



Technical Data Sheet BrazeTec CB4



TD BT 0703 E.03

Inhalt

Standard

BrazeTec Standard
ISO 3677

B-Ag70,5CuTi 780/805

Nominal composition [wt.-%]

Ag 70,5; Cu 26,5; Ti 3

Permitted impurities max. [wt.-%]

Al 0,001; Bi 0,030; Cd 0,010; P 0,008; Pb 0,025; Si 0,05

Max. impurities [wt.-%]

0,15

Technical data

Melting range

approx. 780 - 805 °C

Working temperature

approx. 850 - 950 °C

Density

approx. 9,9 g/cm³

The strength values of joints brazed with active brazing alloy **BrazeTec CB4** depend on the base materials and the brazing process parameters. In general it can be said that the joints fail in the ceramic if optimized process parameters have been used.

Standard delivery forms*

Wire:

1,0 - 1,5 - 2,0 mm Ø

Ribbon:

0,1/ 0,2 mm thickness and 50 mm width

Preforms:

rings, shaped parts, sections, stamped and shaped parts, shims, discs, perforated plates

*Other delivery forms upon request

Applications

Active brazing alloy **BrazeTec CB4** can be used for high temperature brazing of ceramics, ceramic-metal-joints, graphite and diamonds. A minimum brazing temperature of 850 °C is recommended to get a joint to the ceramic. Higher brazing temperatures improve the wetting behaviour. The brazing processes have to be carried out in vacuum or with argon (4.8 or purity 99,998%) as protective atmosphere. If the brazing process is carried out in vacuum the brazing temperature should not be higher than 900 °C to avoid the evaporation of silver. Active brazing alloys do not flow on ceramics. That's why the active brazing alloys always have to be applied between the surfaces to be brazed.

Our information about our products and equipment as well as our systems and procedures are based on comprehensive research and application technological experience. We communicate these results, but take no liability for respective single contracts that are exceeding thereof. We reserve the right to make technical changes in the process of product development in spoken and written terms to the best of our knowledge. Only as an exception do we give guarantees for appearance and workmanship or durability that has been specifically documented in an individual contract. Furthermore, our application technology services are available at your convenience for more detailed consultation such as the involvement in solving manufacturing and application technology problems.

This does not however, release the user from their own responsibility for checking the input and recommendations we give for their own use prior to using that input or recommendation. This is especially applicable for foreign deliveries. This also applies to the trade mark rights of third parties, for applications and procedures that are not specifically given by us. In the event of damage or loss our liability is limited to indemnification of the same admeasurements as is foreseen in our general terms of sales and delivery in reference to deficiencies in quality.