

## 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 HCI

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, after sensitization, in highly

oxidizing environments.

PROPERTIES 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)

F-nr 43 FM 6 W.Nr. ~2.4606

SUITABLE FOR ENICrMo-14, E Ni 6686 NiCr21Mo16W4

2.4602, 2.4605, 2.4607, 2.4610, 2.4819, 2.4656, 1.4529, 1.4547, 1.4565

NiCr23Mo16, NICr23Mo16Al, 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, N06022, N06625, N08925, S31254

Duplex, Superduplex, super austenitic stainless steel, Nickel Alloys, N06059, N06022, Hastelloy

C276, Alloy C22, Inconel 622, 625, 686, Outokumpu 654 SMO,

APPROVALS No Approvals Found

WELDING POSITIONS

PA PB PC PD PE PF PG

TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) 
 C
 Si
 Mn
 P
 S
 Cr
 Ni
 Mo
 Ti
 Fe
 W
 Cu

 0.006
 0.03
 0.25
 0.004
 0.001
 20
 58
 16
 0.06
 0.27
 4
 0.002

ALL WELD MECHANICAL PROPERTIES

As Welded /		760		
Treatment	MPa	MPa	(%)	
Heat	R <sub>P0,2</sub>	Rm	A5	

REDRYING TEMPERATURE Not required

GAS ACCORDING EN 14175 I1



## CEWELD NiCrMo 686 CPT Tig



NICRMO 686 CPT TIG 1,6 X 1000MM	Type	KG/unit	EANCode	
	Tube	4,54	8720663419415	
NICRMO 686 CPT TIG 2,0 X	Type	KG/unit	EANCode	
1000MM	Tube	5	8720663419422	_
NICRMO 686 CPT TIG 2,4	Type	KG/unit	EANCode	
X1000MM	Tube	5	8720663419439	
NICRMO 686 CPT TIG 3,2 X 1000MM	Type	KG/unit	EANCode	
	Tube	4,54	8720663419446	