

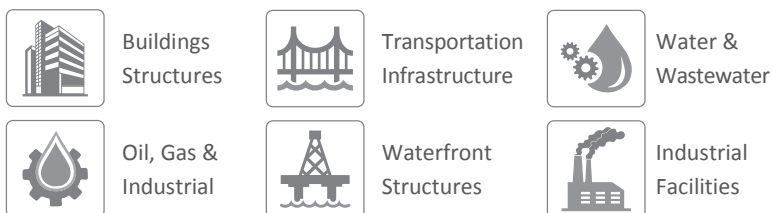
TechnoGrout™NC

Nano Cement Grout

TECHNOPOL
مقاوم سازی تکنوپل

PRODUCT DESCRIPTION

The main components of TechnoGrout™NC, blast furnace slag and Portland cement clinker, are separately grinded and classified to the requested grade. These fractions are blended with selected gypsum to a regulated setting according to fixed formulas in a batch mixer into TechnoGrout™NC. The specification of the specific surface area (Blaine) isn't significant for ultrafine binders as it gives no information about the maximum grain size, which is the key parameter for grout ability.



TECHNICAL DATA (DRY FIBER)

	Unit	TechnoGrout™NC
Density	kg/l	1.7
Compressive Strength (28 days)	MPa	35
Modulus of Elasticity in Compression	GPa	9.6
Chemical Base	Modified nano cement	
Viscosity	mPa·s	~ 100
Mixing Ratio by Weight	Parts A:B	1:0.65

ADVANTAGES

- Structural grouts for cracks
- Corrosion protection of embedded reinforcements.
- Deep penetration into narrow cracks in concrete and mortar
- Good flow properties
- Filling of voids
- Final, rigid, cementitious sealing of cracks while simultaneously treating corroding or corrosion-prone reinforcing steel in concrete and mortar.

TYPICAL USES

- Waterproofing and stabilization of rock in tunneling
- Repair of concrete or mortar
- As a component for high performance concrete as a substitute for micro silica.
- Remedial cementing of oil and gas wells.
- To improve the early strength of light weight oil well cement slurries

MIXING

- TechnoGrout™NC is delivered in two precisely matched components. If required, a maximum of 0.2L water can be added.
- Place the liquid part B in a suitable mixing vessel. Mix with colloidal mixer at approx. 2800 rpm and add the powder part A slowly and continuously. Mix the suspension thoroughly for at least 3 minutes.
- Subsequently, pour the injection material directly into the pump or keep ready in a clean container.

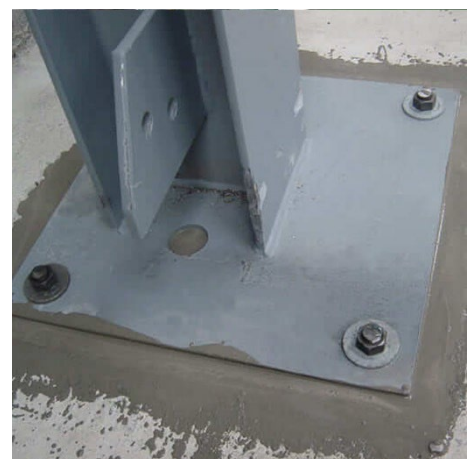
INSTALLATION PROCEDURE

PREPARATION OF SUBSTRATE

The substrate must be sound, clean, free of oil and grease, old coatings and other contaminations. For good adhesion, pre-treat the substrate with high pressure water or mechanically. Use air pressure to remove dust from cracks.

APPLICATION

The injection material can be injected with commercially available equipment designed for cement injections. For vertical injection sections, inject from bottom to top. If dry concrete has to be injected, it is recommended to pre-wet the concrete with water under light



pressure.

CLEAN UP

Clean tools with water immediately after use. Hardened material can only be removed mechanically.

FAIRST AID

Skin

Wash fibers off skin with water and soap. If fibers are embedded in the skin, remove with tweezers. Discard clothing that may contain embedded fibers. Seek medical advice if exposure results in adverse effects.

Eyes

Immediately flush with a continuous water stream for at least 20 minutes. Washing immediately after exposure is expected to be effective in preventing damage to the eyes. Seek medical advice.

Inhalation

If there is inhalation exposure to the fibers of this product, remove source of exposure and move victim to fresh air. If victim is not breathing, give artificial respiration. If there is breathing difficulty, give oxygen. Seek medical advice for any respiratory problems.

Ingestion

Ingestion is not a likely means of exposure for this product. If ingestion does occur, do not induce vomiting. Give nothing by mouth if victim is unconscious. Seek medical advice.

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