



# DATA SHEET No 19

## Titanium Alloys

(April 2006)

ASTM Grade	Alloy Composition	Min. UTS MPa	Min. YS MPa	Mod. Of Elasticity, Gpa	UNS No.	Sour Service Approved*
1	Unalloyed Ti	240	170	103	R50250	
2	Unalloyed Ti	345	275	103	R50400	Yes
3	Unalloyed Ti	450	380	103	R50550	
4	Unalloyed Ti	550	480	105	R50700	
5	Ti-6Al-4V	895	825	114	R56400	
6	Ti-5Al-2.5Sn	825	795	110	R54250	
7	Ti-0.15Pd	345	275	103	R52400	
9	Ti-3Al-2.5V	620	485	107	R56320	
10	Ti-11.5Mo-6Zr-4.5Sn	690	620	103	R58030	
11	Ti-0.15Pd	240	170	103	R52250	
12	Ti-0.3-Mo-0.8Ni	485	345	103	R53400	Yes
13	Ti-0.5Ni-0.05Ru	280	170	103	R53413	
14	Ti-0.5Ni-0.05Ru	410	280	103	R53414	
15	Ti-0.5Ni-0.05Ru	480	380	103	R53415	
16	Ti-0.05Pd	345	275	103	R52402	
17	Ti-0.05Pd	240	170	103	R52252	
18	Ti-3Al-2.5V-0.05Pd	620	480	105	R56322	
19	Ti-3Al-8V-6Cr-4Zr-4Mo (Beta C) aged	795 1170	760 1105	93-96 102	R58640	Yes
20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd aged	795 1170	760 1105	93-96 102	R58645	
21	Ti-15Mo-2.7Nb-3Al-0.25Si (TIMETAL ®21S) aged	790 1170	760 1100	103 103	R58210	
23	Ti-6Al-4V ELI	825	760	114	R56407	
24	Ti-6Al-4V-0.05Pd	900	830	113	R56405	
25	Ti-6Al-4V-0.5Ni-0.05Pd	900	830	113	R56403	Yes
26	Ti-0.1Ru (Grade 2 interstitials)	345	275	103	R52404	
27	Ti-0.1Ru (Grade 1 interstitials)	240	170	103	R52254	
28	Ti-3Al-2.5V-0.1Ru	620	485	107	R56323	Yes
29	Ti-6Al-4V-0.1Ru	825	760	114	R56404	Yes
30	Ti-0.3Co-0.05Pd (Grade 2 interstitials)	345	275			
31	Ti-0.3Co-0.05Pd (Grade 3 interstitials)	450	380			
32	Ti-5Al-1Sn-1Zr-1V-0.8Mo (TIMETAL® 5111)	670	585	R55111		
33	Ti-0.4Ni-0.015Pd-0.025Ru-0.15Cr, O<0.25	450	275			
34	Ti-0.4Ni-0.015Pd-0.025Ru-0.15Cr, O<0.35	550	380			

\* According to NACE Standard MR0175-97

### FOR FURTHER INFORMATION

TIG, tel. +44 (0) 1709 722 463  
 Fax. +44 (0) 1709 724 999, enquiries@titaniuminfogroup.co.uk  
 www.titaniuminfogroup.com

*The data and other information contained in this Data sheet are derived from a variety of sources which the Titanium Information Group believes to be reliable. Because it is not possible to anticipate every use or operating condition, you are urged, if in doubt, to consult with the appropriate safety authorities or qualified personnel of the supplier company.*