

S-309L.16[17]

Type : Rutile, Rutile-acid



Conformances

AWS A5.4/ ASME SFA5.4 E309L-16
 JIS Z3221 ES309L-16 / EN ISO 3581-A-E 23 12 L R
 AWS A5.4 / ASME SFA5.4 E309L-17
 JIS Z3221 ES309L-17 / EN ISO 3581-A-E 23 12 L R
 KR RD309L
 ABS AWS A5.4 E309L-16
 AWS A5.4 E309L-17
 LR SS/CMn
 BV UP

DNV-GL VL 309L
 NK KD309L
 CWB CSA W48 E309L-16
 TÜV EN ISO 3581-A-E 23 12 L R
 DB DIN EN ISO 3581-A-E 23 12 L R
 CE
 CCS 309L

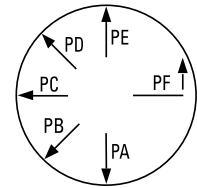
Applications

- Welding of dissimilar steels
- Buffer layer for bulid-up

Features

- Good resistance to heat and corrosion
- Good crack resistance
- Easy to remove slag
- High moisture resistance (17 type)

Welding Position



Current

AC or DC ±

Redrying Conditions

350°C (662°F) X 1hr

Diameter / Packaging

Diameter	Length	Standard		Vacuum				P.V.C	
		packet	carton	packet	carton	packet	carton	packet	carton
mm (in)	mm (in)	5kg(11lbs)	20kg(44lbs)	1.5kg(3.3lbs)	15kg(3.3lbs)	5kg(11lbs)	20kg(44lbs)	2.5kg(11lbs)	10kg(22lbs)
2.0 (5/64)	300 (12)								✓
2.6 (3/32)	300 (12)								✓
3.2 (1/8)	350 (14)								✓
4.0 (5/32)	350 (14)								✓
5.0 (3/16)	350 (14)								✓

SWAW

SAW

GMWAW

GTAW

FCAW

Non-FERROUS

APPENDIX

Typical Chemical Composition of All-Weld Metal (%)

Product name	C	Si	Mn	P	S	Cr	Ni	Mo
S-309L.16	0.02	0.76	1.21	0.028	0.018	22.9	12.7	0.10
S-309L.17	0.02	0.63	1.15	0.028	0.017	23.1	12.8	0.10

Typical Mechanical Properties of All-Weld Metal

Product name	TS MPa(lbs/in ²)	EL (%)
S-309L.16N	563 (81,800)	43.0
S-309L.17	570 (82,800)	43.0

Typical Welding Parameters / Amp.(A)

Diameter mm (in)	2.0 (5/64)	2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	5.0 (3/16)
Length mm (in)	300 (12)	300 (12)	350 (14)	350 (14)	350 (14)
F & HF	25-55	50-85	70-115	95-145	135-180
V-up, OH	20-50	45-80	65-110	85-135	-