

S2

CATEGORY	SAW Submerged arc	
TYPE	Solid wire for submerged arc welding upto 420 N/mm ² yield strength structural steels	
APPLICATIONS	Shipbuilding, piping, root welding, bridges, repair, construction, offshore, etc...	
PROPERTIES	Solid drawn and rolled SAW wire with copper coating for improved current carrying capacity. S2 wire can be used with FL 180, FL188, FL 155 and FL 851 depending on the requirements and application.	
CLASSIFICATION	AWS	A 5.17: EM 12K
	EN ISO	14171-A: S2
	DIN: W.Nr.	1.0494
	DIN	8575: S2
SUITABLE FOR	A, B, D, E, St 37 - St 52-3, DIN 17 100, H I, H II, 17Mn4, 16Mo5, DIN 17 155, StE 255 - StE 355, DIN 17 102, GS-38, GS-60, DIN 1681, St 35.8, St 45.8, DIN 17 175, St 37.0 - St 52.0, DIN 1626 / 1629, St 37.4 - St 52.4, DIN 1628 / 1630, StE 290.7 TM - StE 360.7 TM, DIN 17 172, X 52	
APPROVALS	TUV (12523.00), CE approved	

WELDING POSITIONS:



TYPICAL WELD DEPOSIT ANALYSIS WITH FL 155 (WEIGHT %)

C	Mn	Si	P	S	Cr	Ni	Mo	Cu	Al
0.07-0.15	1.00-1.20	0.10-0.15	<0.025	<0.025	<0.15	<0.15	<0.15	<0.3	<0.03

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRC / HV
				-20°C	-40°C	-60°C	
AW	>420	>520	>22		>47		

AW - as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing	
D (mm)	Voltage (V)	Current range (A)	spool type	kg / spool / drum
2.4	28-32	300-600	K-415 / drums	20-30 / 300
3.2	28-34	350-700	K-415 / drums	20-30 / 300
4.0	28-36	450-800	K-415 / drums	20-30 / 300

REDRYING TEMPERATURE not required