CEWELD AA M690

certilas® THE FILLER METAL SPECIALIST

TYPE

Seamless metal flux cored wire for gas metal arc welding of high-strength steels up to a minimum yield strength of 690 MPa. (Type T 69 6 Mn2NiCrMo, E 110C-K4)

APPLICATIONS

CEWELD® AA M690 offers a unique weld metal even after PWHT, for steels up to 690 MPa yield strength.
Areas of application are:
Crane-, plant-, craft-, lifting and steel construction, pipe work, foundries, ship building, offshore applications and also for penstocks.

PROPERTIES

CEWELD® AA M690 has excellent crack resistance in combination with a very low hydrogen content (Ø < 3 ml/100 g). It is therefore very suitable for the economical processing of high-strength fine-grain structural steels up to 690 MPa yield strength and heat-resistant fine-grain structural steels. The excellent welding properties in the short arc and spray arc as well as the high deposition rate and the absence of intermediate cleaning with very low spatter losses result in high economic efficiency. In addition, it has excellent wetting behaviour compared to solid wires, which results in an extended parameter range and an improved duty cycle for the welder

CLASSIFICATION

AWS	A 5.28: E110C-K4 H4, A 5.36: E111T15-M21A8-K4-H4
EN ISO	18276-A: T 69 6 Mn2NiCrMo M M21 1 H5
F-nr	6
FM	2

SUITABLE FOR

Reh < 690 MPa Iso 15608: 2.2, 3.1 u 3.2 (460 < Reh ≤ 690(700) MPa)
1.7147, 1.7149, 1.8914, 1.8915, 1.8917, 1.8927, 1.8928, 1.8930, 1.8931, 1.8932, 1.8734, 1.8974, S620Q, S620QL, S690Q, S690QL, S620QL1-S690QL1, 20MnCr65, 28CrMn4-3
L480 - L550, X65, X80, X90, X100
ASTM A 514 Gr. F, H, Q; A 709 Gr. 100 Type B, E, F, H, Q; A 709 Gr. HPS 100W
Weldox 700, Dillimax 690, Hardox, Naxtra 63, Naxtra 70, Optim 700 mc plus, Weldox 500, Hardox, Domex 460 MC, Domex 500 MC, Domex 550 MC, Domex 600 MC, Domex 650 MC, Domex 700 MC, Hardox 400,Strenx 700; XAR 400, Dillidur 400, Oceanfit 100, Oceanfit 690, alform plate 620 M, 700 M, aldur 620 Q, 620 QL, 620 QL1, aldur 700 Q, 700 QL, 700 QL1, Salzgitter S700MC, Ympress Steel E690 TM, S700MC, Amstrong Ultra 650MC, 650 MCt, 700 MC.....

APPROVALS

TÜV: (12707), CE, Lloyds, DNV

WELDING POSITIONS

TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)

C	Si	Mn	P	S	Cr	Ni	Mo
0.05	0.4	1.6	0.015	0.015	0.5	2.2	0.5

MECHANICAL PROPERTIES

Heat Treatment	$R_{P0,2}$ (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V		Hardness
				-40°C	-60°C	
As Welded	763	820	20	140	107	HRc
570°C- 620°C 1h	730	790	22	99	94	HRc

REDRYING

Not required

GAS ACC. EN ISO 14175

M21

CEWELD AA M690

AA M690 1,0MM

Packaging	KG/unit	EanCode
K-300	16	8720663423467

AA M690 1,2MM

Packaging	KG/unit	EanCode
BS-300	16	8720663423474
D-200	5	8720663423450

AA M690 1,6MM

Packaging	KG/unit	EanCode
K-300	16	8720663408181