

TiN

Titanium Nitride is a bright gold coloured ceramic coating applied to metallic surfaces by the physical vapour deposition (PVD) process. The coating has high hardness and low friction combined with moderate resistance to oxidation

Tecvac produce TiN coatings using a process of electron beam evaporation under vacuum at a workpiece temperature of about 480 deg C. This method of manufacture results in coatings which are very smooth and require no post coating processing.

Typical Properties:

Coating Thickness	1-4um
Hardness	2300Hv
Melting Point	2800 deg C
Max Operating Temp	500 deg C



Applications

Cutting Tools -- Drills, Mills, Reamers and Taps

Gear Cutting Tools -- Hobs and Shaper Cutters

Plastic Moulding Tools -- Especially high finish tools

Press Tools -- Stamping and Cold Forming

TiN coatings are widely used to improve the life and performance of cutting and press tools. The high hardness and low friction characteristics of the coating combine to make the coating extremely cost effective in the general reduction of tool wear.

TiN is very versatile product and since its introduction as a wear reduction coating during the 1980s it has become the "work horse" of the coatings industry. Uses include the coating of gear cutting hobs, shaper cutters, drills, taps, dies, mills, and press tools of all types.

The coating has a very attractive bright gold colour and this distinctive feature has resulted in TiN also being used in a number of decorative applications.



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