

21.33.MnNb

TIG (GTAW)

SOLID TIG WIRE FOR 800H AND SIMILAR HEAT RESISTING ALLOYS

PRODUCT DESCRIPTION

Solid wire – This is a high Mn, 21%Cr-33%Ni-1%Nb, micro-alloyed wire for TIG welding of 800 type alloys.

CLASSIFICATIONS

There are no national specifications for this electrode.

ASME IX QUALIFICATION

QW432 F-No --

QW442 A-No --

CHEMICAL COMPOSITION (WELD METAL WT %)

	C *	Mn	Si	S	P	Cr	Ni	Mo	Nb	Cu	Al	Ti
min.	0.10	3.5	--	--	--	19.0	30.0	--	0.8	--	--	--
max.	0.20	5.0	0.70	0.015	0.025	23.0	35.0	0.50	1.5	0.5	0.35	0.30
Typical	0.15	4.3	0.5	0.008	0.012	21	33	0.3	1	0.1	0.1	0.15

* Weld deposit carbon is typically a little lower than wire analysis.

ALL-WELD MECHANICAL PROPERTIES

As welded	Min. *	Typical
Tensile strength [MPa]	520	640
0.2% proof strength [MPa]	210	420
Elongation [%] 4d	--	27
5d	--	25
Impact ISO-V(J) +20°C	--	40

* Minimum tensile properties based on wrought alloy 800H.

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
1.6	2.5	PE TUBE	T2133MN-16
2.0	2.5	PE TUBE	T2133MN-20
2.4	2.5	PE TUBE	T2133MN-24
3.2	2.5	PE TUBE	T2133MN-32