

Aldura

TiAlN + AlCrXN

(Aluminium Chromium Nitride based)

Aldura (TiAlN + AlCrXN), produced in the INNOVA, is a bi-layered coating. Aldura combines the excellent adhesion, thermal barrier and strength properties of TiAlN, with the superior hot hardness, oxidation resistance and thermal barrier properties of an AlCrN based, nanocrystalline top coating. The top coating dramatically limits the possibility of oxidizing the TiAlN coating and therefore increases the maximum service temperature of this combined coating well beyond TiAlN alone. Consequently Aldura is the next generation coating for difficult to machine and hardened materials in both roughing and finishing applications.

Due to its high deposition temperature Aldura is not suitable for HSS tools.

Applications and Benefits

- Hard materials eg moulds & dies
- Outstanding in difficult to machine materials, Ti alloys, Inconel
- High speeds and feeds
- Carbide tools

Improved Performance with

- High speed machining
- Dry or MQL machining
- Machining of hardened steels (>60HRC)

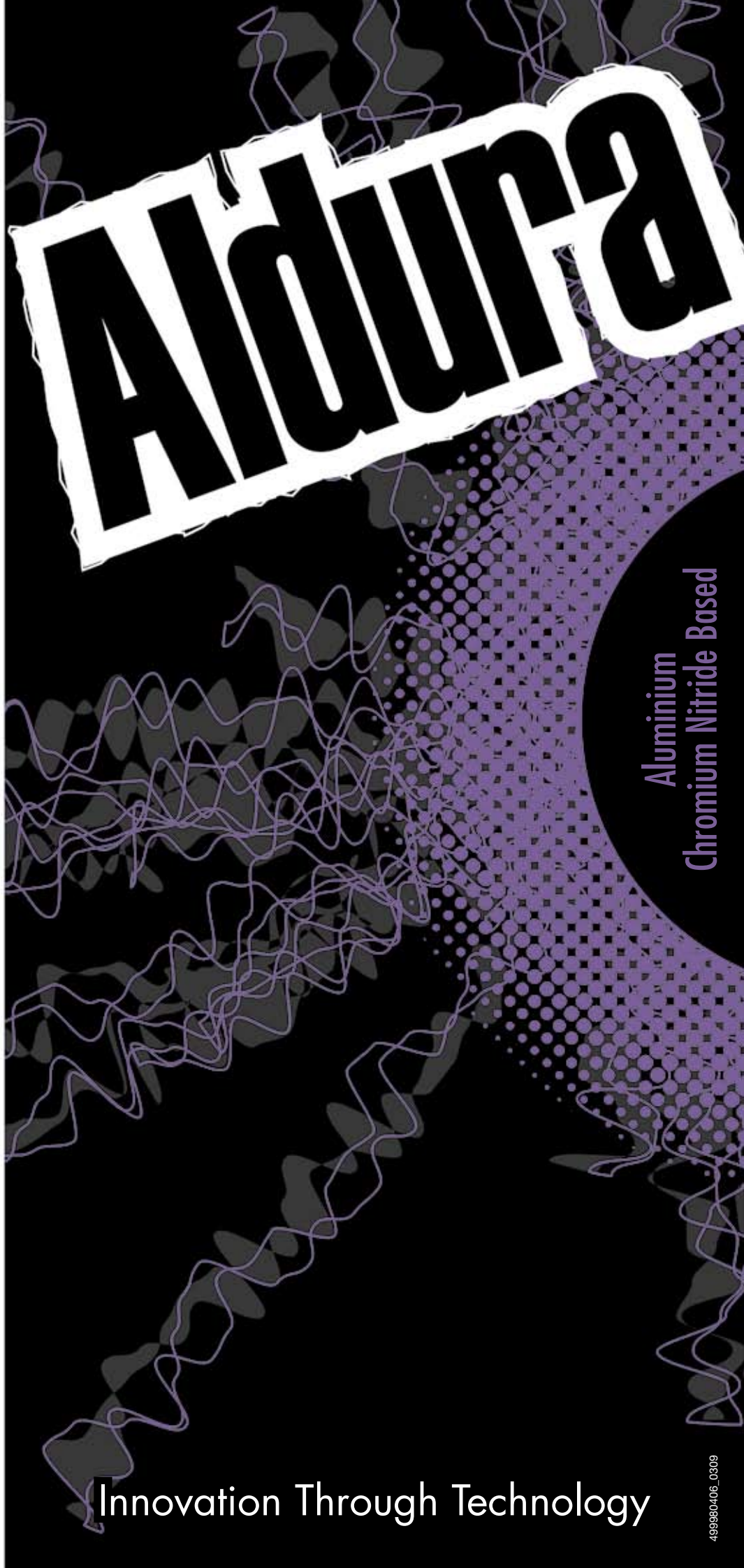
Colour	Blue - Grey
Coating Thickness	4 μ m
Microhardness	3300 HV
Thermal Stability	over 1,100°C
Coeff. Friction vs Steel	< 0.4

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Surface Technology Coatings is a division of Sutton Tools

**SURFACE
TECHNOLOGY
COATINGS**

Innovation Through Technology



Aluminium
Chromium Nitride Based

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

