

MIDALLOY ER21/33 BARE WIRE

CLASSIFICATION

- No AWS specification at this time
- Din 8556 SG-X15 NiCrNb 32 21
- Werkstoff Number 1.4850
- EN ISO 14343-A WZ 21 33 Mn Nb

DESCRIPTION

- MIDALLOY ER21/33 is a fully austenitic alloy filler metal.
- MIDALLOY ER21/33 is a stainless steel wire used for GTAW welding of castings that are intended to be used at high temperatures, up to 1,050°C.

APPLICATIONS

- MIDALLOY ER21/33 is used to surface and / or join cast heat resistant alloys like Alloy 800, 800H, and UNS N08151 castings (CT15C).
- MIDALLOY ER21/33 can be used for GTAW welding and provides good creep and stress rupture properties at elevated temperatures.
- MIDALLOY ER21/33 weld metal is normally used in the as-welded condition, but can be stabilized at 1,600°F for 3 hours, and air cooled.

TYPICAL CHEMISTRY

C	Si	Cr	Mn	P	Nb	S	Ni	Mo	Ti	Al	N	Cu	Fe	Others
.12	.20	21	4.8	.005	1.2	.008	34	.01	.22	.12	.02	.02	Bal	<.50

B, Sb, Pb, Sn, Zn Elements can be reported for total composition control

TYPICAL MECHANICAL PROPERTIES

TENSILE STRENGTH	87,500 PSI
YIELD STRENGTH	55,500 PSI
ELONGATION IN 2"	20 %
CHARPY IMPACTS @ 20°C	30 FT-LBS

RECOMMENDED WELDING PARAMETERS

PROCESS	DIAMETER	VOLTAGE	AMPERAGE	GAS
TIG (GTAW)	1/16"	14-18	90-130	100% Ar
	3/32"	15-20	120-175	100% Ar
	1/8"	15-20	150-220	100% Ar

PACKAGING

TIG: 10 Lb. Tube / 60 Lb. Carton

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