

Ti-6Al-4V is a kind of typical  $\alpha + \beta$  titanium alloy, which is of medium/high strength, excellent fracture toughness, fatigue performance and good processing performance. Ti-6Al-4V alloy has most widely application scope at present, which are mainly used in manufacture of aircraft structure, engine blade and fastener ect. WST can supply a wide range size of Ti-6Al-4V finished products with dia.1.6mm to dia.400mm in form of billets, forgings, slabs, bars, rods and wires according to various industry specifications. Currently Ti-6Al-4V alloy is one of WST's typical products.

Table 1

Chemical Composition

Ti	Al	V	Fe	C	N	H	O	Y	Si	Total
										Each Total
balance	5.5~6.5	3.5~4.5	≤0.30	≤0.05	≤0.03	≤0.0125	≤0.20	≤0.005	≤0.10	≤0.1 ≤0.30

Table 2

Mechanical Properties

Diameter	Direction	$\sigma_b$ (MPa)	$\sigma_{0.2}$ (MPa)	A (%)	Z (%)
≤50.8	L	≥931	≥862	≥10	≥25
	LT			≥10	≥20
>50.8~101.6	L			≥10	≥25
	LT	≥896	≥827	≥10	≥20
	ST			≥10	≥15
>101.6~152.4	L			≥10	≥20
	LT	≥896	≥827	≥10	≥20
	ST			≥8	≥15

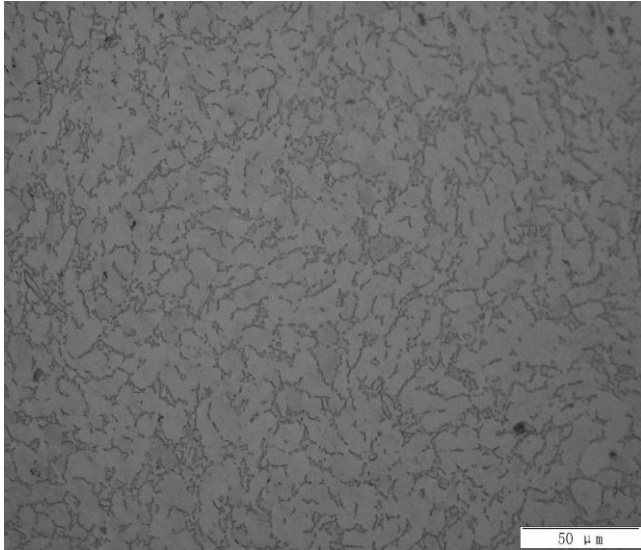


Fig.1 Micrograph of dia.70mm bars (200X)

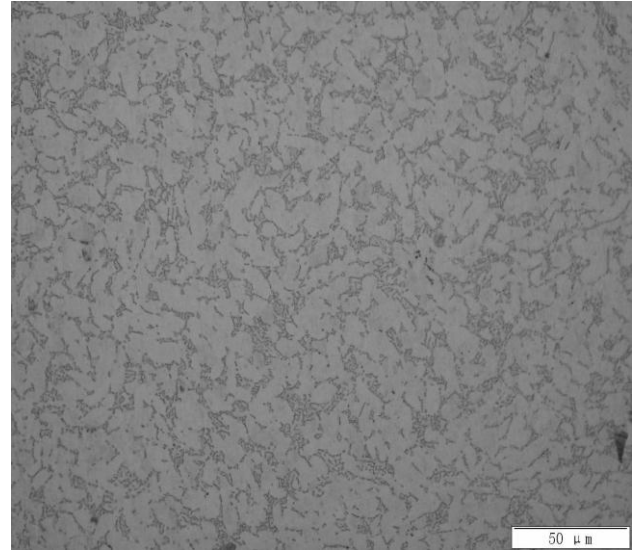


Fig.2 Micrograph of dia.30mm bars (200X)

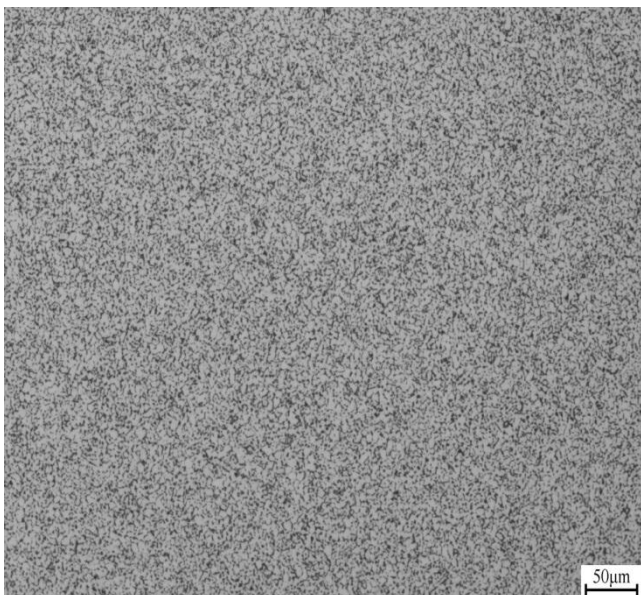


Fig.3 Micrograph of dia.4mm wires (200X)

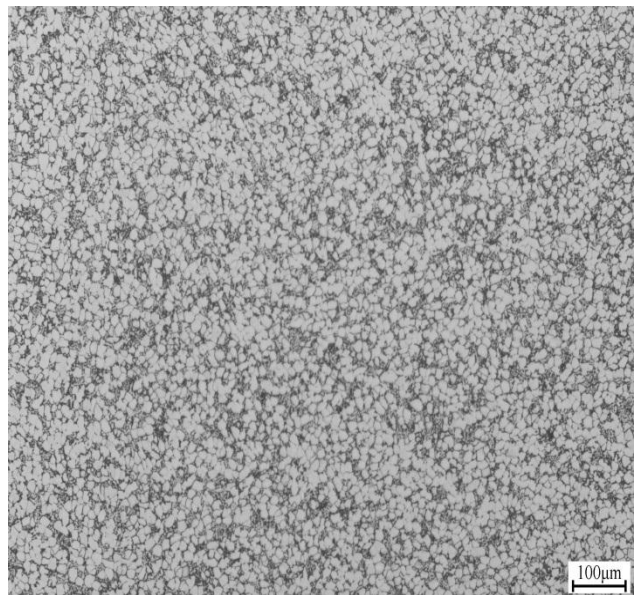


Fig.4 Micrograph of dia.115mm bars (100X)