



鈦合金 Ti-6Al-7Nb

相當規格 Grade

STC	UNS	EN / DIN
ET67	R56700	3.7164

主要成份 Chemical composition

Grade	Al	Nb	Ta	Fe	O	C	N	H	(wt%)
									Ti
ET67 (ISO5832)	5.50- 6.50	6.50- 7.50	Max. 0.5	Max. 0.25	Max. 0.20	Max. 0.08	Max. 0.05	Max. 0.009	balan ce

*熱加工後之氫含量重測值，符合上述氫成分

*After the peeling procedure, H content must confirm to the above composition.

產品特性 Characteristic

1. 良好成形性與切削性。

Good formability and cutting.

2. 退火材易於焊接。

Alloy can be easily welded in the annealed condition.

3. 合金表面氧化層具有良好的耐腐蝕與生物相容性。

Dense and stable passive layers that form on alloy surface possess good corrosion resistance and bio-compatibility.

一般用途 Application

1. 生醫：髖關節替代品／骨折固定板／髓間棒材、釘子／脊髓裝置／螺絲／線材。

Orthopaedics: hip replacement systems / fracture fixation plates / inter-medullary rods and nails / spinal devices / screws / wires.



符合規範 Specification

ASTM F1295、ISO 5832。

熱處理條件 Heat treatment

- 退火：704~732 °C / 持溫 1 小時 / 空冷。
Annealing: 704~732 °C / for one hour / air cooling.

供應範圍 Size range

- 圓棒：Φ25-50 mm。
Round bar: Φ25-50 mm.

機械性質 Mechanical properties

- 拉伸 Tensile

Size range (mm)	Tensile test (room temp., longitude)			
	Rm(KSI)	0.2%Rp(KSI)	A, 4D(%)	Z(%)
Up to 101.6	Min.130	Min.116	Min.10	Min. 25

- 金相組織 Microstructure

Spec.	Size Range (mm)	Level	Surface
ETTC2	25-50	A1-A9	No α layer