



CEWELD ER 120 S-1

TYPE Extreme high tensile strength alloy with excellent impact properties for fine grain steels exceeding 890 N/mm² yield strength.

APPLICATIONS Welding materials such as S960QL – S1100Q and other similar fine grain cold tough steels. Offshore, crane building etc.

PROPERTIES Extreme high tensile strength alloy with very good mechanical properties and perfect welding characteristics. High impact strength at very low temperatures with exceptional plasticity of the weld deposit. Weldable with Co₂ and Mix gas.

CLASSIFICATION

AWS	A 5.28: ER 120S-G
EN ISO	16834-A: G 89 5 M21 Mn4Ni2,5CrMo
F-nr	6
FM	2

SUITABLE FOR **Reh ≤ 960 MPa ISO 15608: ~3.1, 3.2 (Reh > 690 MPa)**
 1.8796, 1.8925, 1.8940, 1.8983, 1.8797, 1.8933, 1.8934, 1.8941, 1.8997
 S690Q-S890Q, S690QL-S890QL, S960Q, S960QL, S720MC
 ASTM A 709 Gr. 100 Type B, E, F, H, Q, HPS 100W
 N-A-XTRA M 700, PAS 700, alform 700 M, alform 900 x-treme, alform® 960 x-treme, Strenx 700-960, DILLIMAX 700-960

APPROVALS CE

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

C	Si	Mn	P	S	Cr	Ni	Mo
0.11	0.6	1.8	0.01	0.01	0.4	2.4	0.4

MECHANICAL PROPERTIES

Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V	Hardness
				-50°C	
As Welded	960	1050	17	52	HRc

REDRYING Not required

GAS ACC. EN ISO 14175 M21



CEWELD ER 120 S-1

ER 120 S-1 0,8MM

Packaging	KG/unit	EanCode
BS-300	15	8720663417299

ER 120 S-1 1,0MM

Packaging	KG/unit	EanCode
BS-300	15	8720663417305

ER 120 S-1 1,2MM

Packaging	KG/unit	EanCode
BS-300	15	8720663417312

ER 120 S-1 1,6MM

Packaging	KG/unit	EanCode
BS-300	15	8720663417329