VENVU 116 Ni

FCAW - Seamless Rutile FCW

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.29	AWS A5.29M
T 50 6 1Ni P M 1 H5	T556T1-1MA-N2-H5	E81T1-Ni1M-JH4	E551T1-Ni1M-JH4

Characteristics and typical fields of application

Seamless rutile, Nickel alloyed, fl ux cored wire for single or multipass welding of Carbon, Carbon-Manganese steels and high strength steels with Argon-CO_2 shielding gas or pure CO_2. Main features: excellent weldability in all positions, excellent bead appearance, no spatter and fast freezing and easy to remove slag. The exceptional mechanical properties of this wire even at the lowest temperatures (-60°C) make it especially suitab le for o-shore applications.

Base materials

EN 10207: P253S - P265S - P275SL, **EN 10025-2:** S235JR-J0-J2 - S275JR-J0-J2 - S355JR-J0-J2-K2 - S450J0, **EN 10025-3**: S275N - S275NL - S355N - S355NL - S420N - S420NL - S460N - S460NL, **EN 10025-4:** S275M - S275ML - S355M - S355ML - S420M - S420ML - S460M - S460ML, **EN 10028-2:** P235GH - P265GH - P295GH - P355GH, **EN 10028-3:** P275NH - P355NH - P460NH - P275NL1 - P275NL2 - P355N - P355NL1 - P355NL2 - P460NL1 - P460NL2, **EN 10028-6:** P355QH - P460QH - P500QH, **N 10025-6:** S460Q - S500Q - S460QL - S500QL - S460QL1 - S500QL1, **EN 10028-5:** P355M - P420M - P460M - P355ML1 - P420ML1 - P460ML1 - P355ML2 - P420ML2 - P460ML2, **EN 10028-6:** P355Q - P460Q - P500Q - P355QL1 - P460QL1 - P500QL1 - P355QL2 - P460QL2 - P500QL2, **EN 10208-1:** L210GA - L235GA - L245GA - L290GA - (X42) - L360GA - (X52), **EN 10208-2:** L245NB - L245MB - L290NB - L290MB - (X42) - L360NB - L360QB - L360MB - (X52) - L415NB - L415QB - L415MB - (X60) - L450QB - L450MB - (X65) - L485QB - L485MB - (X70), **EN 10208-4:** 11MnNi5-3 - 13MnNi6-3 - 15NiMn6

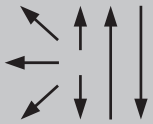
Typical analysis of all-weld metal (wt.-%)

C	Mn	Si	P	S	Ni	GAS
0.07	**1.30**	**0.45**	**< 0.025**	**< 0.025**	**0.85**	**M21**

Mechanical properties of all-weld metal – typical values (minimum values)

Shielding gas	Heat-treatment	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work in J CVN			
		MPa	MPa	%	RT	-40°C	-50°C	60°C
M21	**AW**	**500**	**580**	**22**	**110**	**90**	**70**	**47**
M21	**S=620°CX2h**	**500**	**560**	**24**	**-**	**47**	**-**	**-**
Untreated, as welded – shielding gas Ar + 18% CO_2								

Operating data



Ø (mm)	Spool	Weight (Kg)	Current A	Voltage V
1.00	B300	16	160 - 270	21 - 34
1.20	B300	16	190 - 320	22 - 35
1.40	B300	16	200 - 350	23 - 36
1.60	B300	16	210 - 380	23 - 37

Other spool types on request

Approvals

RINA • TÜV (06226) • LR • ABS • DNV • BV • GL • DB (42.052.11) • CWB, RS