

ER690

TIG (GTAW)

SOLID WIRE FOR TIG WELDING OF ALLOY 690

PRODUCT DESCRIPTION

Solid rod for TIG.

CLASSIFICATIONS

AWS A5.14M ERNiCrFe-7
ISO 18274 S Ni6052

ASME IX QUALIFICATION

QW432 F-No 43

CHEMICAL COMPOSITION (WIRE WT %)

	C	Mn	Si	S	P	Cr	Ni	Nb	Fe	Mo	Ti	Al	Cu	Al+Ti
Min.	--	--	--	--	--	28.0	54.0	--	7.0	--	--	--	--	--
Max.	0.04	1.0	0.50	0.015	0.020	31.5	--	0.10	11.0	0.50	1.0	1.10	0.30	1.5
Typical	0.03	0.7	0.2	0.005	0.010	29	60	0.03	8.5	0.05	0.6	0.6	0.05	1.2

ALL-WELD MECHANICAL PROPERTIES

	As welded typical, RT	As welded typical, +360°C	PWHT 610°C/40h typical
Tensile strength [MPa]	720	520	--
0.2% proof strength [MPa]	430	320	--
Elongation [%] 4d	43	40	--
5d	40	--	--
Reduction of area [%]	60	50	--
Impact ISO, KCV [J] - 50°C	200	--	145
Impact energy, KCU [J/cm ²] + 20°C	160	--	130

TYPICAL OPERATING PARAMETERS

Shielding gas	Current	Diameter (mm)	Parameters
Argon*	DC-	2.4	100A, 12V

*Also required as a purge for root runs.

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
2.4	2.5	PE TUBE	TER690-24