



Elgacore DW 50

FCAW - Flux cored arc welding
Un-alloyed

Date: 2009-02-19
Revision: 11

Description:

Elgacore DW 50 is a rutile flux cored wire for use with a 100% CO₂ gas shield. The wire is all-positional and runs with a very stable, soft arc producing excellent weld bead shape and finish with minimal spatter. The slag is easily detachable and fume emission is very low. It is suitable for welding mild and medium strength carbon manganese structural steels and produces excellent root beads on ceramic backing. Ease of use and high productivity, in combination with good mechanical properties and a weld metal hydrogen content less than 5 ml/100g, make Elgacore DW 50 an excellent general purpose cored wire where CO₂ is the preferred working gas.

Welding positions:



Welding current:

DC +

Deposition efficiency:

88%

Shielding gas:

100% CO₂, 22-25 l/min.

Stick-out:

15-25 mm

Hydrogen content / 100 g weld metal

≤ 5 ml

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min							
Typical	0.06	0.5	1.4	0.015	0.007		
Max	0.18	0.90	1.75	0.03	0.03	0.20	0.50

	Mo	Cu	V	Nb
Min				
Typical				
Max	0.20	0.30	0.08	0.05

Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Re:	≥ 420 MPa	530 MPa
Tensile Strength, Rm:	500-640 MPa	590 MPa
Elongation, A5	≥ 22%	28%
Impact energy, CV:	-20 °C • >47 J	-20 °C • >75 J

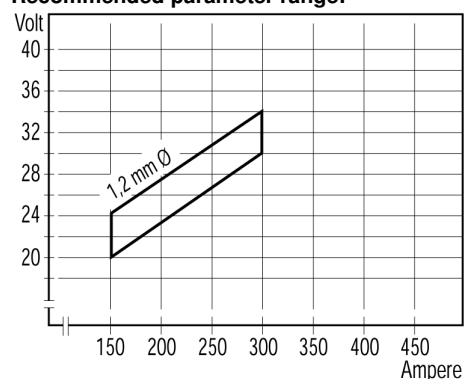
Classification:

EN 758	T 42 2 P C/M 1 H5
EN ISO 17632	T 42 2 P C/M 1 H5
AWS A5.20	E 71T-1/-1M

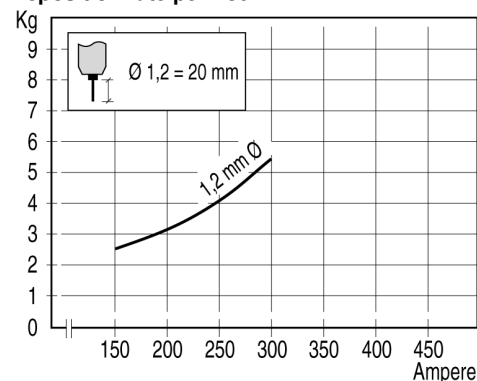
Approvals:

ABS	3SA, 3YSA H5
LR	3, 3YS H5
DNV	III Y MS H5

Recommended parameter range:



Deposition rate per hour:



Product data:

Diam.mm	Product code	Spool weight
1,2	9551012	15 kg WBS
1,2	95512012	15 kg PSP
1,6	95512016	12,5 kg PSP
1,6	95512216	250 kg AutoPac

Note

Strip:
S ≤ 0.015%
P ≤ 0.025%
N ≤ 0.004%