



Elgacore DWA 65L

FCAW - Flux cored arc welding
Low-alloyed

Date: 2005-01-25
Revision: 2

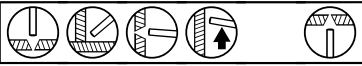
Description:

Elgacore DWA 65L is a rutile flux cored wire designed to meet extremely high weld integrity demands in applications such as offshore fabrication. The micro-alloyed design, in combination with the 1.7% Ni, 0,1% Mo alloying level, produces excellent fracture toughness down to -40°C, whilst ensuring a good safety margin of yield strength in 500 MPa steel. Impact strength is tolerant to a wide range of heat-input and preheat/interpass conditions. The all-positional wire operates with a smooth but forceful arc to give very good penetration characteristics when welding horizontally, combined with high deposition rates when welding vertically up. Elgacore DWA 65L is CTOD tested.

Applications:

500 Mpa base material in Offshore constructions

Welding positions:



Welding current:

DC+

Deposition efficiency:

87%

Shielding gas:

M21, 80% Ar + 20% 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	0,03		0,50				1,00
Typical	0,05	0,35	1,3	0,01	0,01		1,7
Max	0,10	0,80	1,75	0,02	0,02	0,15	2,00

	Mo	Cu	V	Nb
Min				
Typical	0,1			
Max	0,20	0,30	0,05	0,05

Mechanical properties

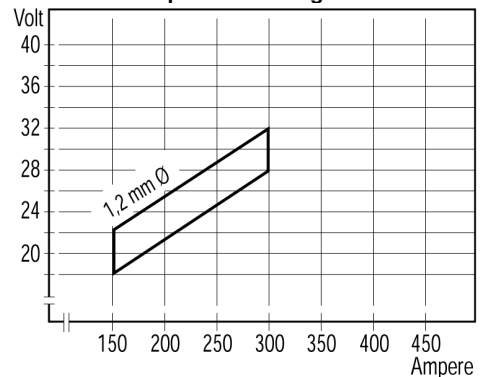
	<u>Specified</u>	<u>Typical</u>
Yield strength, Re:	≥ 550 MPa	620 MPa
Tensile Strength, Rm:	640-760 MPa	690 MPa
Elongation, A5	≥ 18%	25%
Impact energy, CV:	-40°C • 47 J	-40°C • 80 J

Classification:

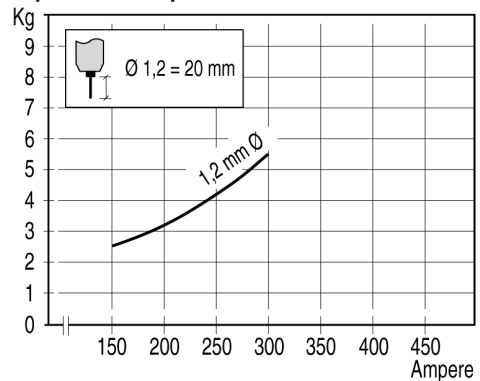
EN 12535 T 55 4 Z P M 2 H5
AWS A5. 29 E91T1-K2MJ
ISO 18276-A T 55 4 Z P M 2 H5

Approvals:

Recommended parameter range:



Deposition rate per hour:



Product data:

Diam.mm	Product code	Spool weight
1,2	95882012	15 kg D300

Note

Strip:
S ≤ 0.012%
P ≤ 0.015%
N ≤ 0.004%