ALUMINIUM CHROMIUM NITRIDE BASED

TiAIN+AICrXN

Aldura

TiAIN + AICrXN, produced in the INNOVA, is a bi-layered coating. Aldura combines the excellent adhesion, thermal barrier and strength properties of TiAIN with the superior hot hardness, oxidation resistance and thermal barrier properties of an AICrN based, nanocrystalline top coating. The top coating dramatically limits the possibility of oxidizing the TiAIN coating. Therefore, increasing the maximum service temperature of this combined coating well beyond TiAIN 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 μm
Microhardness	3300 HV
Thermal Stability	over 1,100°C
Coeff. Friction vs Steel	< 0.4

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