Weld CF 89

The non copper coated Weld CF 89 is a low-alloyed, chromium-nickel-molybdenum (0.4% Cr, 2.2%

Ni, 0.55% Mo), solid wire for GMAW of ultra high tensile strength steels requiring tough weld metal for critical applications. Also suitable when high impact strength at lower temperatures is required.

The Weld CF wires are suitable for operating at high currents with maintained disturbance free wire feeding giving a stable arc with a low amount of spatter, due to its unique Advanced Surface Characteristics ASC)technology.

Some of the common application areas where the benefits of high strength steel have already been utilised include mobile cranes, commercial vehicle chassis, mining equipment, tower crane sections, containers, concrete pump cranes and booms for forestry equipment.

The type steel designation which Weld CF 89 was suitable for welding were as listed according to ISO 15608, international steel works brand: S890QL, Weldox 900, 1100,1300, Domex 960, XABO 890,960,1100, NAXTRA 70, OX-700,800,1002, Optim 900QC, 960QC, 1100QC, T1 - HY80.

CLASSIFICATIONS Wire Electrode

SFA/AWS A5.28: ER120S-G
EN ISO 16834-A: G Mn4Ni2CrMo

Approvals

Not applicable

CHEMICAL COMPOSITION

Wire/Strip (%)

	Min	Max
C	0.08	0.12
Si	0.60	0.90
Mn	1.60	2.10
P		0.015
S		0.015
Cr	0.25	0.45

Ni	2.10	2.30	
Mo	0.45	0.65	
Cu		0.15	

Typical Mechanical Properties of Weld Metal

Condition	Yield Strength	Tensile Strength	Elongation
EN 80Ar/20CO2 (M21)			
As weld	920 MPa	1000 MPa	16 %

Typical Charpy V Type Impact Properties of Weld Metal

Condition	Temperature	Impact vaule
EN 80Ar/20CO2 (M21)		
As weld	-40 °C	53 J

Deposit rate

Diameter	Current	Voltage	Feeding Speed	Deposit rate
1.0 mm	80-280 A	18-32 V	2.7-14.7 m/min	1-5.4 kg/h
1.2 mm	120-350 A	18-34 V	2.7-12.4 m/min	1.5-6.6 kg/h