S-8018.B2R

Type : Basic

Conformances

AWS A5.5/ ASME SFA5.5 E8018-B2

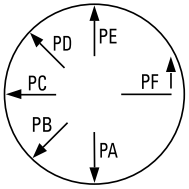
JIS Z3223 E5518-1CM

EN 1599 - ECrMo1 B 3 2 H5

Applications

- Low alloy steel (1.25%Cr-0.5%Mo)

Welding Position



Features

- Relevant elements P, Sn, As and Sb controlled (X-Factor ≤15ppm)
- Low-Hydrogen electrode (HDM ≤5ml/100g)
- Iron powder type electrode (high efficiency)
- Good impact value at low temperature

Current

AC, DC ±

Redrying Conditions

350~400°C (662~752°F) X 0.5~1hr

Diameter / Packaging

Diameter	Length	Standard		Vacuum				P.V.C	
mm (in)	mm (in)	packet	carton	packet	carton	packet	carton	packet	carton
		5kg(11lbs)	20kg(44lbs)	1.5kg(3.3lbs)	15kg(3.3lbs)	5kg(11lbs)	20kg(44lbs)	5kg(11lbs)	20kg(44lbs)
2.6 (3/32)	350 (14)			√		√		√	
3.2 (1/8)	350 (14)			√		√		√	
4.0 (5/32)	400 (16)			√		√		√	
5.0 (3/16)	400 (16)			√		√		√	

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Cr	Mo	Sn	As	Sb	X-factor
0.069	0.57	0.82	0.007	0.010	1.32	0.58	0.0050	0.0020	0.0010	10.4ppm

X-factor = (10P + 5Sb + 4Sn + As)/100 ≤ 15 (ppm)

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)	Heat Treatment
608 (88,200)	684 (99,200)	25.4	0 (32) -20 (-4)	144 (106) 62 (46)	690°C(1274°F) X 1hr. S.R
606 (87,900)	661 (95,900)	27.2	0 (32) -20 (-4)	143 (106) 91 (67)	690°C(1274°F) X 2hr. S.R

Typical Welding Parameters / Amp.(A)

Diameter mm (in)	2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	5.0 (3/16)
Length mm (in)	350 (14)	350 (14)	400 (16)	400 (16)
F & HF	55~90	90~130	130~190	190~240
V-up, OH	50~80	80~120	120~180	-