



CEWELD Ultra Clean S2

TYPE Copper free solid wire for Submerged Arc (SAW) welding unalloyed and low-alloyed steels up to 420 MPa yield strength

APPLICATIONS CEWELD® Ultra Clean S2 is ideally suited for pipe welding, offshore structures, pressure vessels, bridge construction, crane construction, equipment construction, and steam turbine structures, where consistent mechanical properties and reproducible weld quality are essential.

PROPERTIES CEWELD® Ultra Clean S2 is a high-quality solid welding wire that is part from the **CEWELD® Ultra Clean family** and offers lower friction and a improved corrosion resistant compared to copper coated wire. Due to the absence of copper. CEWELD® Ultra Clean S2 shows better performance with the multiwire and FMI process with lower impurities and cleaner surface. CEWELD® Ultra Clean S2 is best to be used with [FL180](#) or [FL188](#), depending on the requirements and application. The weld deposit shows remarkable stable mechanical properties making it suitable for demanding constructions and applications.

CLASSIFICATION

AWS	A 5.17: EM12
EN ISO	14171-A: S2
F-nr	6
FM	1

SUITABLE FOR **Rp< 420 MPa (60ksi) ISO 15608: 1.1(ReH < 275 MPa), 1.2 (275 < ReH < 360 MPa), 1.3 (ReH > 360 MPa < 420 MPa)**
 1.0035, 1.0038, 1.0039, 1.0044, 1.0112, 1.0116, 1.0130, 1.0145, 1.0253, 1.0254, 1.0255, 1.0258, 1.0259, 1.0319, 1.0345, 1.0345, 1.0345, 1.0348, 1.0352, 1.0418, 1.0420, 1.0425, 1.0425, 1.0425, 1.0451, 1.0452, 1.0453, 1.0457, 1.0459, 1.0460, 1.0461, 1.0486, 1.0490, 1.0491, 1.0619, 1.1100, 1.0409, 1.0421, 1.0426, 1.0429, 1.0430, 1.0436, 1.0473, 1.0481, 1.0482, 1.0484, 1.0505, 1.0545, 1.0546, 1.0562, 1.0566, 1.0570, 1.0578, 1.0581, 1.0582, 1.8902, 1.8912, 1.8932
 10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6,
 S235JR-S355JR, S235JO-S355JO, P195TR1-P265TR1, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB, L415NB, L415MB, WStE 380, WStE 420, S420NL
 A, B, D, E, A 32-E 36
ASTM A 105, A 106, Gr. A, B; A 283 Gr. A, C; A 285 Gr. A, B, C; A 501, Gr. B; A 573, Gr. 58, 65, 70; A 633, Gr. A, C; A 711 Gr. 1013;
API 5 L Gr. B, X42, X52, X60
 Domex 315-420MC, MC Plus, ML

APPROVALS CE, TÜV: in progress, Lloyds: in progress, DNV: in progress

WELDING POSITIONS





TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)	C	Si	Mn	P	S	Cu
	0.1	0.09	1.2	0.015	0.015	0.029

MECHANICAL PROPERTIES	Heat Treatment	R _{P0.2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V	Hardness
					-30°C	
	As Welded	445	560	24	60	HRC

REDRYING Not required

GAS ACC. EN ISO 14175



CEWELD Ultra Clean S2

ULTRA CLEAN S2 2,4MM

Packaging	KG/unit	EanCode
Drum	300	8720682052044
K-415	25	8720682052051
K-415	25	8720682052082
Drum	300	8720663424808

ULTRA CLEAN S2 3,2MM

Packaging	KG/unit	EanCode
Drum	300	8720682052068
K-415	25	8720682052075