

This page is mainly introduced the **Ti-3Al-8V-6Cr-4Mo-4Zr Ti Alloy 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 Ti Alloy**, 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 Alloy

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

ITEM	Standard Number	Descriptions
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Ti-3Al-8V-6Cr-4Mo-4Zr Ti Alloy 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

<b>Category</b>	Titanium Alloy
<b>Class</b>	Wrought
<b>Type</b>	Beta alloy
Composition	
Element	Weight %
Al	3
V	8
Cr	6

Mo	4
Zr	4

Mechanical Properties			
Properties		Conditions	
		T (°C)	Treatment
Density ( $\times 1000$ kg/m <sup>3</sup> )	4.82	25	
Poisson's Ratio	0.33	25	
Elastic Modulus (GPa)	105.5	25	
Tensile Strength (Mpa)	883	25	annealed more
Yield Strength (Mpa)	834		
Elongation (%)	15		
Reduction in Area (%)			
Hardness (HRC)	42	25	solution+ age
Impact Strength (J) (Charpy)	10	25	solution+ age

Thermal Properties	
Properties	Conditions

		T (°C)	Treatment
<b>Thermal Expansion</b> (10 <sup>-6</sup> /°C)	9.68	20-425	

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Ti-3Al-8V-6Cr-4Mo-4Zr Ti Alloy Physical Properties		
Tensile strength	115-234	$\sigma_b$ /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
$\psi$	-	$\psi \geq$ (%)
Akv	-	Akv $\geq$ /J
HBS	123-321	-
HRC	30	-

Ti-3Al-8V-6Cr-4Mo-4Zr Ti Alloy Mechanical Properties		
Tensile strength	231-231	$\sigma_b$ /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
$\psi$	-	$\psi \geq$ (%)
Akv	-	Akv $\geq$ /J
HBS	235-268	-
HRC	30	-

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

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

### Ti-3Al-8V-6Cr-4Mo-4Zr Ti Alloy 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:**