ASTM SPECIFICATIONS

The following table is a guide to the alloys which are covered by form in the ASTM range of specifications. These tables include historic as well as current references. ALWAYS CHECK THAT YOU HAVE THE MOST RECENT ISSUE OF THE SPECIFICATION BEFORE PROCEEDING FURTHER

Specification number and product form	Grades covered within the specification	Alloy
B265 Sheet, strip, plate	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	3	CP Ti 0.35% max oxygen
	4	CP Ti 0.40% max oxygen
	5	Ti-6Al-4V
	6	Ti-5Al-2.5Sn
	7	Ti-0.15Pd 0.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
	13	Ti-0.5Ni-0.05Ru
	14	Ti-0.5Ni-0.05Ru
	15	Ti-0.5Ni-0.05Ru
	16	Ti-0.05Pd 0.25% max oxygen
	17	Ti-0.05Pd 0.18% max oxygen
	18	Ti-3Al-2.5V-0.05Pd
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd
	21	Ti-15Mo-3Nb-3Al-0.2Si
	23	Ti-6Al-4V ELI
	24	Ti-6Al-4V-0.05Pd
	25	Ti-6Al-4V-0.5Ni-0.05Pd
	26	Ti-0.1Ru 0.25% max oxygen
	27	Ti-0.1Ru 0.18% max oxygen
	28	Ti-3Al-2.5V-0.1Ru
	29	Ti-6Al-4V-0.1Ru (ELI)

	30	Ti-0.3Co-.05Pd 0.25% max oxygen
	31	Ti-0.3Co-.05Pd 0.35% max oxygen
	32	?
B299 Titanium Sponge	Five grades are listed	Identification by analysis and Brinell Hardness
B337 ?94 Seamless and welded pipe. NOTE:- ASTM B861 Now replaces this specification relating to seamless pipe and ASTM B 862 replaces this specification relating to welded pipe	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	3	CP Ti 0.35% max oxygen
	7	Ti-0.15Pd.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
B338 Seamless and welded tube	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	3	CP Ti 0.35% max oxygen
	7	Ti-0.15Pd.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
	13	Ti-0.5Ni-0.05Ru
	14	Ti-0.5Ni-0.05Ru
	15	Ti-0.5Ni-0.05Ru
	16	Ti-0.05Pd 0.25% max oxygen
	17	Ti-0.05Pd 0.18% max oxygen
	18	Ti-3Al-2.5V-0.05Pd
	26	Ti-0.1Ru 0.25% max oxygen
	27	Ti-0.1Ru 0.18% max oxygen
	28	Ti-3Al-2.5V-0.1Ru
	30	Ti-0.3Co-.05Pd 0.25% max oxygen
	31	Ti-0.3Co-.05Pd 0.35% max oxygen
B348	1	CP Ti 0.18% max oxygen

Bars and billets	2	CP Ti 0.25% max oxygen
	3	CP Ti 0.35% max oxygen
	4	CP Ti 0.40% max oxygen
	5	Ti-6Al-4V
	6	Ti-5Al-2.5Sn
	7	Ti-0.15Pd 0.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
	13	Ti-0.5Ni-0.05Ru
	14	Ti-0.5Ni-0.05Ru
	15	Ti-0.5Ni-0.05Ru
	16	Ti-0.05Pd 0.25% max oxygen
	17	Ti-0.05Pd 0.18% max oxygen
	18	Ti-3Al-2.5V-0.05Pd
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd
	21	Ti-15Mo-3Nb-3Al-0.2Si
	23	Ti-6Al-4V ELI
	24	Ti-6Al-4V-0.05Pd
	25	Ti-6Al-4V-0.5Ni-0.05Pd
	30	Ti-0.3Co-.05Pd 0.25% max oxygen
	31	Ti-0.3Co-.05Pd 0.35% max oxygen
	32	Ti-5Al-1Sn-1V-0.8Mo-0.1Si
B363 Seamless and Welded Fittings	WPT 1	CP Ti 0.18% max oxygen
	WPT 2	CP Ti 0.25% max oxygen
	WPT 3	CP Ti 0.35% max oxygen
	WPT 7	Ti-0.15Pd 0.25% max oxygen
	WPT 9	Ti-3Al-2.5V
	WPT 11	Ti-0.15Pd 0.18% max oxygen
	WPT 12	Ti-0.8Ni-0.3Mo
	WPT 13	Ti-0.5Ni-0.05Ru
	WPT 14	Ti-0.5Ni-0.05Ru
	WPT 15	Ti-0.5Ni-0.05Ru

