

BÖHLER NIBAS 617-IG

TIG rod, nickel-based

| Classifications | | | | |
|---------------------------|--------------|--|--|--|
| EN ISO 18274 | AWS A5.14 | | | |
| S Ni 6617 (NiCr22Co12Mo9) | ERNiCrCoMo-1 | | | |

Characteristics and typical fields of application

GTAW rod for joining high-temperature and similar nickel-base alloys, heat resistant austenitic and cast alloys, such as 2.4663 (NiCr21Co12Mo), 2.4851 (NiCr23Fe), 1.4876 (X10 NiCrAlTi 32 20), 1.4859

(GX 10 NiCrNb 32 20). The weld metal is resistant to hot-cracking and is used for service temperatures up to +1100 °C. Scale-resistance up to +1100 °C, high temperature resistant up to 1000 °C. High resistance to hot gases in oxidizing and carburized atmospheres, e.g. gas turbines, ethylene production plants.

Base materials

X10NiCrAlTi32-20 (1.4876) NiCr23Fe (2.4851) GX10NiCrNb32-20 (1.4859) NiCr23Co12Mo (2.4663) Alloy 617, UNS N06617

| Typical analysis of the TIG rods (wt%) | | | | | | | | | | |
|--|------|-----|-----|------|-----|------|------|-----|-----|-----|
| | С | Si | Mn | Cr | Мо | Ni | Co | Al | Ti | Fe |
| wt% | 0.06 | 0.1 | 0.1 | 21.8 | 9.0 | Bal. | 11.0 | 1.3 | 0.3 | 0.5 |

| Mechanical properties of all-weld metal | | | | | | |
|---|----------------------------------|---------------------------------|--|---------------------------|--|--|
| Condition | Yield strength R _{p0,2} | Tensile strength R _m | Elongation A (L ₀ =5d ₀) | Impact work ISO-V KV J | | |
| | MPa | MPa | % | +20 °C | | |
| u | 450 | 700 | 30 | 60 | | |

u untreated, as welded – shielding gas Argon

| Polarity: Shielding gases: Rod marking: ø (mm) 100 % Argon Ar + He mixture gases Rod marking: ø (mm) 2.0 back: ERNiCrCoMo-1 2.4 | Operating data | | | | | | | | |
|--|----------------|---|-------------|-----------------|-----|--|--|--|--|
| | | ~ | 100 % Argon | front: + 2.4627 | 2.0 | | | | |

Approvals

TÜV (10551.), CE