

Classifications

TIG rod

EN ISO 14343

Material-No.

WZ 21 33 Mn Nb

~ 1.4850

Characteristics and field of use

UTP A 2133 Mn is suitable for joining and surfacing heat resistant base materials of identical and of similar nature, such as

1.4859	G X 10 NiCrNb 32 20	
1.4876	X 10 NiCrAlTi 32 21	UNS N08800
1.4958	X 5 NiCrAlTi 31 20	UNS N08810
1.4959	X 8 NiCrAlTi 31 21	UNS N08811

A typical application is the root welding of centrifugally cast pipes in the petrochemical industry for operation temperatures up to 1050 °C in dependence with the atmosphere.

Scale resistant up to 1050 °C. Good resistance to carburising atmosphere.

Typical analysis in %

C	Si	Mn	Cr	Ni	Nb	Fe
0.12	0.3	4.5	21.0	33.0	1.2	balance

Mechanical properties of the weld metal

<i>Yield strength $R_{p0.2}$</i>	<i>Tensile strength R_m</i>	<i>Elongation A</i>	<i>Impact strength K_V</i>
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>J [RT]</i>
400	600	20	70

Welding instructions

Clean the weld area thoroughly. Low heat input. Max. interpass temperature 150 °C

Approvals

TÜV (No. 10451)

Form of delivery and recommended welding parameters

<i>Rod diameter x length [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>
2.0 x 1000	DC (-)	I 1
2.4 x 1000	DC (-)	I 1
3.2 x 1000	DC (-)	I 1