress. The aim is an even and rapid coating of the manhole, therefore no pauses should be made during a coating process with ombran FT. The required total layer thickness of at least 4 mm above grain tips must be ensured in all application areas. An overcoat thickness of approx. 1 mm must be planned to compensate for the impact craters typical of spinning application (temperature-dependent).

Safety instructions: The usual rules of conduct for reactive resin-based systems must be observed. During processing, suitable protective clothing, gloves, goggles / face must be worn.

