



Industry Uses:



- Aerospace
- Manufacturing
- Oil & Gas
- Power Generation
- Automotive

Industry Specifications:

- ASM 2447-7

Coating Thickness:

0.050" (2mm) maximum

Coating Finish:

As sprayed: 150 μ - in AA

Ground: Less than 10 μ - in AA

Composition Weight %

83% Tungsten Carbide;

17% Cobalt

Bond Strength:

10,000 PSI (epoxy failure at

0.015" coating thickness)

Hardness:

Superficial: 91 R_{15N}

Macro: 64 R_c

Micro: 1200 DPH₃₀₀

Microstructure:

Porosity: less than 1%

Oxides: less than 3%

TMTC17 Tungsten Carbide: 17% Cobalt

TMTC17 is Techmetals' Tungsten Carbide (17% Cobalt) thermal spray coating used to help protect critical parts from harsh operational environments. The hard, dense coating helps parts prevent abrasion and impingement, while also reducing sliding and fretting wear. This rugged solution is a natural fit for applications such as airplane blades, takeoff gear and engine parts – as well as oil field apparatus, brick molds, draft fans and many others. TMTC17 is often used as a hard chrome replacement.

Benefits of TMTC17 Tungsten Carbide (17% Cobalt):

- Hard, dense coating with increased sliding wear resistance
- Improves wear from impingement, fretting and abrasion on critical parts
- Chrome plating replacement
- Engineered to provide a superior balance of hardness, fracture toughness, and wear

