Titanium Grade 5 (Ti 6Al-4V), commonly called “6-4,” is the most common and widely used alloy grade due to its relatively low cost and good availability. It has a UTS of 130,000 psi [895 MPa] minimum, good weldability, and can be heat treated to a higher strength or toughness. Grade 5 is used in aircraft components such as landing gear, wing spars, and compressor blades. Its corrosion resistance is generally comparable to Grade 2 and it is often used in corrosion service where higher strength is required, particularly in shafts, high strength bolting, and keys.

The weldability of Titanium is excellent for most grades but extra care have to be taken for the gas protection on the weld pool, the weld pool needs to stay protected until it cooled down to at least 470ºC. Often Titanium is welded in a gas chamber with pure argon gas to make sure that the weld pool gets proper protection.

We stock all Titanium grades in Mig and Tig wires which can be found in our database.