TECHNICAL DATA

TRIBALOY T800

CHARACTERISTICS

TRIBALOY COBALT-BASED ALLOYS consist of a hard, intermetallic (Laves) phase dispersed in a softer matrix of eutectic or solid solution. They exhibit outstanding resistance to wear and galling, high corrosion resistance, and are particularly suitable where lubrication is a problem. Wear resistance of Tribaloy alloys is highly dependent on the volume percentage of the Laves phase.

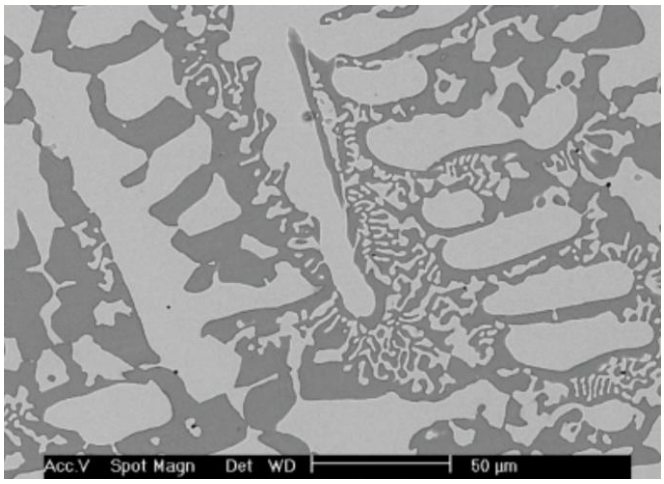
TRIBALOY T-800 alloy contains hard intermetallic phases of Mo and Si which give the alloy excellent wear properties over a wide temperature range. T-800 was designed to resist high temperature wear and abrasion and has exceptional oxidation and corrosion resistance due to its high chromium content. T-800 is harder and more resistant to abrasive wear, corrosion, and oxidation than TRIBALOY T-400. T-800 exhibits outstanding resistance to galling and is particularly suitable where lubrication is a problem.

TRIBALOY T-800 has been used in a wide range of applications, most notably as a wear surface in aircraft engines. Other applications include galvanizing roll bushings, cams, retainer rings, diesel piston rings, mechanical seals, bearing seats, valve trim, and pump components. Areas of application where Tribaloy alloys are used:

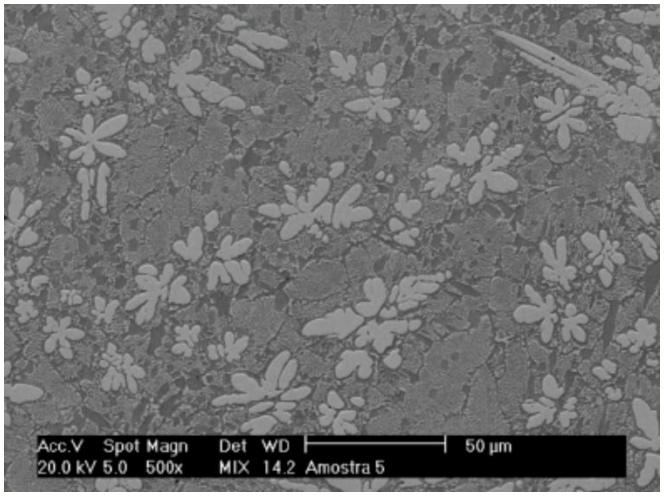
- Metal-to-metal wear
- Surfaces that cannot be lubricated (e.g. high temperatures)
- Lubrication starvation
- Fluid lubricants are of low viscosity
- Both wear and corrosion are factors

NOMINAL COMPOSITION (MASS %) AND PHYSICAL PROPERTIES

Co	Cr	Mo	C	Si	Others	Hardness (HRC)	Density	Melting Range
Base	17.5	28.5	<0.08	3.4	Ni, Fe	54-62 HRC	8.6 g/cm³ 0.312 lb/in³	1288-1352 °C 2350-2465 °F



Crosssection of T-800 Casting 500x



Crosssection of T-800 as Deposited 500x

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