



BrazeLet™ Ni613 – The Signature of Ni Brazing Quality

BrazeLet™ Ni613 is a Ni-based filler metal powder for high temperature brazing developed specifically for EGR coolers, but it is also suitable for all types of application in high temperature and high corrosion environments.

The unique composition of BrazeLet™ Ni613 offers an attractive combination of properties such as excellent wetting, high strength, and high corrosion and oxidation resistance.

The optimal application medium for BrazeLet™ Ni613 filler metal powders is as a paste. The paste can be applied via conventional techniques such as dispensing, roller coating, screen printing and spraying. Paste and application technology solutions are offered in cooperation with highly recommended partners.

For more information on BrazeLet™ or any other product from Höganäs, please contact your local sales representative.

Benefits

- Cost-efficient
- Gap size flexibility
- Corrosion resistant
- High strength



BrazeLet™ Ni613 Technical Data

Unique Chemical Composition

BrazeLet™ Ni613 is gas atomised into spherical particles to form a unique chemical composition resulting in the advantageous properties found during brazing and in the final joint.

Comp. weight %	Ni	Cr	P	Si
BrazeLet™ Ni613	Bal	29	6	4

The recommended brazing temperature for BrazeLet™ Ni613 is 1080°C / 1976°F in a vacuum or a controlled atmosphere.

Wetting Properties

BrazeLet™ Ni613 has excellent wetting properties, which exceed most Ni-based filler metals. During brazing the alloy fills gap sizes up to 0.46 mm and is not sensitive to uneven gaps. The excellent wetting properties also lead to direct cost savings, as a lower amount of filler metal is needed compared to conventional Ni-based filler metals.

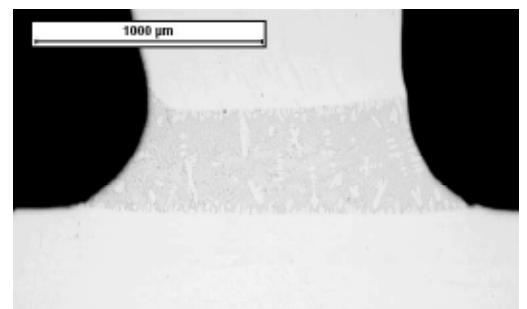
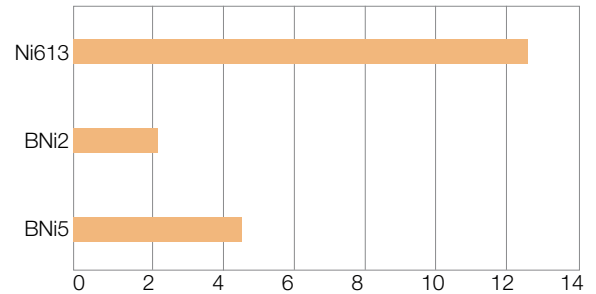
Microstructure and Strength

The microstructure of BrazeLet™ Ni613 contains a homogenous mix of a hard phase surrounded by a ductile phase – a combination that results in high strength. This structure remains during wide gap brazing and no segregation can be detected. The joint fillet is crack free.

Corrosion Resistance

BrazeLet™ Ni613 displays better corrosion resistance than BNi5, but can still be brazed at lower temperatures. Corrosion resistance has been proven against acids such as HCl, HNO₃ and H₂SO₄.

Spreading ratio



Joint strength

