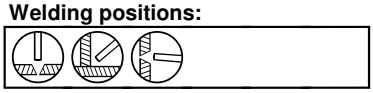
Cromacore DW 329A Duplex

FCAW - Flux cored arc welding
Stainless Steel

Date:	2007-05-25
Revision:	12

Description:
Cromacore DW 329A Duplex is a rutile flux cored wire which deposits a low carbon 23% Cr / 9% Ni / 3% Mo / N duplex stainless steel weld metal with a nominal ferrite level of FN 40. The wire is designed for welding in the flat and horizontal-vertical positions only and is ideal for standing fillets. It is intended for welding similar duplex stainless steels which offer an excellent combination of high strength and very good resistance to chloride induced pitting and stress corrosion cracking. Cromacore 329A Duplex operates with a very stable, spatter-free arc and produces a bright, smooth weld bead surface and self-releasing slag.

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 40

Corrosion resistance
Pitting resistance equivalent, PRE = 35.
Critical pitting temperature, CPT = 30°C (ASTM G48).

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min			0.5			22.0	8.0
Typical	0.02	0.8	1.3	0.020	0.007	22.9	9.2
Max	0.04	1.0	2.0	0.025	0.020	24.0	10.0

	Mo	Cu	V	Nb	N
Min	2.5				0.08
Typical	3.0	0.02	0.1	0.08	0.10
Max	4.0	0.50	0.2	0.1	0.20

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	≥ 500 MPa	610 MPa
Tensile Strength, Rm:	≥ 700 MPa	800 MPa
Elongation, A5	≥ 20%	32%
Impact energy, CV:	–20°C • 27 J	–20°C • 40 J

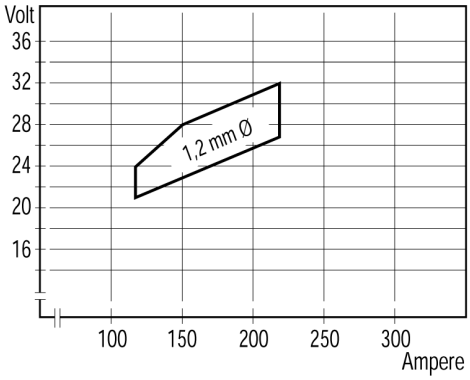
Classification:

AWS A5.22	E 2209T0-4/-1
ISO 17633-A	T 22 9 3 N L R M/C 3

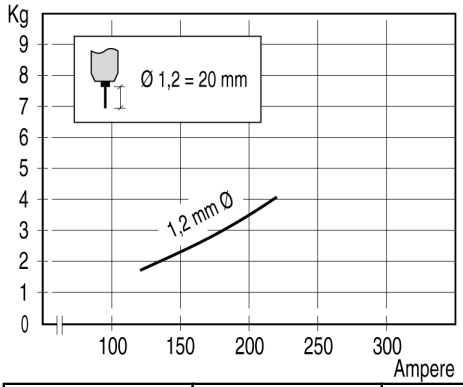
Approvals:

DNV	Duplex
GL	4462S
LR	S 31803 S
TÜV	6028.00
CE	

Recommended parameter range:



Deposition rate per hour:



Diam.mm	Product code	Spool weight
1,2	95761012	15 kg BS300
1,2	95761112	5 kg BS200

Note

Strip:
S ≤ 0.03%
P ≤ 0.04%
N ≤ 0.06%