BÖHLER ASN 5-IG

TIG rod, high-alloyed, high corrosion resistant

Classifications

EN ISO 14343-A	AWS A5.9
W Z18 16 5 N L	ER317L (mod.)

Characteristics and typical fields of application

GTAW rod for 3 – 4 % molybdenum alloyed CrNi-steels like 1.4438 / 317L.

The weld metal shows a stable austenitic microstructure with good pitting resistance (PREN > 35) and crevice corrosion resistance as well as excellent CVN toughness behaviour down to –269 °C. Resistant to intergranular corrosion up to +400 °C.

BÖHLER ASN 5-IG has an increased Mo content (4.1 %) to compensate for segregation when welding high molybdenum alloyed steels, thus producing equivalent corrosion resistance to the relevant base metals offering a 3 – 4 % Mo guarantee.

Base materials

1.4436 X3CrNiMo17-13-3, 1.4439 X2CrNiMoN17-13-5, 1.4429 X2CrNiMoN17-13-3, 1.4438 X2CrNiMo18-15-4, 1.4583 X10CrNiMoNb18-12

AISI 316Cb, 316LN, 317LN, 317L, UNS S31726

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

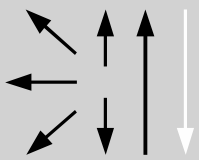
	C	Si	Mn	Cr	Ni	Mo	N		PRE_N	FN
wt.-%	≤ 0.02	0.4	5.5	19.0	17.2	4.3	0.16		38.0	≤ 0.5

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	–269 °C
u	**440** (≥ 400)	**650** (≥ 600)	**35** (≥ 30)	**120**	**75** (≥ 32)

u untreated, as welded – shielding gas Argon

Operating data



Polarity	Shielding gas:	Rod marking:	ø (mm)
DC (–)	100 % Argon	front: W Z 18 16 5 NL back: 1.4453	1.6 2.0 2.4

Approvals

TÜV (00017.), DNV GL, CE