



Alloy 686

1. Brief introduction:

Alloy686 is an alloy that improves the chromium content in C276 alloy by reducing iron content.

This alloy has both the ability to resist reducing media of 276 and the ability to resist oxidizing media of C22.

In addition, low carbon, low silicon, and low iron make the alloy highly thermally stable and reduce the precipitation of harmful phases, thereby giving the alloy excellent resistance to sensitization and greatly improving its resistance to intergranular corrosion.

2. Main specifications:

Alloy	UNS	W.Nr	EN DESIGNATION
686	No6686	2.4606	NiCr21Mo16W

3. Chemical composition under ASTM B163 standard:

Grade	chemical composition,%										
	Ni	Cr	Mo	W	Fe	Mn	C	Si	Ti	S	P
UNS No6686	remainder	19.0-23.0	15.0-17.0	3.0-4.4	≤5.0	≤0.75	≤0.01	≤0.08	0.02-0.25	≤0.02	≤0.04

Ni element shall be determined arithmetically by difference.

Remarks: If require adjustments for some chemical compositions, pls consult with us.



4. Main product types:

wire,rod,forging,bar,strip,sheet/plate.

5. Main produce standards:

Wire,Rod, Bar,Forging	Pipe/Tube	Plate/Sheet/Strip
ASTM/ASME B564	ASTM/ASME B163	
ASTM/ASME B574	ASTM/ASME B619	ASTM/ASME B575
DIN17744	ASTM/ASME B622	

6. Alloy686 Source URL:

<https://www.hitealloy.com/product/alloy-686.html>