MM1018 P #1436

Product description

MM1018 P is a metal polymer for the 100% form-and force locking gap compensation for tolerance inaccuracies and unevenness between metal elements, head plates, bridge bearings, crane and rail guides as well as steel components.

For gaps of >10 mm, it is recommended to insert steel shim plates in order to reduce the gap width to less than 10mm.

Pasty variant for application and insertion. Product hardens under room conditions. Pressure resistance up to 133 N/mm2.

MM1018 paste is a product with general building inspectorate approval (abZ). Registration number: Z-3. 82-2042

Characteristics

- Very high compressive strength
- Corrosion and weather resistant
- Injection for almost any gap situation, no casting
- General buliding authority approval
- Seawater resistant

Typical application

Gap compensation, force-locked connection to

- Headplate bumps
- Bridge bearings
- Crane and guide rails
- Silos
- Steel and water engineering
- Steel construction and structural steel
- Tunnelling

for joints steel to steel and steel to concrete.

Pack sizes

Article	Description
1,5kg	
4,5kg	

Custom sizes on request.

Produktdaten Anlieferzustand

Hue component A (resin) component B (Hardener)	Grey Grey
Storabillity	Store dry and frost-free (5°C bis +20°C) in the unopened container. Durability 24 months. Avoid direct sunlight.
Density component A (resin) component B (Hardener)	3,0 [g/cm³] 2,0 g/cm³
Grain Größtkorn in Mischung	125µm
Mixing ratio component A (resin) component B (Hardener)	79g 21g
Pot life	20 ± 20% (T15K, DIN EN ISO 9514)
Curing	siehe Verarbeitungsparameter
Processing temperature Material temperature Component surface	+5°C bis +30°C +5°C bis +40°C

Usage	The base area (A in cm2) and the mean gap dimension (d in cm) are required as the basis for the calculation of the material consumption. M (in g) = A cm² * d cm * 1,2 * 3,0g/cm² Example: 1m2 contact surface with 1mm gap M = 10,000cm2 * 0,1cm * 1,2 * 3,0g/cm3 = 3600g = 3,6kg In this calculation, a material surplus of 20% is calculated to compensate for tolerances as well as additional consumption due to application.
Maximum layer thickness Tested by the manufacturer	until 140mm
Approved according to abZ	bis 10mm It is permitted to reduce the gap size by inserting feed plates and to apply MM1018 e. g. in several layers up to a maximum of 10mm.

Product data (reactive product)

Density	2.75 g/cm³	
Compressive strength	110 N/mm²	DIN EN 13412:2006
Strength	89	
E-Modul	10.000 N/mm²	DIN EN 12190:1998
Thermal expansion coefficient	0.000025 1/K	bei -20°C bis +60°C
Temperature resistance (permanent)	160 °C	
Shrinkage	0.084 %	DIN EN 12617-4:2002

colour	Darkgrey	
creep coefficient	2,1	DIN EN ISO 13584:2003-11
Friction value	größer 0,5	
Viscosity	600 Pas	DIN EN ISO 3219:1994

custody / durability

Store dry and frost-free in the unopened container. Durability 24 months. Avoid direct sunlight. Higher temperatures reduce the durability.

Processing parapet

The processing time (potting time) of the material begins as soon as the two components A and B are added together. Pot and curing time depend on the amount of material and the temperature. For larger containers, the potting time may be reduced due to a higher reaction heat. The following table gives practical pot life values for a 1kg package:

Temperatur [°C]	Topfzeit [Min]
10	60
20	25
30	10

Topfzeit bei unterschiedlichen Temperaturen gemessen am 1kg Ansatz

The material hardening can be accelerated by heating. The maximum permissible temperature for accelerated curing is 65°C. The minimum curing temperature required is +5°C. At lower temperatures it is recommended to preheat the components.

Temperatur [°C]	Druckfestigkeit [N/mm²]	Zeit bis zum Erreichen der Druckfestigkeit
5	-	24 Stunden
5	106	7 Tage
21	88	24 Stunden
21	110	7 Tage
30	90	24 Stunden
30	122	7 Tage

Druckfestigkeit in Abhängigkeit zu Aushärtetemperatur und Aushärtezeit
Druckschwellbelastung – Smith Diagramm für MM1018FL

