

INDUGROUT-MC

HIGH PERFORMANCE, FREE FLOWING, HIGH STRENGTH, DUAL EXPANSION, NON-SHRINK, NON-OXIDIZED, CEMENTITIOUS MICRO-CONCRETE

Product Description:

INDUGROUT-MC is a ready-to-use high performance, high strength, non-oxidized, non-shrink, cementitious grout which only requires the addition of water to produce a non-shrink flowable grouting mortar for large gap filling. INDUGROUT-MC contains selected Portland cements, selected hard aggregates, modifiers and shrinkage-compensating materials that work during both the plastic & post hardened states. INDUGROUT-MC is designed for application by pouring or pumping in thicknesses between 12 mm & 300 mm.

Primary Uses:

INDUGROUT-MC is typically used for:

- Grouting anchor bolts.
- Grouting bridge bearings.
- Grouting of structural elements such as precast wall, beams, columns, etc.
- Grouting anchor bolts, crane rails and milling machines.
- Structural concrete repairs.
- Grouting of generators & turbines.
- Heavy stanchion bases and base plates reciprocating machines.

Advantages:

- Easy to mix and apply.
- Designed for hot weather applications.
- Non-oxidized, non-shrink.
- Low heat of hydration.

- Compatible with all physical properties of concrete.
- High mechanical properties.
- Low permeability extends durability & service life.
- High early and ultimate strengths.
- Chloride-free, nitrate-free & non-toxic.
- Excellent bond to concrete and steel.
- Excellent heat resistance.
- Can be applied in a single layer at a thickness of up to 300 mm.

Standards:

INDUGROUT-MC is formulated to comply with all requirements of ASTM C-1107: "Packaged Dry, Hydraulic – Cement Grout (Non-shrink)" Grade C as well as CRD C-621.

Technical Properties:

Appearance consistency	: Free flow grey powder
Mixing water (litres)	: 3.75
Yield/bag (litres)	: 13
Mixture density (kg/l) at +20°C	: 2.3 (mixed)
Setting times (Influenced by ambient Temp.)	: Initial 3-4 hrs. Final 5-6 hrs.
Flow (Flowable consistency)	: CRD C-cone
Chloride content (%)	: 19-25 sec. : Nil



Expansive Behavior	: Dual: Expansion occurs in both plastic & hardened states
Expansion at 28 days	: +0.02%
Compressive Strength(N/mm ²)	: Flowable consistency
at 24 hrs.	: 18
at 3 days	: 43
at 7 days	: 54
at 28 days	: 72
Flexural Strength (N/mm ²)	: Flowable consistency
at 24 hours	: 10
at 3 days	: 12
at 28 days	: 14
Modulus of Elasticity	: >3300 MPa
Coefficient of thermal Expansion	: 10x10 ⁻⁶ mm/mm/°C

Application Guide Surface Preparation:

All surfaces must be sound, clean and free from dust, grease, oils, curing compounds, mould release agents or other adhesion inhibiting materials. Remove all surface laitance and maintain a surface profile between CSP 1 & CSP 5 as described by the International Concrete Repair Institute (ICRI).

Thoroughly saturate all mineral substrates and remove standing/surface water prior to application of INDUGROUT-MC.

Steel reinforcement must be grit blasted to SA 2½ (White clean metal) and immediately primed with INDUBOND-VK4032-ACI or INDUCRET-BIS-0/2 before new rust/scale is formed. Please refer to relevant technical data sheets.

Shuttering:

Always use water tight and smooth surfaced shuttering. Use rubber strips or appropriate

sealant between the formwork and the host concrete. Maintain a maximum unrestrained (exposed) gap between the formwork and base plate edge of:
25 mm on inspection sides.
70 mm on pouring side.

Mixing:

Place the exact amount of water in a clean vessel and gradually add the contents of the bag while mixing with an electric drill (maximum 450 rpm) attached with the appropriate mixing paddle. Continue mixing until a homogenous, lump-free consistency is achieved. An appropriate grout mixer is recommended for large-volume grout pours. DO NOT mix more than what you can consume within 45 minutes at +25 °C. DO NOT RE-TEMPER grout to restore workability. Grouts that have lost workability must not be used.

Placement:

Continuously pour - from the pouring side - the mixed materials onto the prepared substrate. Avoiding air pocket entrapment & allow air to escape. If base plate grouting is carrying out, ensure adequate head pressure is maintained throughout the pouring process. Voids should be removed by rodding or strapping.

Curing:

INDUGROUT-MC is a cementitious grout. ACI recommendations should be followed during mixing, placement and curing. After placement, the grout must be properly cured for at least 3 days. REMICURE, curing compounds from the SCHOMBURG range can be used. Protect freshly placed grout from direct sunlight and/or extreme temperatures.

Cleaning:

Clean all tools & equipment with water immediately after finishing grouting works. Cured/hardened grout can only be removed mechanically.



Estimating & Supply Packaging:

INDUGROUT-MC is available in 25 kg bags.

Yield:

13.0 liters/bag in the flowable state.

Storage & Shelf-life:

9 months when stored in original, unopened bags and elevated from the floor in a covered & well-ventilated storage area away from extreme temperatures, and any source of moisture.

Health and Safety:

- INDUGROUT-MC is non-toxic & non-hazardous during handling, storage & use.
- Do not dispose directly into water or onto soil. Expired or out of pot-life material should be disposed of in accordance with local environmental regulations.
- Splashes on skin can be washed with soap and water.
- For more details about any safety requirement, please refer to valid MSDS.

