

MARTENSITIC STS TYPE SUBMERGED ARC WIRE

HYUNDAI WELDING CO., LTD.



Specification

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Description & Applications

Supershield 410NiMo-O is an open arc type wire. Used for Hardfacing of casting rolls. Good weldability(Non-Gas) and PWHT(Post-Weld Heat Treatment) is not required.

(Steel Mill Rolls, Casting Rolls, etc.)

*** Welding Process**

Open Arc Type

Current Type

DC+

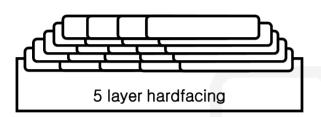
Packing

Supershield 410NiMo-O	Dia.	2.4mm(3/32in) 2.8mm(7/64in)		
	Coil	25kg(55lbs)		
	Pailpack	150kg(330lbs), 250kg(551lbs)		



Mechanical Properties & Chemical Composition of All Weld Metal

*** Welding Conditions**



Diameter : 2.4mm(3/32in)

Welding Type : Open Arc Amp./ Volt. : 380 / 28

 Stick-Out
 : 25~30mm(0.98~1.18in)

 Pre-Heat
 : 150~250°C (302~482°F)

 Interpass Temp.
 : 200~300°C (392~572°F)

Total layers : ≥4 layer

Chemical Analysis of All weld metal(wt%)

Consumable	С	Si	Mn	Cr	Ni	Мо	Nb
Supershield 410NiMo-O	0.04	0.85	1.05	14.45	3.90	0.65	0.26

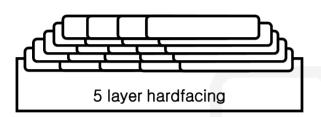
Hardness test of All weld metal(HRc)

Consumable		Avg.				
Supershield 410NiMo-O	38	40	41	41	43	41



Mechanical Properties & Chemical Composition of All Weld Metal

*** Welding Conditions**



Diameter : 2.8mm(7/64in)
Welding Type : Open Arc

Amp./ Volt. : 380 / 29

 Stick-Out
 : 25~30mm(0.98~1.18in)

 Pre-Heat
 : 150~250°C (302~482°F)

 Interpass Temp.
 : 200~300°C (392~572°F)

Total layers : ≥4 layer

Chemical Analysis of All weld metal(wt%)

Consumable	С	Si	Mn	Cr	Ni	Мо	Nb
Supershield 410NiMo-O	0.05	1.07	1.30	14.85	4.43	0.60	0.25

Hardness test of All weld metal(HRc)

Consumable	Hardness(HRc)					Avg.
Supershield 410NiMo-O	40	40	41	42	42	41



Test Results

*** BEAD APPEARANCE**

Consumable	Supershield 410NiMo-O (2.4mm, 3/32in)
Amp.(A)	360~380
Volt.(V)	27~28
Carrige Speed	40~60cm/min(15.7~23.6in/min)
Welding Position	Flat(1G)

Consumable	Supershield 410NiMo-O (2.8mm, 7/64in)				
Amp.(A)	370~390				
Volt.(V)	27~29				
Carrige Speed	40~60cm/min(15.7~23.6in/min)				
Welding Position	Flat(1G)				

This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.