Cromacore DW 309L

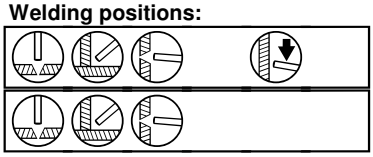
FCAW - Flux cored arc welding
Stainless Steel

Date:	2007-05-25
Revision:	12

Description:
Cromacore DW 309L is a rutile flux cored wire which deposits a low carbon 24% Cr / 13% Ni stainless steel weld metal with a ferrite content of about FN 14. The wire operates with a very stable, spatter free arc producing a bright, smooth weld bead surface and self-releasing slag. Cromacore DW 309L is used mainly for downhand and horizontal-vertical welding and is ideal for standing fillets.

Applications:
Dissimilar joints between stainless and mild or low alloy steels.
Buffer layers on mild and low alloy steels prior to overlaying with Cromacore DW 308L/LP or DW 347.
Interface runs on clad steel joints.
Welding of similar composition, 309 type, stainless steels.
Joining of ferritic-martensitic stainless steels.

Welding positions:



Welding current:
DC+

Deposition efficiency:
87%

Shielding gas:
M21, 80% Ar + 20% CO2, 22-25 l/min
C1, 100% CO2, 22-25 l/min

Stick-out:
15-25 mm

Ferrite content:
FN 14

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min			0.5			22.0	12.0
Typical	0.03	0.7	1.4	0.025	0.009	24.0	12.7
Max	0.04	1.0	2.5	0.030	0.025	25.0	14.0

	Mo	Cu	V	Nb
Min				
Typical	0.1	0.15	0.1	0.08
Max	0.50	0.50	0.2	0.1

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:		460 MPa
Tensile Strength, Rm:	≥ 520 MPa	590 MPa
Elongation, A5	≥ 30%	36%
Impact energy, CV:		–20°C • 38 J

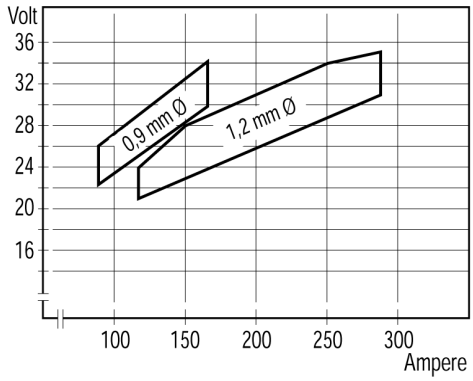
Classification:

AWS A5.22	E 309LT0-4/-1
ISO 17633-A	T 23 12L R M/C 3

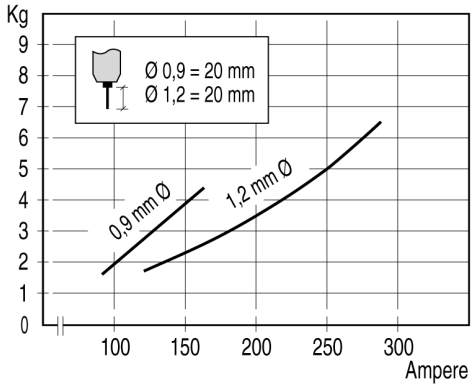
Approvals:

GL	4332S
LR	SS/CMn S, Dup/CMn
DNV	309L
TÜV	07381.02
CE	

Recommended parameter range:



Deposition rate per hour:



Product data:

Diam.mm	Product code	Spool weight
0,9	95722009	12,5 kg D300
1,2	95721012	15 kg BS300
1,2	95721112	5 kg BS200

Note

Strip:
S ≤ 0.03%
P ≤ 0.04%
N ≤ 0.06%