

High-Temperature Alloy

High temperature alloys are essential to the construction of [engine components](#): only a material with the strength of [cobalt](#) and the temperature resistance of [niobium](#) could withstand the tremendous amount of heat and pressure that exists within the combustion chamber of a fusion engine. However, the rarity of [niobium](#) and the complex fabrication methods employed mean that high temperature alloys are relatively expensive - but without them, modern space travel would be impossible.