CP Grade 3

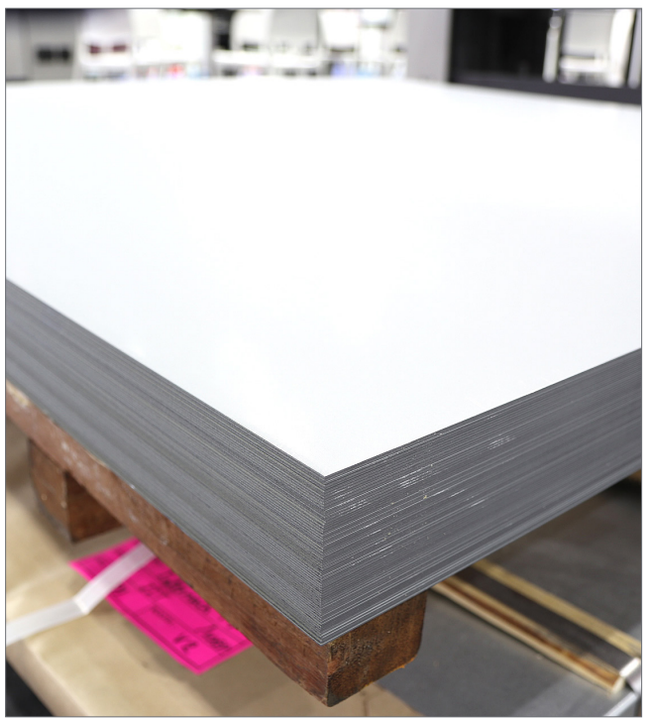
Smiths Advanced Metals

Higher Mechanical Strength

CP Grade 3 is a commercially pure titanium alloy offering greater strength.

CP Grade 3 offers higher mechanical strength with a typical yield strength of 462MPa.

This higher strength is superior when compared to commercially pure grades 1 and 2. The alloy offers excellent weldability with moderate ductility and excellent corrosion resistance, particularly in highly oxidising and mildly reducing environments. The unalloyed titanium also provides good impact characteristics at low temperatures. Smiths Advanced Metals stocks CP Grade 3 titanium alloy sheets in the annealed condition and in closer incremental sizes.



Grades / Specifications

- AMS4900
- ASTM B265
- DMS2442
- MSRR8608, DTD5023
- 3.7055
- T50

Benefits

- Very good resistance to corrosion
- Good formability
- Excellent weldability
- Greater mechanical strength

Key Applications

- General engineering
- Oil and Gas components
- Medical parts
- Chemical plants

*Chemical Composition (weight %)

	Ti	C	Fe	N	O	H	Others (each)	Others (total)	
min.	Bal								
max.	Bal	0.08	0.30	0.05	0.30	0.015	0.10	0.30	

* As per AMS 4900

*Mechanical Properties (minimum unless stated)

	Minimum
UTS, MPa	448
0.2% PS, MPa	379 - 552
Elongation on 2 in., %	18

* Properties as per AMS 4900

Versatility

CP Grade 3 offers low density with a good strength to weight ratio.

Combining these attributes with higher mechanical strength results in a highly versatile titanium alloy which finds widespread use in engineering applications. From medical impants and instruments to offshire and petrochemcial applications. CP Grade 3 provides a range of performance charateristics which are attractive.

Stratton Business Park,
London Road, Biggleswade,
Bedfordshire SG18 8QB
Tel: +44 (0) 1767 604710