



Cromacore DW 329AP Duplex

FCAW - Flux cored arc welding
Stainless Steel

Date: 2013-05-27
Revision: 9

Description:

Cromacore DW 329AP 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 specially designed for positional welding and is not recommended for flat or horizontal-vertical applications. 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. The wire operates with a very stable, spatter-free arc and produces a bright, smooth weld bead surface and self-releasing slag. Cromacore DW 329AP Duplex is ideal for high productivity welding in the vertical position.

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:	-46°C • 27 J	-46°C • 42 J

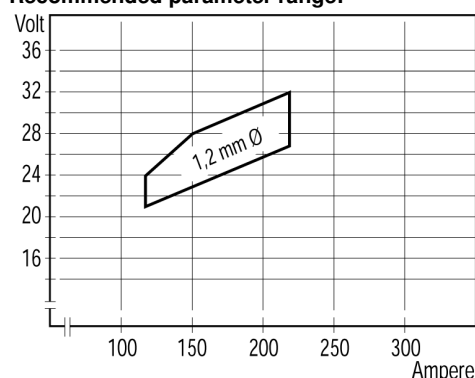
Classification:

AWS A5.22 E 2209T1-4/-1
ISO 17633-A T 22 9 3 N L P M/C 1

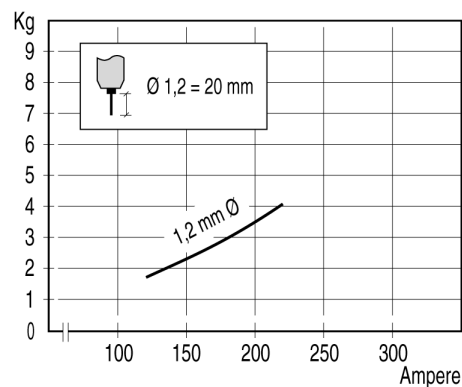
Approvals:

GL 4462S
LR S 31803 S
DNV Duplex
CE

Recommended parameter range:



Deposition rate per hour:



Product data:

Diam.mm	Product code	Spool weight
1,2	95781012	15 kg BS300
1,2	95782112	5 kg D200

Note

Strip:
S ≤ 0.03%
P ≤ 0.04%
N ≤ 0.06%