Work preparation

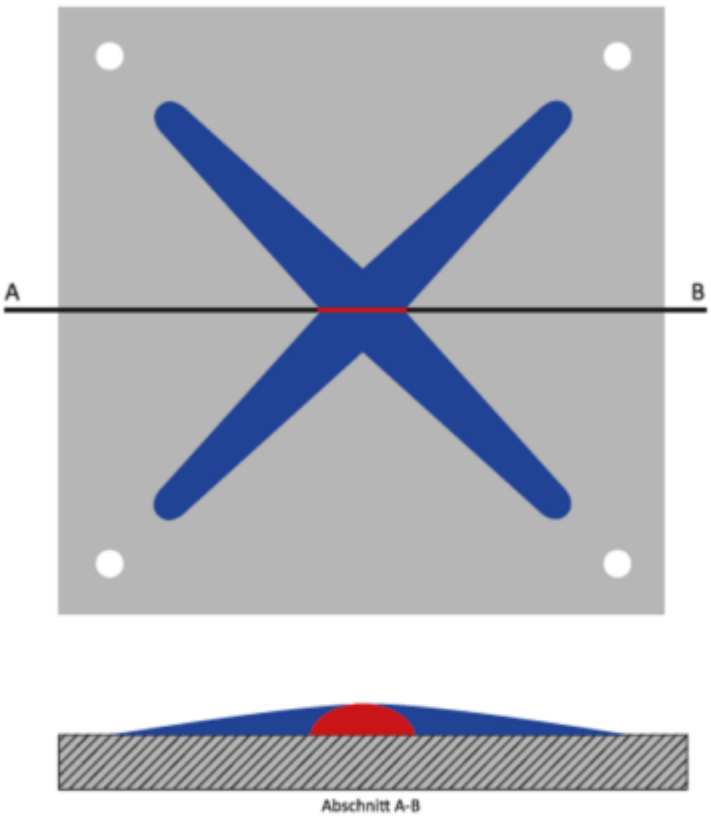
Contact surfaces wetted with MM1018 must be cleaned of dirt and loose particles using deoiled compressed air if possible. The Diamant-Reininger #1417 is recommended. The cleaner must be placed on a lint-free cloth, with which the contact surface is then cleaned. Screws must be protected if necessary (e. g. DIAMANT Screw Protector #8880) to prevent future adhesion of the threads with MM1018. If the contact surfaces have to be separated again at a later time, it is necessary to apply a release agent (e. g. DIAMANT release agent #1354) in advance.

Mixing process

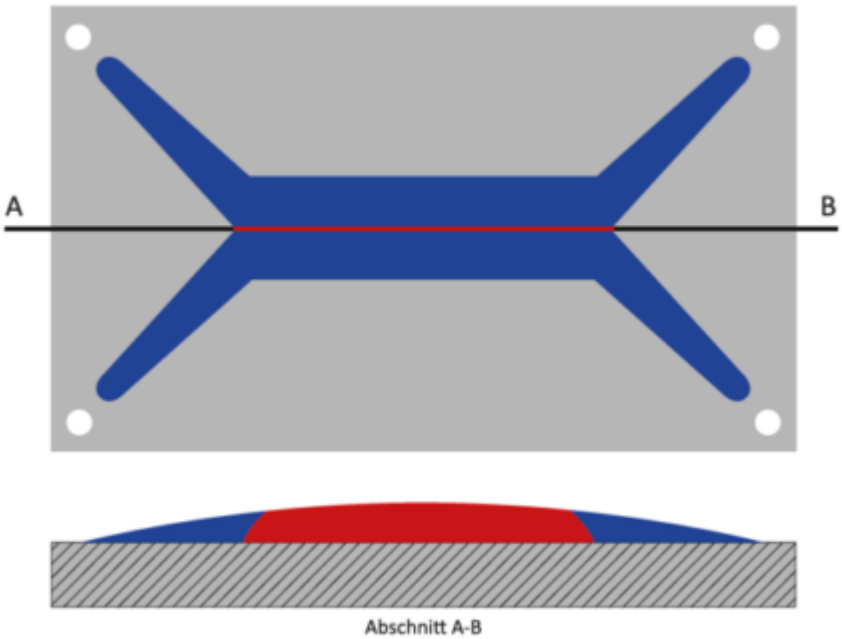
For mixing of MM1018, component B is placed completely in the container with component A. Mix intensively with a hand drill and the DIAMANT mixing propeller (Art. –No. #0789) (max. 250 rpm for approx. 2 minutes). Wipe off material adhering to the wall of the container with a spatula and add to the mixture. Mix again thoroughly.

Application description

MM1018 paste is applied x-shaped to the contact surface. The following illustrations show an example of a square and a rectangular contact surface. It is important to note that the highest material elevation is applied in the center of the contact surface (see red line in the picture) so that MM1018 is dispersed in paste when the contact surfaces are joined together. After joining the contact surfaces, MM1018 is pasty free of air bubbles and distributed over the entire surface. Excess material that has been pressed out at the sides of the contact surfaces should, if possible, be removed before curing.



Auftrag MM1018 pastös auf quadratischer Fläche



Auftrag MM1018 pastös auf rechteckiger Fläche

Disposal

Unused material can be disposed of normally if it has been mixed in the correct mixing ratio and is fully cured (EAKV 170 203). Unmixed material must be disposed of as chemical waste (EAKV 080 111).

When booking our DIAMANT application service, we take care of the professional and correct disposal of the waste.

Qualification und Service

In order to ensure the best possible quality and error-free application, the following services will be offered:

Product training
Site supervision and supervision (supervising)
Complete execution of the work by our experienced application technicians or fitters

Please contact us, we will be happy to advise you and will be there immediately.

Safety data sheet

Please read the relevant safety data sheet before processing the product. Safety data sheets are available daily on request via info@diamant-polymer. de or by phone at +49-2166-98 360. DIAMANT guarantees the product characteristics as long as they are stored and used according to the specifications listed here. DIAMANT assumes no responsibility for the processing of the material. For further questions, our technicians will help you.

Werteintragung

disclaimer

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This issue replaces all previous versions