DWH 310 smart Cartridge 2:1 #2521

Product description

DWH 310 smart is a two component adjustment and adhesive coating on epoxy-resin basis in a double cartridge, designed for form- and forcefitting filling and gluing of joints on components, assemblies of different maerials. Due to spatula- and molding techniques it is possible to even achieve precision in µm-range. When using a micro-thin layer of Diamant-parting agent on the counter surface DWH 310 P can be seperated from it. The result is an exact copy of the molded surface. A high-perision preperation of surfaces and the mechanical post-processing of the surfaces is not necessary. In modern production processing times and costs can be dramatically reduced.

Typical applications

- Form- and force-fitting installation of guides in mechanical engineering
- Adjusting coating for assemblies and elements of various materials.
- Full-surface lining of mouldings and elements as a replacement for feed plates.
- Load-bearing gap compensation on beams of portal milling and Gantry systems
- µm-accurate adjustment of bushes, centering and guide elements
- Fixing and / or centering of bearing bushes according to high precision alignment
- As filling and composite material in 3D printing + additive manufacturing

Characteristics

- no contact with the product, no mixing errors
- Very high accuracy, µm-accurate molding
- Very high compressive strenght
- Extreme dimensional stability after curing
- Excellent load transfer due to complete contact of the surfaces
- Temperature resistance up to +80 °C
- Excellent damping properties thanks to the E-module ca. 8600 N/mm²
- Aluminium-grey color after curing
- High resistance to oils, cooling emulsions, mineral and synthetic coolants and lubricates and many other chemicals.

Chemical resistance

Please contact our technicians for questions about chemical resistance.

Pack sizes

Article	Description
DWA 250g	

Custom sizes on request.

Product data condition of delivery

Hue component A (resin)	metallic grey
Component B (hardener)	clear
Mixing ratio	[A : B] (gr) 92 : 8
Pot life	50 minutes at 20°C
Curing complete	24 hours at 20°C
for deformation	18 hours at 20°C
Processing temperature	10°C to 30°C
Viskosität ~12500 mPas	

Product data outreacted product

Density	2.2 (g/cm³)	
Compressive strength	165 (N/mm²)	DIN EN 12190:1994
Strength	86	
E-Modul	10400 (N/mm²)	DIN EN 13412:2006

temperature resistance (permanent)	-20 to +80 °C
temperature resistance (short-term)	-40 to +125 °C
color after curing	steel grey
Shrinkage	less than 0,1%

Storage / Shelf life

Store in original, unopened container in a dry, cool and frost-free place (+5°C to +20°C). Shelf life 2 years. Keep away from direct sunlight. Higher temperatures reduce the shelf life.

Preparation of the bonding surface

The surfaces to be coated should have a significant roughening to improve adhesion. The peak-to-valley height should be 0.5 mm (Rt = 500µm). The roughening can be produced, for example, with a cutter head with a large feed on a milling machine.surfaces must be clean, dry and free of grease and oil. For cleaning dirty surfaces we recommend DIAMANT Cleaner #1417 or DIAMANT Cleaning Spray #1534.Surfaces to which DWH should not adhere should be coated with Release Agent #1354 or Release Spray #1355.

Mixing Procedure

To mix DWH 310 P, add Component B completely to the Component A container. Mix intensively with a drill and the DIAMANT mixing propeller (Prod. No. #0789) (max. 250 rpm for approx. 2 minutes). Scrape off any material adhering to the wall of the container with a spatula and add to the mixture. Mix again thoroughly. The deaeration described below also results in a final mixing.

Deaerate

Remove DWH 310 P from the container immediately after mixing and spread thinly, crosswise, on a clean sheet. By spreading, a further mixing effect is achieved, but in particular stirred-in air bubbles are broken up. furthermore, a part of the reaction heat is dissipated by the flat spreading, whereby the processing time is secured.

Description of use

First apply DWH 310 P with a trowel as a thin adhesive layer firmly onto the adhesive primer.Further trowel the product on the roof with a small excess without trapping air.The excess quantity applied should displace the air when moulding the components and thus ensure bubble-free application.

Disposal

Unused residual material from the cans can be disposed of normally when mixed in the correct ratio and fully cured (EAKV 170203). Unmixed material must be disposed of as chemical waste (EAKV

080111). When booking the DIAMANT service team, waste will be disposed of by us.

Qualification and service

It is recommended to have the application carried out by trained DIAMANT technicians.

- To ensure the best possible quality and error-free application, we offer the following services:
  - Consultation by telephone and / or on site
  - Site supervision and monitoring during the work on site
  - Complete execution of the work by our experienced application technicians

  Further information can be found in the service data sheet

Safety Data Sheet

Please read the appropriate safety data sheet before processing the product. Material Safety Data Sheets are available on a daily basis upon request via info@diamant-polymer.de or by phone +49-2166-98360.DIAMANT guarantees the product properties as long as they are stored and used according to the specifications listed here. DIAMANT does not assume any responsibility for the processing of the material. Our technicians will be happy to answer any further questions you may have.

Accessories / processing equipment

#1354 Release agent, liquid#1355 Release agent, spray 500 ml#1417 Cleaner, liquid#1534 Cleaner, spray 500 ml#78 Filler, DIAMOND green#0789 Mixing propeller#7010 Sponge rubber sealing tape HxW 10 x 15 mm#1580 Sponge rubber sealing tape HxW 4 x 9 mm

Haftungsausschluss

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