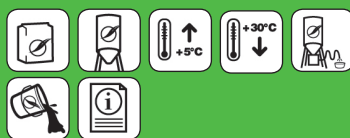




INJECT HD

Special mortar for foundations, with controlled shrinkage, for medium and high pressure injections, for use in the presence of water and special geotechnical contexts.



Product description

INJECT HD is a special premixed, single-component, pourable, controlled-shrinkage mortar specifically designed for the construction of jet-grouting columns, micropiles, tie-rods and valved systems in general in the presence of water.

Supply and storage

INJECT HD is supplied in bags on pallets or loose in a 22 m³ silo system.

Substrate preparation and application methods

INJECT HD is automatically mixed by the mixing and pumping unit (type SMP).

The mortar produced in this way is conveyed by the pump (type SMP), suitably modified, with selectable flow rates and conveying pressure up to approx. 15 bar; these values are merely a reference as the data are subject to variations depending on the length of the casting pipe, its diameter and climatic conditions.

The use of INJECT HD for high-pressure injections requires a piston pump or jet system, which is not included in the equipment supplied with the silo.

INJECT HD

The UNI EN 14199 standard

INJECT HD complies with the recommendations of “UNI EN 14199 Execution of special geotechnical works: Micropiles”:

- the absence of bleeding and/or segregation phenomena
- the good cohesiveness of the dough
- adequate fluidity
- the ability to self-compact
- workability
- the minimum cement content
- the mechanical resistance to compression

AICAP recommendations

INJECT HD complies with the recommendations of AICAP - Anchors in Soil and Rock - with regard to:

- fluidity
- resistance
- exudation
- withdrawal

Peculiarities of mortar

The composition of INJECT HD, especially with regard to the rheological modifiers with cohesive action, makes the mix particularly homogeneous, compact and self-compacting, difficult to segregate and wash away by the action of the water table, within the limits of its speed.

The product has a low permeability coefficient and casting in the presence of water does not alter the setting and curing characteristics of the mix.

INJECT HD can be effectively used for the formation of jet columns as a replacement for silicate additives.

Warnings

INJECT HD must be applied at a room temperature between 5°C and 30°C; in case of low temperatures (5°C ÷ 10°C) it is however advisable to mix the material with lukewarm water. Vice versa, with high ambient temperatures, it is advisable to mix with cold water.

Do not mix INJECT HD with other substances.

Avoid large temperature changes during the setting phase. The product must be protected from frost and rapid drying.

The mixing water, for the correct functioning of the equipment, must be free of impurities and, for the quality of the mortar, must also comply with the reference standard.

The qualification of the mortar is obtained by the viscosity test and the density test of the mix; it is recommended to carry out these tests at least at the beginning of each casting session.

The proposed qualification of the mortar does not replace any mandatory design tests.

It is recommended that long storage periods in silos be avoided in order to prevent the loss of the cement binder's characteristics and the related reduction in the hydration process of the cement with a consequent reduction in the mechanical characteristics of the mortar.

INJECT HD

TECHNICAL DATA	PERFORMANCE
Mixing water	approx. 30%
Maximum inert diameter D_{MAX}	< 0,1 mm
Dough density	approx. 2000 kg/m ³
Viscosity	110"-180"
(Marsh cone nozzle 10 mm)	110"-180"
Mechanical resistance to compression at 28 days	> 30 N/mm ²
Mechanical resistance to bending at 28 days	> 6 N/mm ²
Theoretical yield	approx. 1530 kg/m ³
Specific weight	approx. 1100 kg/m ³ det. in free fall

v. 06/2022

I dati riportati si riferiscono alle prove di Controllo Qualità in condizioni ambientali normalizzate. Applicazioni pratiche di cantiere a seconda delle condizioni di esercizio possono rilevare dati sensibilmente modificati, pertanto le informazioni presenti nella Scheda hanno valore puramente indicativo in quanto l'utilizzatore deve sempre verificarne l'idoneità nell'impiego del prodotto assumendosi la responsabilità derivante dall'uso. Fornaci Calce Grigolin S.p.A. si riserva di apportare modifiche di qualsiasi genere senza alcun preavviso.