

Futura Nano

TiAlN (Titanium Aluminium Nitride)

Futura Nano (TiAlN), produced in the INNOVA, is a great all round coating for both HSS and carbide tools, especially in applications where there is a high thermal load. TiAlN has a nanolayered structure which was engineered to give an optimum balance between hardness and internal stress. High internal compressive stresses help to reduce the propagation of cracks through a coating therefore delaying the onset of failure. TiAlN also has improved sliding properties.

Applications and Benefits

- Abrasive materials - cast iron and heat treated steel
- Difficult to machine materials, such as stainless steel
- Higher speeds and feeds
- Reduces or eliminates use of coolants

Improved Performance with

- Higher speed and feed machining
- Dry or MQL machining
- Machining of harder materials

<u>Colour</u>	Violet - Grey
<u>Coating Thickness</u>	4 μm
<u>Microhardness</u>	3300HV
<u>Thermal Stability</u>	up to 900°C
<u>Coeff. Friction vs Steel</u>	0.3 - 0.35

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Surface Technology Coatings is a division of Sutton Tools

**SURFACE
TECHNOLOGY
COATINGS**

Innovation Through Technology

Futura

Titanium Aluminium 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

