

This page is mainly introduced the **Ti-3Al-8V-6Cr-4Mo-4Zr Datasheet**, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of **Ti-3Al-8V-6Cr-4Mo-4Zr**, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Ti Alloy Ti-3Al-8V-6Cr-4Mo-4Zr

Ti-3Al-8V-6Cr-4Mo-4Zr Standard Number:

ITEM	Standard Number	Descriptions
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Ti-3Al-8V-6Cr-4Mo-4Zr Chemical composition (mass fraction) (wt.%)

Chemical				Min.(%)			Max.(%)		
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

SAE AMS 4958D (2012)

Titanium Alloy Bars and Rods 3Al - 8V - 6Cr - 4Mo - 4Zr Consumable
Electrode Melted Solution Heat Treated and Centerless Ground

Al	3.0000	4.0000
C	0.0500	
Cr	5.5000	6.5000
Fe	0.3000	
H	0.0300	
Mo	3.5000	4.5000
N	0.0300	
O	0.1200	
Others each		0.1500
Others total		0.4000
Ti (*)		
V	7.5000	8.5000

Y 0.0050
Zr 3.5000 4.5000

SAE AMS 4957E (2011)

Titanium Alloy, Round Bar and Wire 3Al - 8V - 6Cr - 4Mo - 4Zr
Consumable Electrode Melted Solution Heat Treated and Cold Drawn

SAE AMS T 9046B (2002)

Titanium and Titanium Alloy, Sheet, Strip, and Plate

SAE AMS 4939B (2013)

Titanium Alloy Sheet, Strip, and Plate 3Al - 8V - 6Cr - 4Mo - 4Zr Solution
Heat Treated

SAE AMS 6920B (2011)

Titanium Alloy Bars, Forgings and Forging Stock 3Al - 8V - 6Cr - 4Mo -
4Zr Solution Heat Treated

SAE AMS 6921A (2011)

Titanium Alloy Bars, Forgings and Forging Stock 3Al - 8V - 6Cr - 4Mo -
4Zr Solution Heat Treated and Aged

SAE AMS T 9047A (2003)

Titanium and Titanium Alloy, Bars (Rolled or Forged) and Reforging
Stock, Aircraft Quality

Ti-3Al-8V-6Cr-4Mo-4Zr Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	123-321	-
HRC	30	-

Ti-3Al-8V-6Cr-4Mo-4Zr Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	235-268	-
HRC	30	-

Ti-3Al-8V-6Cr-4Mo-4Zr Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

Ti-3Al-8V-6Cr-4Mo-4Zr Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

We can produce Ti Alloy the specifications follows: