

**Technical Datasheet** 16.11.2017

# **Repair Stick Titanium**



# wear resistant titanium-filled high temperature resistant up to +280°C (briefly up to +300°C)

It is suited for the permanent and wear resistant repair and bonding of metal parts such as tanks and pipelines, aluminium, light metal and injection moulded parts, shafts and slide bearings, pumps and housings and torn-out threads.

The WEICON Repair Stick Titanium can be used in machine and system construction, tank construction and apparatus engineering, and in many other industrial applications.



## **Technical Data**

Composition	Epoxy resin titanium-filled
Composition	pasty
Colour after curing	grey-green
Mixing ratio by volume resin/hardener	1:1
Density of the mixture	1,9 g/cm <sup>3</sup>
Gap bridging max.	15 mm
Processing temperatur	+10 to +50 °C
Curing temperature	+6 to +65 °C
Polt life for 25gr preparation and +20°C (+68°F)	30 min.
Handling strength (35%) after	60 min.
Mechanical loads (50% strength) after	240 min.

Final strength (100%) after	48 h
Pressure (DIN 53281-83)	80 N/mm <sup>2</sup>
Medium shear strength after 7 days at +20°C (+65°F) DIN 532832 at	Steel sandblasted: 7,5 N/mm <sup>2</sup>
Shore hardness D	80
Thermal conductivity (ASTM D 257)	0,5 W/m.K
Linear shrinkage	<1 %
Electrical resistance (ASTM D 149)	5•10 <sup>11</sup> Ohm/cm
Dielectric strength (ASTM D 149)	3,0 kV/mm
Thermal expansion coefficient (ISO 11359)	30-40 x 10^-6 K^-1
Temperature resistance	-50 to +280 briefly +300 °C
ISSA-Code	75.530.06/07
IMPA-Code	81 29 77/78

# Surface pre-treatment

To ensure a perfect bond, the surfaces to be joined must be clean and dry (e.g., clean and degrease using WEICON Surface Cleaner).

# Processing

WEICON Repair Sticks cover gaps of max. 15 mm per procedure. The pot life given is for a material quantity of 25 g at room temperature. If larger quantities are used, the curing time will be faster due to the typical reaction heat of epoxy resins (exothermic reaction). Similarly, higher ambient temperatures shorten the cure time (as a rule of thumb, every +10°C increase above room temperature will halve working and curing time). Temperatures below +16°C will extend working and curing times considerably, while below about +5°C, no reaction will take place at all.

# Storage

When kept at a constant room temperature of about +20°C and unopened in dry conditions, WEICON Repair Sticks will keep for at least 18 months. Avoid direct sunlight.

## Safety and health

When using WEICON products, the physical, safety technical, toxicological and ecological data and regulations in our EC safety data sheets (www.weicon.com) must be observed.

## Available sizes:

10535057	Repair Stick Titanium 57 g
10535115	Repair Stick Titanium 115 g
Accessories: 11202400 11207400 11850200	Sealant and Adhesive Remover, 400 ml Surface Cleaner, 400 ml Hand Protective Foam, 200 ml

#### Note

The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

WEICON GmbH & Co. KG (Headquarters) Germany phone +49 (0) 251 9322 0 info@weicon.de

WEICON SA (Ptv) Ltd South Africa phone +27 (0) 21 709 0088 info@weicon.co.za

WEICON Middle East L.L.C. United Arab Emirates phone +971 4 880 25 05 info@weicon.ae

WEICON South East Asia Pte Ltd Singapore phone (+65) 6710 7671 info@weicon.com.sg

WEICON Inc. Canada phone +1 877 620 8889 info@weicon ca www.weicon.ca

WEICON Czech Republic s.r.o. Czech Republic phone +42 (0) 417 533 013

WEICON Kimya Sanayi Tic. Ltd. Şti. Turkey phone +90 (0) 212 465 33 65 info@weicon.com.ti www.weicon.com.t

WEICON Romania SRL Romania phone +40 (0) 3 65 730 763 office@weicon.com

WEICON Ibérica S.L. Spain phone +34 (0) 914 7997 34 info@weicon.es