



CEWELD NiCrMo 686 CPT

TYPE Nickel-Chromium-Molybdenum based alloy for gas metal arc welding

APPLICATIONS NiCrMo 686 is of great value for service environments requiring general corrosion-resistance in HCl or sulfuric acid; for resistance to crevice corrosion in hot, concentrated acid chloride solutions such as sulfur dioxide saturated NaCl solutions and oxidizing chloride solutions; and for resistance to intergranular attack, and for resistance to intergranular attack, after sensitization, in highly oxidizing environments.

PROPRIÉTÉS NiCrMo 686 (UNS N06686/W.Nr. 2.4606) is a single-phase, austenitic Ni-Cr-Mo-W alloy offering outstanding corrosion-resistance in a range of severe environments. Its high nickel (Ni) and molybdenum (Mo) provide good resistance in reducing conditions, and high chromium (Cr) offers resistance to oxidizing media. Molybdenum (Mo) and tungsten (W) aid resistance to localized corrosion such as pitting. Iron (Fe) is closely controlled to enhance properties. Low carbon (C) helps minimize grain boundary precipitation to maintain corrosion-resistance in the heat-affected zones of welded joints. Resistance to general, pitting and crevice corrosion increases with the alloying (Cr+Mo+W) content, and NiCrMo 686 scores higher than competitive materials.

CLASSIFICATION

AWS	A 5.14: ERNiCrMo-14
EN ISO	18274: S Ni 6686 (NiCr21Mo16W4)
W.Nr.	~2.4606
F-nr	43
FM	6

CONVIENT POUR **ENiCrMo-14, E Ni 6686 NiCr21Mo16W4**
2.4602, 2.4605, 2.4606, 2.4607, 2.4610, 2.4819, 2.4656, 1.4529, 1.4547, 1.4565
NiCr23Mo16, NiCr23Mo16Al, NiCr21Mo16W, NiMo16Cr15Ti, NiMo16Cr16Ti, NiCr21Mo14W,
NiMo16Cr15W, NiCr22Mo9Nb, Alloy 59, Alloy C4, Alloy 276, X1NiCrMoCuN25-20-7, X1CrNiMoCuN20-18-7
ASTM: C-4, C-276, C-22, 625, 904hMo
UNS: N06059, N06455, N10276, N06625, N08925, S31254, N06686, N06022, N06059, N06200, N08367, N08926, N08031
Duplex, Superduplex, super austenitic stainless steel, Nickel Alloys, N06059, N06022, Hastelloy C276, Alloy C22, Alloy 59. Inconel 622, 625, 686, Outokumpu 654 SMO, Incoloy® Alloy 25-6MO, 27-7MO (Special Metals)

AGRÉMENTS

POSITIONS DE SOUDAGE



**ANALYSE CHIMIQUE
TYPIQUE DU MÉTAL
D'APPORT (%)**

C	Si	Mn	P	S	Cr	Ni	Mo	Ti	Fe	W	Cu	Al
0.03	0.06	0.3	0.002	0.001	21	58	16	0.1	0.8	3.5	0.01	0.23

PROPRIÉTÉS MÉCANIQUES

Heat Treatment	R _{P0.2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness
				RT	-196°C	
As Welded	450	760	40	100	80	HRc

ETUVAGE Not required

GAS ACC. EN ISO 14175 I1, I3



CEWELD NiCrMo 686 CPT

NICRMO 686 CPT 0,8MM	Packaging	KG/unit	EanCode
	BS-300	15	8720663419484
NICRMO 686 CPT 1,0MM	Packaging	KG/unit	EanCode
	BS-300	15	8720663419507
NICRMO 686 CPT 1,14MM	Packaging	KG/unit	EanCode
	BS-300	13,6	8720663419521
NICRMO 686 CPT 1,6MM	Packaging	KG/unit	EanCode
	BS-300	15	8720663419538