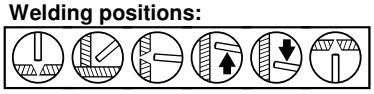
Elgacore DWA 55E

FCAW - Flux cored arc welding
Un-alloyed

Date:	2013-05-27
Revision:	21

Description:
Elgacore DWA 55E is a rutile flux cored wire for use with an Ar/CO2 gas shield and deposits a 0.4% Ni alloyed weld metal designed to meet requirements for very good fracture toughness at temperatures down to –40°C. The wire has excellent welding characteristics in all positions and very low fume emission. With its good weld metal ductility and hydrogen content of around 5 ml/100 g, Elgacore DWA 55E is recommended for high integrity fabrication of medium to heavy sections in structural steelwork, shipbuilding and pipeline construction.

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							
Typical	0.05	0.5	1.3	0.015	0.008		0.4
Max	0.18	0.90	1.75	0.03	0.03	0.20	0.5

	Mo	Cu	V	Nb
Min				
Typical				
Max	0.20	0.30	0.08	0.05

Mechanical properties

	Specified	Typical
Yield strength, Re:	≥ 420 MPa	570 MPa
Tensile Strength, Rm:	500-640 MPa	630 MPa
Elongation, A5	≥ 20%	27%
Impact energy, CV:	–40°C • 47 J	–40°C • 80 J

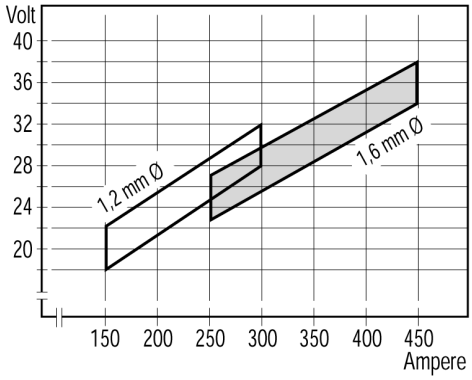
Classification:

EN 758	T 42 4 P M 1 H5
AWS A5.20	E 71T-9MJ
ISO 17632-A	T 42 4 P M 1 H5

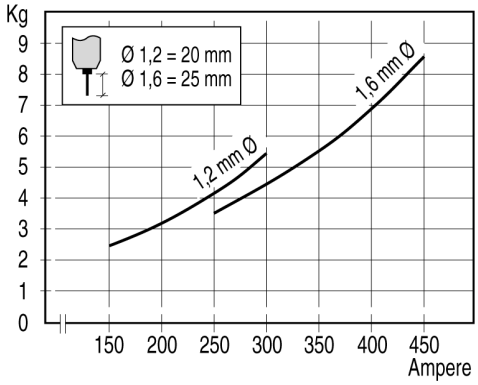
Approvals:

ABS	3YSA
LR	4Y40S H5
DNV	IV YMS H5
DB	42.042.06
TÜV	7124.00
MRS	4Y 42 MS HHH
BV	SA 4Y40M HHH
GL	4Y40H5S
NAKS	
CE	

Recommended parameter range:



Deposition rate per hour:



Product data:

Diam.mm	Product code	Spool weight
1,2	95641012	15 kg BS300
1,2	95642112	5 kg D200
1,6	95641016	15 kg BS300

Note

Strip:
S ≤ 0.015%
P ≤ 0.025%

N ≤ 0.004%