	WPT 16	Ti-0.05Pd 0.25% max oxygen
	WPT 17	Ti-0.05Pd 0.18% max oxygen
	WPT 18	Ti-3Al-2.5V-0.05Pd
	WPT 19	Ti-3Al-8V-6Cr-4Zr-4Mo
	WPT 20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd
	WPT 21	Ti-15Mo-3Nb-3Al-0.2Si
	WPT 23	Ti-6Al-4V ELI
	WPT 24	Ti-6Al-4V-0.05Pd
	WPT 25	Ti-6Al-4V-0.5Ni-0.05Pd
B367 Castings Casting grades do not correspond to the wrought grades suggested by the grade reference	C-2	CP Ti 0.2% Fe max 0.4% Oxygen max
	C-3	CP Ti 0.25% Fe max 0.4% Oxygen max
	C-5	Ti-6Al-4V
	Ti-Pd7B	Ti-0.12Pd 0.2% Fe max 0.4% Oxygen max
	Ti-Pd8A	Ti-0.12Pd 0.25% Fe max 0.4% Oxygen max
	Ti-Pd16	Ti-0.05Pd 0.3% Fe max 0.18% Oxygen max
	Ti-Pd16	Ti-0.05Pd 0.2% Fe max 0.25% Oxygen max
	Ti-Pd18	Ti-3Al-2.5V-0.05Pd
B381 Forgings	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	3	CP Ti 0.35% max oxygen
	4	CP Ti 0.40% max oxygen
	5	Ti-6Al-4V
	6	Ti-5Al-2.5Sn
	7	Ti-0.15Pd 0.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
	13	Ti-0.5Ni-0.05Ru
	14	Ti-0.5Ni-0.05Ru
	15	Ti-0.5Ni-0.05Ru

	16	Ti-0.05Pd 0.25% max oxygen
	17	Ti-0.05Pd 0.18% max oxygen
	18	Ti-3Al-2.5V-0.05Pd
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd
	21	Ti-15Mo-3Nb-3Al-0.2Si
	23	Ti-6Al-4V ELI
	24	Ti-6Al-4V-0.05Pd
	25	Ti-6Al-4V-0.5Ni-0.05Pd
	28	Ti-3Al-2.5V-0.1Ru
	29	Ti-6Al-4V-0.1Ru (ELI)
	32	Ti-5Al-1Sn-1V-0.8Mo-0.1Si
B861 Seamless Pipe	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	3	CP Ti 0.35% max oxygen
	5	Ti-6Al-4V
	6	Ti-5Al-2.5Sn
	7	Ti-0.15Pd 0.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
	13	Ti-0.5Ni-0.05Ru
	14	Ti-0.5Ni-0.05Ru
	15	Ti-0.5Ni-0.05Ru
	16	Ti-0.05Pd 0.25% max oxygen
	17	Ti-0.05Pd 0.18% max oxygen
	18	Ti-3Al-2.5V-0.05Pd
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd
	21	Ti-15Mo-3Nb-3Al-0.2Si
	23	Ti-6Al-4V ELI
	24	Ti-6Al-4V-0.05Pd
	25	Ti-6Al-4V-0.5Ni-0.05Pd
B862 Welded Pipe	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen

