BÖHLER NIBAS C 24-IG

TIG rod, nickel-based

Classifications

EN ISO 18274	AWS A5.14
S Ni 6059 (NiCr23Mo16)	ERNiCrMo-13

Characteristics and typical fields of application

GTAW rod for highest corrosion requirements and welding of the Ni base steel grades, e.g. UNS N06059, N06022, 2.4605, 2.4602 as well as for joining these grades with low alloyed and stainless steels. Also suitable for surfacing on low-alloyed steels. It is employed primarily for welding components in environmental plants and plants for chemical processes with highly corrosive media. Excellent resistance against pitting and crevice corrosion and chloride-induced stress corrosion cracking. In addition to its exceptional resistance to contaminated oxidizing mineral acids, acetic acids and acetic anhydrides, hot contaminated sulphuric- and phosphoric acid.

Base materials

NiCr21Mo14W (2.4602), NiMo16Cr16Ti (2.4610), NiMo16Cr15W (2.4819), NiCr23Mo16Al (2.4605), X2 CrNiMnMoNbN25-18-5-4 (1.4565), Alloy 59,

UNS N06059; N06022, B575, B626

Joint welds of listed materials with low alloy and stainless steels

Typical analysis of the TIG rods (wt.-%)

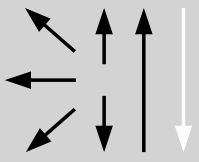
	C	Si	Mn	Cr	Mo	Ni	Fe
wt.-%	≤ 0.01	≤ 0.1	< 0.5	23.0	15.8	Bal.	< 1.0

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	≥ 35	≥ 120

u untreated, as welded – shielding gas Argon

Operating data



Polarity:	Shielding gases:	Rod marking:	ø (mm)
DC (–)	100 % Argon Ar + He mixture gases	front: ✢ 2.4607 back: ERNiCrMo-13	1.6 2.0 2.4 3.2

Weld with possibly low heat input and a low interpass temperature.

Approvals

TÜV (10523.), CE