

TITANIUM AND TITANIUM ALLOYS Zirkonium

Material	Material-no.	Purpose
PURE TITANIUM		
Coralloy CP Ti-2 Aeralloy CP Ti-2 Pure titanium grade 2	3.7035 3.7034	Most used pure titanium variant. Good availability. Balanced strength and ductility.
Coralloy CP Ti-4 Aeralloy CP Ti-4 Pure titanium grade 4	3.7065 3.7064	Pure titanium grade 4 is characterised by a high mechanical strength and good weldability with good corrosion resistance in a neutral or oxidising atmosphere including chloride.
·		By the addition of approx. 0.2 percent per weight of palladium (Pd) to the pure titanium variants Coralloy CP Ti-1/Ti-2/Ti-3, their corrosion resistance in reducing media is enhanced. The mechanical properties remain unaffected.
Coralloy CP Ti-2-Pd Pure titanium Pd alloyed grade 7	3.7235	Pd alloyed pure titanium variant, grade 2.
NEAR-ALPHA-TITAN		
Coralloy CP Ti-12 Pure titanium grade 12; near- α	-	Near-α-material, excellent weldability and good mechanical/technological values. Excellent crevice corrosion resistance as well as very good stability in oxidising media or in a slightly reducing atmosphere i.e., particularly chlorides.
Aeralloy Ti-Cu 2 Pure titanium, Cu alloyed	3.7124	Heat treatable and weldable titanium variant. High creep resistance and good corrosion resistance.
Aeralloy Ti-6-2-4-2 Titanium alloy, near-α Ti-6Al-2Sn-4Zr-2Mo	3.7144	High temperature alloy for applications up to approx. 480°C, also suitable for turbo chargers in engines, e.g., washers, blades, rotors, gaskets. May also be used as valves for automobile engines.
Aeralloy Ti-6-2-4-2 S Titanium alloy, near-α Ti-6Al-2Sn-4Zr-2Mo addition of 0.08 Si	-	The Si alloyed version offers even better creep resistance.
Aeralloy Ti-8-1-1 Titanium alloy, near-α Ti-8Al-1Mo-1V	-	High temperature alloy with excellent creep resistance for applications up to approx. 480°C, for engine compressors, e.g., discs or blades.
Aeralloy Ti-834 Titanium alloy, near-α Ti-5.8Al-4Sn-3.5Zr-0.7Nb-0.5Mo-0.35Si-0.06C	-	High temperature alloy for applications up to approx. 550 °C with peaks of 600 °C, enhanced strength and creep resistance.
ALPHA-BETA-TITANIUM		
Coralloy Ti-6-4 Aeralloy Ti-6-4 Titanium alloy, α-β Ti-6AI-4V	3.7165 3.7164	Most used titanium material (alloyed). Applied in chemistry, for centrifuges, in motorsport, aircraft construction, aerospace, in turbines (compressors) and engines (turbo chargers).
Coralloy Ti-6-6-2 Aeralloy Ti-6-6-2 Titanium alloy, α - β Ti-6AI-6V-2Sn	3.7175 3.7174	High performance variant with even better mechanical values than Aeralloy Ti-6-4
Coralloy Ti-4-4-2 Aeralloy Ti-4-4-2 Titanium alloy, α - β Ti-4Al-4Mo-2Sn	3.7185 3.7184	High performance variant for structural aircraft components, also used for engines up to approx. 350°C and peaks of 400°C.
NEAR-BETA-TITANIUM		
Coralloy Ti-10-2-3 Aeralloy Ti-10-2-3 Titanium alloy, near-β Ti-10V-2Fe-3Al	-	Excellently suited for the near-net-shape forming technology. excellent toughness/strength ratio.
ZIRKONIUM		
Coralloy Zirkonium 702 Coralloy Zirkonium 704		Highly resistant alloys for applications in highly aggressive organic media (e.g., acetic acid); also resistant to oxidising and reducing aqueous media. These two alloys are used outside of nuclear applications; Coralloy Zirkonium 704 has somewhat higher mechanical values.