T-E-Klebetechnik

Anwendungs-, Verfahrens- und Dosiertechnik



Graphi-Bond 551-RN/669

Description

Based on graphite, these products prove their worth especially in applications under special atmospheres. These adhesives are particularly suitable for bonding and coating graphite parts. Graphi-Bond 551-RN has proven its worth in the repair and reconditioning of fixtures and shells as used in the glass-to-metal casting atmosphere.

Graphi-Bond 669 excels when used in oxidizing atmosphere.

Technical Data

Characteristics	Graphi-Bond 551-RN	Graphi-Bond 669
Main Components	Graphite	Graphite
Max. Temperature	2985 °C	760 °C
Viscosity	Paste	200 – 400 g/cm/s
Spec. Weight	1.45 – 1.50 g/cm ³	1.45 – 1.50 g/cm3
CTE	7.4 cm/cm/°C x 10 ⁶	7.6 cm/cm/°C x 10 ⁶
Dielectric Strength	2.95 KV/mm at RT	4.13 KV/mm at RT
Torque Strength	40675 N/mm	35251 N/mm
Hardness	4.0 Moh's Skala	6.0 Moh's Skala
Components	1	1
Moisture Resistance	Excellent	Excellent
Alkali Resistance	Good	Good
Acid Resistance	Good	Good
Dispenser Usable	No	Yes
Atmosphere Resistant for	Reduced atmosphere	Oxidizing atmosphere
	High vacuum resistant	

Handling

Graphite surfaces must be dust-free, avoid grinding or sandblasting.

Dry graphite at 120 °C for 10 minutes in the oven, cool down at room temperature

Mix the adhesive well before use and apply a thin layer to each surface.

Use a clamp or similar tool to apply even pressure to the bond.

The adhesive layer should have a thickness of 0.2 - 0.5 mm.

The application can be done with a brush, spatula or a dispenser.

Hardening

Graphi-Bond 551-RN

- 1 4 hours air cure
- 4 hours heat cure at 130 °C
- +2 hours final cure at 260 °C

Graphi-Bond 669

- 1 4 hours air cure
- 2 hours final cure at 90 °C