	3	CP Ti 0.35% max oxygen
	5	Ti-6Al-4V
	6	Ti-5Al-2.5Sn
	7	Ti-0.15Pd 0.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
	13	Ti-0.5Ni-0.05Ru
	14	Ti-0.5Ni-0.05Ru
	15	Ti-0.5Ni-0.05Ru
	16	Ti-0.05Pd 0.25% max oxygen
	17	Ti-0.05Pd 0.18% max oxygen
	18	Ti-3Al-2.5V-0.05Pd
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd
	21	Ti-15Mo-3Nb-3Al-0.2Si
	23	Ti-6Al-4V ELI
	24	Ti-6Al-4V-0.05Pd
	25	Ti-6Al-4V-0.5Ni-0.05Pd
	26	Ti-0.1Ru 0.25% max oxygen
	27	Ti-0.1Ru 0.18% max oxygen
	28	Ti-3Al-2.5V-0.1Ru
	29	Ti-6Al-4V-0.1Ru (ELI)
B863 Wire	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	3	CP Ti 0.35% max oxygen
	5	Ti-6Al-4V
	6	Ti-5Al-2.5Sn
	7	Ti-0.15Pd 0.25% max oxygen
	9	Ti-3Al-2.5V
	11	Ti-0.15Pd 0.18% max oxygen
	12	Ti-0.8Ni-0.3Mo
	13	Ti-0.5Ni-0.05Ru
	14	Ti-0.5Ni-0.05Ru
	15	Ti-0.5Ni-0.05Ru

	16	Ti-0.05Pd 0.25% max oxygen
	17	Ti-0.05Pd 0.18% max oxygen
	18	Ti-3Al-2.5V-0.05Pd
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	20	Ti-3Al-8V-6Cr-4Zr-4Mo-0.05Pd
	21	Ti-15Mo-3Nb-3Al-0.2Si
	23	Ti-6Al-4V ELI
	24	Ti-6Al-4V-0.05Pd
	25	Ti-6Al-4V-0.5Ni-0.05Pd
	26	Ti-0.1Ru 0.25% max oxygen
	27	Ti-0.1Ru 0.18% max oxygen
	28	Ti-3Al-2.5V-0.1Ru
	29	Ti-6Al-4V-0.1Ru (ELI)
	32	Ti-5Al-1Sn-1V-0.8Mo-0.1Si
B600	Procedural	Descaling and Cleaning of Titanium
E 8 - 91	Procedural	Methods for Tensile Testing
E10	Procedural	Brinell harness Testing (for Ti sponge)
E16	Procedural	Method for Free Bend Testing of Welds
E120	Procedural	Methods for Chemical analysis
E165	Procedural	Liquid Penetrant Examination
E190	Procedural	Method for Guided Bend Testing of Welds
E-213	Procedural	Ultrasonic examination of pipe and tube
E290	Procedural	Method for Semi- Guided Bend Testing
E-426	Procedural	Eddy ?Current examination of pipe and tube
E 1409	Procedural	Determination of Oxygen
E1417	Procedural	Liquid Penetrant Examination
E 1447	Procedural	Determination of Hydrogen
F 67	CP Ti	Four grades for surgical implants
F 136	Ti-6Al-4VELI	Wrought products for surgical

		implants
F 467 Nuts for general use F467MDetails metric nuts	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	4	CP Ti 0.40% max oxygen
	5	Ti-6Al-4V
	7	Ti-0.15Pd 0.25% max oxygen
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	23	Ti-6Al-4V ELI
	32	Ti-5Al-1Sn-1V-0.8Mo-0.1Si
F468 Bolts, Hex Cap screws and Studs for general use F468M = Metric standard	1	CP Ti 0.18% max oxygen
	2	CP Ti 0.25% max oxygen
	4	CP Ti 0.40% max oxygen
	5	Ti-6Al-4V
	7	Ti-0.15Pd 0.25% max oxygen
	19	Ti-3Al-8V-6Cr-4Zr-4Mo
	23	Ti-6Al-4V ELI
	32	Ti-5Al-1Sn-1V-0.8Mo-0.1Si