

## TiN (Titanium Nitride)

TiN was the first PVD wear resistant film coating introduced at Surface Technology Coatings, using the world's leading low voltage electron beam technology by Balzers of Switzerland. TiN is the standard general purpose coating for protecting a wide variety of tools and parts from wear. TiN is a good choice for the machining of iron based materials, die casting and plastic mould tooling.

TiN is also a good coating for wear part applications demanding resistance to abrasive and adhesive wear. TiN is also an attractive gold colour. LVEB TiN is extremely smooth.

### Applications and Benefits

- General purpose use
- 3 to 8 times longer tool life
- Wide range of materials
- Higher tool speeds and feeds than uncoated tools

### Improved performance with

- Wide range of cutting tools in both HSS and Carbide
- Plastic moulds and moulding machine parts
- Slitting knives for the plastic and paper industries
- Wear parts
- Medical and dental instruments
- Forming tools

Colour	Gold - Yellow
Coating Thickness	1- 3 $\mu\text{m}$
Microhardness	2300 HV
Thermal Stability	up to 600°C
Coeff. Friction vs Steel	0.4

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Surface Technology Coatings is a division of Sutton Tools

**SURFACE  
TECHNOLOGY  
COATINGS**

Innovation Through Technology

Titanium Nitride

# innovation through technology



**By heavily investing in R&D, Surface Technology Coatings is combining the latest technology and Australian ingenuity, to provide world class capabilities for your products. Together we will support Australian manufacturing at a global level.**

Surface Technology Coatings and its parent company Sutton Tools Pty Ltd are a key financial partner in the Defence Materials Technology Centre (DMTC Ltd.), based in Victoria. DMTC Ltd. represents a major partnership between Commonwealth and State Governments, the research sector and private industry, struck to develop and deliver advanced materials and manufacturing technology through industry led research programs that provide enhanced capability to Australian Defence activities. DMTC has installed the Innova Coating System at Surface Technology Coatings in order to provide a unique and worlds-best-practice underpinning of activities to achieve the Centre's vision over the next seven years, based on Surface Technology Coatings' proven track record of market leading products and processes.

## Supporting Australian Manufacturing Together

