

SA 890

CATEGORY SAW Arc Submerged

TYPE Solid drawn wire for high tensile steels with yield strength >890 N/mm².

APPLICATIONS Crane, steel, vessel and apparatus construction.

PROPERTIES Extreme crack resistant weld deposit due to extra low hydrogen content when combined with Ceweld FL 155. Developed for welding cold tough, high tensile fine grain steel exceeding a yield strength of 890N/mm². To obtain the requested mechanical properties the heat input should be kept around 10 KJ/cm. Cooling time (T_{8/5}) must be adjusted by travel speed and preheat temperature.

CLASSIFICATION AWS A 5.28: ER 120 S-G
EN ISO 14295: SZ4Ni2CrMo

SUITABLE FOR S890 TM-pipe steels to StE 890 to S890QL1, A 517, X 120 high-strength fine grain structural steels (low temp) to StE 960 (StE 1100 to 12 mm) to S960QL1 (S1100 to 12 mm)

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Mn	Si	Cr	Ni	Mo	P	S
0.10	1.85	0.6	0.6	2.2	0.55	< 0.015	< 0.015

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V	
				-20°C	-40°C
AW	> 890	950 - 1100	> 14	> 55	> 47

AW: as welded

WELDING PARAMETERS WITH FL 155 FLUX / PACKING

D (mm)	Welding Parameters		spool type	Packing	
	Voltage (V)	Current (A)		kg / spool	kg / pallet
2.0	26-29	225-325	K-415	25	1050
2.4	27-30	250-375	K-415	25	1050

REDRYING TEMPERATURE not required