



CEWELD NiCrMo 686 CPT Tig

TYPE Nickel-Chromium-Molybdenum based alloy for Tig 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
0.006	0.03	0.25	0.004	0.001	20	58	16	0.06	0.27	4	0.002	0.3

PROPRIÉTÉS MÉCANIQUES

Heat Treatment	R _{P0.2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness
				RT	-196°C	
As Welded	420	760	40	100	80	HRc

ETUVAGE Not required

GAS ACC. EN ISO 14175 I1



CEWELD NiCrMo 686 CPT Tig

NICRMO 686 CPT TIG 1,6 X
1000MM

Packaging	KG/unit	EanCode
Tube	4,54	8720663419415

NICRMO 686 CPT TIG 2,0 X
1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663419422

NICRMO 686 CPT TIG 2,4
X1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663419439

NICRMO 686 CPT TIG 3,2 X
1000MM

Packaging	KG/unit	EanCode
Tube	4,54	8720663419446