Union K 52 Ni

Solid wire, mild steel

Classifications

EN ISO 14341-A	AWS A5.28 / SFA-5.28
G 50 6 M21 3Ni1	ER80S-Ni5
G 46 4 C1 3Ni1	

Characteristics and typical fields of application

Solid wire of type G 3Ni1 / ER80S-Ni5 with excellent weld metal toughness at low temperatures. Cryogenic steels for service temperatures down to –60 ºC, fine grained structural steels up to S500; for crack-free tack welding and root pass welds of fine grained structural steels up to S1100QL (undermatching).

Base materials

EN 10028-3: P355NL2 – P460NL2
EN 10025-6: S500QL1
EN 120208-2: L290MB – L485MB
EN 10149-2: S355MC – S500MC
API5L: X 42 – X 70 (X 80)

Typical analysis

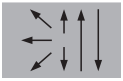
	C	Si	Mn	Ni	Mo	Ti
wt.-%	0.07	0.7	1.5	0.9	0.08	+

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

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J	
	MPa	MPa	%	-40 °C	-60 °C
u1	(≥ 460)	(≥ 560)	(≥ 24)	(≥ 47)	-
u2	(≥ 500)	(≥ 600)	(≥ 24)	-	(≥47)

u1 untreated, as welded – shielding gas 100% CO_2
u2 untreated, as welded – shielding gas Ar + 15 – 25% CO_2

Operating data



Polarity	DC+
Shielding gas (EN ISO 14175)	M21 C1

Dimension mm
1.0
1.2

Approvals

ABS

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.