



CEWELD ER 120 S-1

TYPE Extremely high-strength solid wire with excellent notched impact strength properties for fine-grain steels with a yield strength up to 730 MPa. (ER 120 S-1)

APPLICATIONS CEWELD® 120-S1 is designed for welding high-strength steels. It is used in many highly stressed areas of construction, where it delivers excellent toughness properties at temperatures down to -50°C (-60°C). Typical applications include mobile crane construction, lattice mast manufacturing, mining, shipbuilding, and pressure vessel construction.

PROPERTIES CEWELD® ER 120-S1 is an alloy with excellent mechanical properties and perfect welding characteristics. High impact strength at low temperatures with exceptional toughness of the weld metal.
By adjusting the welding parameters (stretching energy and t8/5 time), yield strengths of up to 890 MPa can also be achieved.

CLASSIFICATION

AWS	A 5.28: ER 120S-1
F-nr	6
FM	2

SUITABLE FOR **Reh ≤ 730 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, S690QLN-S890QLN
 ASTM A 709 Gr. 100 Type B, E, F, H, Q, HPS 100W
 N-A-XTRA M 620-700, PAS 700, alform 700 M, alform 900 x-treme, Strenx 700-890, DILLIMAX 700-890

APPROVALS CE

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

C	Si	Mn	P	S	Cr	Ni	Mo
0.09	0.6	1.8	0.01	0.01	0.4	2.5	0.5

MECHANICAL PROPERTIES

Heat Treatment	R _{P0.2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V	Hardness
				-50°C	
As Welded	800	880	19	90	HRc

REDRYING Not required

GAS ACC. EN ISO 14175 M21, M13, M20



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