

# Strugrout® KER320

## Low Exotherm, Epoxy Resin Free Flow Grout

### Uses

Suitable for use where heavy, dynamic or mobile loads are encountered. Particularly well suited to applications where long working time and/or low exotherm properties are required.

Grouting under reciprocating or rotating equipment

- Heavy crane/transporter rails
- High speed turbines and centrifuges
- Grouting over long distances or in thick sections
- All applications under conditions of high ambient temperatures

### Advantages

Low creep characteristics under sustained loading

- Resistant to repetitive dynamic loads
- Non-shrink & hence ensures complete surface contact & bond
- High compressive, tensile and flexural strengths
- Withstands a wide range of chemicals

### Description

Strugrout KER320 is a low exotherm material which is particularly suitable where long working time is needed; for large gaps (up to 300 mm) or for grouting at high ambient temperatures (up to 55°C). Strugrout KER320 is a three component system consisting of base resin, liquid hardener and specially graded inert fillers.

### Properties

Typical results for hardened grout @ 20°C):

Compressive strength (BS 6319, Part 2:1983):	65 N/mm <sup>2</sup> @ 3 days 88 N/mm <sup>2</sup> @ 7 days
Tensile strength (BS 6319, Part 7:1985):	18 N/mm <sup>2</sup> @ 7 days

Flexural strength (BS 6319, Part 3:1990):	34 N/mm <sup>2</sup> @ 7 days
Density:	1950 kg/m <sup>3</sup>
Pot life:	90 minutes @ 40°C 90 minutes @ 30°C 240 minutes @ 20°C
Chemical resistance:	Oil, grease, fats, most chemicals, mild acids & alkalis, fresh & sea water.

### Instructions for use

#### Preparation:

##### - Concrete surface

The substrate surface must be free from oil, grease or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes and fixing pockets must be blown clean of any dirt or debris.

##### - Pre-soaking

For a minimum of 2 hours prior to grouting, the area of cleaned substrate should be flooded with fresh water. Immediately before grouting takes place, any free water should be removed. Particular care should be taken to blow out all bolt holes and pockets.

##### - Base plate

It is essential that this is clean and free from oil, grease or scale. Air pressure relief holes should be provided to allow venting of any isolated high spots.

##### - Leveling shims

If these are to be removed after the grout has hardened, they should be treated with a thin layer of grease.

##### - Formwork

The formwork should be constructed to be leakproof. This can be achieved by using foam rubber strip or mastic sealant beneath the constructed formwork and between joints. In some cases, it is practical to use sacrificial semi dry sand and cement formwork. The formwork should include outlets for pre-soaking.

## Strugrout Ker320

**- Unrestrained surface area**

This must be kept to a minimum. Generally, the gap width between the perimeter formwork and the plate edge should not exceed 75 mm on the pouring side and 25 mm on the opposite side. It is advisable where practical to have no gap at the flank sides.

**Mixing & placing & cleaning**

Pour all the contents of the hardener pack into the base container. Mix using a slow speed power mixer until homogeneous. Pour all the resultant liquid into a container with a capacity of 25 - 30 litres. Add all the filler provided and mix using a slow speed power mixer for two minutes or until a uniform colour is achieved in the grout. The mixed grout should be poured steadily from one side only to eliminate the entrapment of air. Continuous grout flow is essential. Sufficient grout must be available prior to starting. The time taken to pour a batch should be regulated to the time taken to prepare the next batch.

Flow characteristics: The maximum distance of flow is governed by the gap thickness, the head of grout applied and the ambient temperature.

All tools & equipment should be cleaned immediately after use with Struclean EPO. Spillages should be absorbed with sand or sawdust & disposed in accordance with local regulations.

**Limitations (Temperature)**

**During application:** At temperatures below 25°C the cure rate may be slow, but will go to completion provided the temperature remains above 5°C.

**In service:** Cured grout, which is resistant to frost and sub-zero temperatures, is most suited for ambient temperatures in the range 25° - 55°C.

**Low temperature working**

Whilst the performance of Strugrout KER320 at low temperatures is assured, application under such conditions can sometimes be difficult. It is therefore suggested that, for temperatures below 25°C, below guides are adopted:

- Store unmixed materials in a warm environment (preferably temperature controlled)
- Keep mixing and placing equipment warm, arranging

protection if necessary. It is especially important to keep warm those surfaces of the equipment which will come into direct contact with the material itself

- Try to eliminate application in the coldest time of the day, and certainly avoid application at night
- Minimum temperature of mixed material to be 25°C, & loading shall only be allowed 72 hours after pouring.

**Packaging & storage**

Strugrout KER320 is supplied in 20 Kg packs. All Strugrout KER320 has a shelf life of 12 months if kept in dry conditions at 20°C. If stored at high temperatures the shelf life will be reduced.

**Health, Safety and Fire**

Strugrout KER320 contains resins which may cause sensitization by skin contact. Avoid contact with skin and eyes and inhalation of vapour. Wear suitable protective clothing, gloves and eye/face protection. Barrier creams provide additional skin protection. Should accidental skin contact occur, remove immediately with a resin removing cream, followed by soap and water.

Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting. STRUMIX Solvent 102 is flammable. Keep away from sources of Ignition. No smoking. In the event of fire extinguish with CO<sub>2</sub> or foam. Do not use a water jet. For additional information see relevant Material Safety Data Sheet.

**Flash point: 33°C**

