



AlTiN: Aluminium Titanium Nitride

Aluminium Titanium Nitride (AlTiN) is a high performance coating with high thermal and oxidation resistance. AlTiN is ideal for high speed and high temperature applications. The coating has high toughness and stability, with improved ductility compared to that of TiN coatings.

Properties

- 3 to 4 microns thick
- friction coefficient against steel 0.4
- hardness 2,200 to 2,600 VHN
- colour is dependant upon composition, either blue/grey or purple/black
- maximum operating temperature 900°C

Coating deposition capabilities

- one system dedicated to AlTiN
- coating chamber capacity 450mm diameter, 600mm high
- maximum temperature reached during deposition: 300°C
- AlTiN, also known as TiAlN, is available with standard and increased aluminium levels.

Machining applications

- dry machining
- high speed machining
- high temperature machining

Suitable for use with ferrous materials, abrasive materials, stainless steels, aluminium alloys, nickel alloys and titanium alloys.

Applications

- carbide inserts and tooling
- injection moulding tools
- drilling, tapping and non continuous cutting applications

