

# SM-110

High tensile steels

## Conformances

AWS A5.28/ ASME SFA5.28 ER110S-G

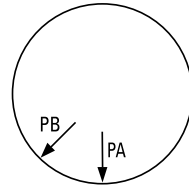
## Applications

- 0.3Cr-1.9Ni-0.5Mo-alloyed, High strength steel

## Features

- Excellent TS and impact value at low temperature
- Stable arc with High-Current
- Low spatter

## Welding Position



## Current

DC +

## Shielding Gas

Ar + CO<sub>2</sub>

## Diameter / Packaging

Diameter	Spool			Ball Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
mm (in)						
0.8 (0.033)	√	√	√	√	√	√
0.9 (0.035)	√	√	√	√	√	√
1.0 (0.040)	√	√	√	√	√	√
1.2 (0.045)	√	√	√	√	√	√
1.4 (0.052)	√	√	√	√	√	√
1.6 (1/16)	√	√	√	√	√	√

### Typical Chemical Composition of the Wire(%)

C	Si	Mn	P	S	Cr	Ni	Mo
0.089	0.75	1.83	0.011	0.012	0.30	1.9	0.52

### Typical Mechanical Properties of All-Weld Metal

	YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)
As welded with 80% Ar + CO <sub>2</sub>	700 (103,000)	858 (124,400)	19.4	-40 (-40) 60 (-76)	82 (60) 69 (51)
As welded with 90% Ar + CO <sub>2</sub>	725 (105,100)	871 (126,300)	17.2	-40 (-40) 60 (-76)	71 (53) 60 (45)

### Typical Welding Parameters

Diameter, Polarity Shielding Gas	CTWD mm(in)	Wire Feed Speed m/min (in/min)	Amp. (A)	Volt. (V)	Deposition Rate kg/hr (lb/hr)
<b>1.2mm (0.045in), DC +</b>					
Mixed Gas (80%Ar + CO <sub>2</sub> )	20 (3/4)	3.7 (145)	150	17.5	1.9 (4.2)
		6.2 (244)	200	24	3.1 (6.8)
		11.2 (440)	280	30	5.6 (12.3)