Supercored 70MXH

Type : Semi-Metal

Conformances

AWS A5.36/ ASME SFA5.36 E70T1-C1A2-CS1
(AWS A5.20/ ASME SFA5.20 E70T-9C)
JIS Z3313 T49 J 2 T1-0 C A -U H5
EN ISO 17632-A-T 42 2 R C1 H5
KR 3YSG(C) H5, 3YMG(C) H5
ABS 3SA H5, 3YSA
LR 3YS H5
BV SA3YM, A3YM HHH
DNV·GL IIIYMS H5
NK KSW53G(C) H5
KAW53MG(C) H5
CCS 3YSM H5
RINA 3YS H5

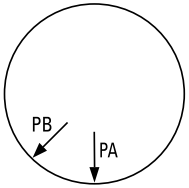
Applications

- Shipbuilding
- Structural fabrication
- General fabrication
- Heavy equipment
- Offshore structure

Features

- Designed for welding with 100% CO_2 shielding gas
- High speed single or twin tandem welding
- Low hydrogen level (H5)
- Good anti-porosity to zinc primer

Welding Position



Current

DC +

Shielding Gas

100% CO_2

Diameter / Packaging

Diameter	Spool			Pac		
mm (in)	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	500kg (771lbs)
1.4 (0.052)		√	√	√	√	√
1.6 (1/16)		√	√	√	√	√

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S
0.05	0.55	1.65	0.013	0.010

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft·lbs)
540 (78,400)	620 (90,000)	28	-30 (-22)	54(40)

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)	Efficiency (%)
1.4mm (0.052 in) DC+						
100% CO_2	25 (1)	12.2 (480)	280~320	29~33	5.6 (12.4)	90~92
		13.1 (515)	330~370	34~38	6.1 (13.4)	91~93
		15.0 (590)	380~420	36~40	6.4 (14.1)	91~93
1.6mm (1/16 in) DC+						
100% CO_2	25 (1)	7.6 (300)	280~320	31~35	4.9 (10.8)	87~89
		8.9 (350)	330~370	34~38	5.5 (12.1)	90~91
		10.2 (400)	380~420	36~40	6.3 (13.9)	90~91
		11.8 (500)	430~470	40~44	7.7 (17.0)	91~92