

TiAlN

Titanium Aluminium Nitride is a bright blue/black coloured ceramic coating applied to suitably prepared surfaces by the physical vapour deposition (PVD) process. The coating is of extreme hardness, has low coefficient of friction with most metallic surfaces and resists oxidation up to 800°C

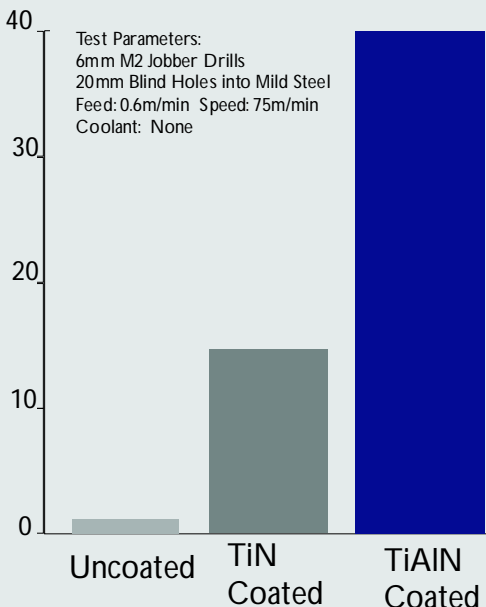
Tecvac produce TiAlN coatings using a process of electron beam evaporation under vacuum at a workpiece temperature of about 480° C. This method of manufacture results in coatings which are very smooth and require no post coating processing. The highly adherent deposited films strongly resist oxidation, abrasive and adhesive wear.

Typical Properties:

Coating Thickness	1-4um
Hardness	3000Hv
Max Operating Temp	800°C
Coefficient of Friction against steel (dry)	0.4



Holes Drilled



Applications

Dry Machining

Machining of Hardened Tools and Dies

TiAlN coatings will outperform titanium based coatings such as TiN in many applications involving the cutting and machining of ferrous materials particularly with high rates of feed and speed.

The coating is particularly resistant to oxidation and can operate at the high temperatures required for dry machining processes.

Tecvac Ltd
Buckingway Business Park
Swavesey
CAMBRIDGE
CB4 5UG
Tel: 01954 233700
Fax: 01954 233733
[email:sales@tecvac.com](mailto:sales@tecvac.com)

Tecvac is a [Wallwork](#) company