

Classifications

EN ISO 14343-A

EN ISO 18274

W Z 35 45 Nb

S Ni Z (NiCr36Fe15Nb0.8)

Characteristics and typical fields of application

Nickel-base TIG rod of W Ni Z (NiCr36Fe15Nb0.6) type for joining and surfacing of identical and similar high-heat-resistant cast alloys (centrifugal- and mould cast parts), such as GX-45NiCrNbSiTi45 35. The main application field is tubes and cast parts of reformer and pyrolysis ovens.

The weld deposit is applicable in low-sulphur, carbon-enriching atmosphere up to 1175°C.

Base materials

GX45NiCrNbSiTi45-35

Typical analysis

	C	Si	Mn	Cr	Ni	Nb	Ti	Fe	Zr
wt.-%	0.42	1.5	0.8	35	45.0	0.8	0.1	Balance	0.05

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m
	MPa	MPa
u	450	550
u untreated, as-welded – shielding gas Ar		

Operating data

	Polarity	DC-	Dimension mm
	Shielding gas (EN ISO 14175)	I1	2.0 × 1000
			2.4 × 1000
			3.2 × 1000

Clean welding area carefully. No preheating or post weld heat treatment. Keep heat input as low as possible and interpass temperature at max. 150° C.

Approvals

-