CEWELD AA R500 PIPE

certilas® THE FILLER METAL SPECIALIST

TYPE

Seamless rutile flux cored wire with < 1% Ni, for FCAW orbital welding (H2-Ready) S480 and X80 steel grades. (Type E 81-T1, T 50 4)

APPLICATIONS

CEWELD® AA R500 PIPE is a seamless rutile cored wire with very good modeling properties, therefore excellent constraint welding with higher amperages is possible. Suitable for use down to -40°C depending on requirements down to -60°C. Especially well suited for orbital welding and basically welding on weld pool backing in all positions, even with high heat input. CEWELD® AA R500 PIPE is suitable for the following applications: Pipeline and tank construction (H2-Ready), steel construction and shipbuilding as well as in offshore or onshore applications.

PROPERTIES

CEWELD® AA R500 PIPE is a seamless rutile cored wire with very good modelling properties, therefore excellent all-position welding with higher currents. Applicable down to -40°C. Low spatter loss and remarkably easy slag removal. Due to the seamless manufacturing process, the content of diffusible hydrogen in the weld metal is extremely low (on average less than 3 ml/100 g). For the entire storage and processing time, < 4 ml/100 g is guaranteed according to AWS. EN -ISO 17632-A: T 50 4 Mn1Ni P M21 1 H5 (for > 1,5 kJ/mm) EN -ISO 18276-A: T 55 4 Mn1Ni P M21 1 H5 (for < 1,5 kJ/mm) ASME -AWS A 5.36: E81T1-M21A4-Ni1-H4 (for > 1,5 kJ/mm) ASME -AWS A 5.36: E91T1-M21A4-Ni1-H4 (for < 1,5 kJ/mm)

CLASSIFICATION

AWS	A 5.36: E81T1-M21A8-Ni1-H4
EN ISO	17632-A: T 50 4 Mn1Ni P M21 1 H5
F-nr	6
FM	1

SUITABLE FOR

ReH ≤ 500 MPa ISO 15608: 1.1, 1.3, 2.1, 2.2 (ReH max. 500 MPa), 3.1 (ReH max. 500 MPa)
1.0580 to 1.0070, 1.8900 to 1.8905, 1.8930 to 1.8935, 1.8910 to 1.8915, 1.6217, 1.6210, 1.0481, 1.0482, 1.0551, 1.0553.
S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P355N, P355NH, P460N, P460NH, P275NL1-P460NL1, P275NL2- P460NL2, L360NB, L415NB, L360MB-L450MB, L360QB-L450QB
ASTM A 203 Gr. D, E; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65, 70; A 572 Gr. 42, 50, 55, 60, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C; API 5 L X52, X60, X65, X52Q, X60Q, X65Q, X70Q
Oceanfit 52, Oceanfit 60, Oceanfit 65, Oceanfit 355, Oceanfit 420, Oceanfit 460, alform plate 460M; durostat 400, 450, 500, durostat B2, aldur 500Q, aldur 500QL, aldur 500QL1, N-A-XTRA 56

APPROVALS

CE

WELDING POSITIONS

TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)

C	Si	Mn	P	S	Ni
0.08	0.5	1.5	0.015	0.015	0.9

MECHANICAL PROPERTIES

Heat Treatment	$R_{P0,2}$ (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V -40°C	Hardness
As Welded	575	644	26	90	HRc

REDRYING

Not required

HEAT INPUT

HI>1,5kJ/mm: T 50 4 Mn1Ni P M21 1 H5 HI<1,5kJ/mm: T 55 4 Mn1Ni P M21 1 H5

GAS ACC. EN ISO 14175

M21

CEWELD AA R500 PIPE

AA R500 PIPE 1,2MM

Packaging	KG/unit	EanCode
BS-300	15	8720663423689
D-200	5	8720663400055