

## High Grade Non-shrink Grouting Mortar

### PRODUCT DESCRIPTION

**INKA-HG500**, is a high grade ready to use self-leveling non-shrink grouting mortar with extra high initial and final strengths.

### USES

**INKA-HG500** is successfully used in fixing:

- Steel constructions,
- Concrete anchors,
- Machine foundations,
- Foundation plates,
- Guide rails for heavy construction equipment,
- Precast concrete,
- Tank and reservoir piers... etc.

### ADVANTAGES

- Ensures high initial and final strengths.
- Shows perfect flow characteristics with low water/cement ratios.
- Balanced expanding ability eliminates shrinkage.
- Its strong, homogenous watertight structure gives durability and resistance against mineral oils.
- Protects reinforcement thanks to its watertight structure.
- Ensures perfect adherence to sound steel and concrete surfaces preventing corrosion.
- Its non-corrosive nature makes it possible to be used just about anywhere.
- Smooth and sound surfaces can be easily obtained thanks to the mixed design.
- Adjustable consistency makes it easier to fill detailed formwork without making any significant change on initial and final strengths.
- Its strong and specially selected mineral aggregate base gives perfect durability against extreme temperatures. (added fire resistance)

### TECHNICAL DATA

- **Colour:** Grey powder
- **Unit Weight of Fresh Mortar:** ~ 2,1 kg/ltr
- **Expansion:** 0,25 - 0,50% after 28 days
- **Storage:** 12 months when kept in a dry and closed area stacked in loads of maximum 5 bags
- **Packaging:** 20 kg craft paper bag with PE lining
- **Standard:** Complies with TS EN 1504-3.  
Concrete repair product for structural repairs, PCC  
3.1 Mortar application by hand/R4/Reinforced and  
Unreinforced

### APPLICATION

**Surface preparation:** Concrete surface should be in a rough structure and both concrete and metal surfaces should be clean, free from oil, grease, rust and all loosely adhering particles. In order to maintain a homogeneous and voidless mass, vent-holes should be drilled on the mould to allow the trapped air to discharge during the pouring process. Absorbent surfaces should be saturated with water thoroughly. The wetting process should be made 24

hours prior to the application. The surface should be dampen just before the application once more and the excess water should be removed with a sponge. Absorbant moulds should also be saturated with water.

**Mixing the product:** The water/mortar ratio is 1 : 9. **INKA-HG 500** is mixed with a slow speed compulsory mixer. 80% of the mixing water should be poured into the container and **INKA-HG 500** should be added slowly while mixing. The rest of the mixing water is added according to the level of flow (consistency) desired. The mixing process should be continued until the mixture is free from all lumps and air bubbles. The mortar should be left to rest for 5 minutes after the mixing process. For applications above 25°C, additional mixing water might be needed for desired flow. Additional use of mixing water for desired flow in hot weather conditions will reduce the final strength of the mortar. Therefore 2,4 kg's of mixing water should not be exceeded even in extreme (hot) weather conditions.

The product should be mixed with a speed controlled compulsory hand held mixer (with heavy duty mixing tool). The mixing per batch should not exceed 40 kg's. (2 bags)  
Normal concrete/mortar mixers should not be used as the mixing speed will not be sufficient enough to get rid of all the lumps, leading to additional water use and reduced final strengths.

The fresh mortar temperature must be below 30°C.  
A 3 to 5 minute mixing should be enough to have a homogenous, well mixed mortar.  
Mortar should be poured immediately after mixing from one side, in order to allow the trapped air displaced by the mortar to escape.

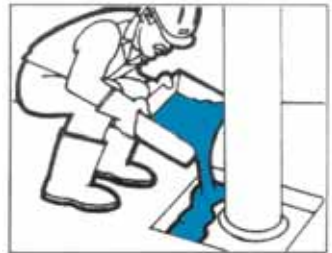
Do not use at temperatures below +5°C.

### Application Thickness:

30 to 40 cm thick pours can be made in a single application. For thicker applications, water-tightness of the moulds and the strength of the fittings should be ensured.

-compressive strengths @ 20°C with 10cm x 10cm x 10cm moulds  
-flexural strength @ 20°C with 160mm x 40mm x 40mm moulds

compressive strength 1 day (N/mm <sup>2</sup> )	compressive strength 28 days (N/mm <sup>2</sup> )	flexural strength 28 days (N/mm <sup>2</sup> )
> 38	> 105	> 18
modulus of elasticity		~ 35.000



# HG500

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INKA.3.03.TB.123 20/08/2015/09

# INKA®

### CONSUMPTION

~ 2000 kgs of **INKA-HG 500** (powder) for 1 m<sup>3</sup>.

### ATTENTION

- Water should never be added to the product after the mixing process is completed. (to increase workability)
- Do not use where environmental and surface temperature is below +5°C and above +35°C.
- The remaining product should be kept closed airtight in its original packaging.
- For outside applications, the area should be protected against direct sunlight, wind, rain and freezing temperatures.
- Tools must be cleaned with warm water before the residues fully cure. The cured product should be removed mechanically.

### HEALTH & SAFETY

- Contains cement. As it is an irritant material incase of contact, wash with plenty of water.
- Protective mask should be worn during the preparation of the product.

### TECHNICAL SERVICES

Our technical support team is ready to answer all your questions concerning our product line.

For additional information, please contact our headquarters.

Material Safety Data Sheet of this product can be obtained from [info@inka.com](mailto:info@inka.com) or from our regional sales representatives.

