

# SW-625 Cored

## Conformances

AWS A5.34/ ASME SFA5.34 ENiCrMo3T1-1/-4  
EN ISO 12153 T Ni 6625 P M/C 2

## Applications

- Joining nickel-chromium-molybdenum alloys
- Cladding steel with nickel-chromium-molybdenum weld metal
- LNG storage tank manufacture, desulfurization

## Features

- Designed for welding with 100% CO<sub>2</sub> or Ar+15~25% CO<sub>2</sub> shielding gas
- Excellent all position weldability
- Smooth and stable arc with a fast freezing slag

## Welding Position

## Current

DC +

## Shielding Gas

100% CO<sub>2</sub> / Ar+20~25% CO<sub>2</sub>

## Diameter / Packaging

Diameter mm (in)	Length mm(in)	
	12.5kg (28lbs)	15kg (33lbs)
1.2 (0.045)	√	√
1.4 (0.052)		
1.6 (1/16)		

## Typical Chemical Composition of All-Weld Metal(%)

C	Si	Mn	P	S	Cr	Ni	Mo	Nb	Fe
0.024	0.42	0.34	0.004	0.002	20.9	65.0	8.9	3.4	0.5

## 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)
-	759	40.4	-196 (-321)	65 (48)

## 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)
1.2mm (0.045 in) DC+					
100% CO <sub>2</sub>	20 (4/5)	6.0 (236)	140	23~26	2.5 (5.5)
		9.2 (362)	180	27~30	3.4 (7.5)
		12.0 (472)	210	28~31	4.5 (9.9)
80% Ar+20% CO <sub>2</sub>	20 (4/5)	6.1 (240)	140	23~26	2.6 (5.7)
		9.0 (354)	180	27~30	3.6 (7.9)
		11.5 (453)	210	27~30	4.6 (10.1)