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TiN Lafer is the **Titanium Nitride coating** suitable for a wide range of applications with low or medium loads in all fields of general mechanics. TiN Lafer is also successfully performed on aeronautical and medical components, allowing to **improve performances during operation**.

MAIN APPLICATION

- Medical devices also implantable
- Machining and gear cutting of non-alloy steel
- Generic cutting tools, general mechanics
- Sheet metal cutting
- Racing, aeronautical, medical components

COATING PROPERTIES

VISUAL FEATURES

Surface



Values

Measurement parameters of color

According to ISO11664-4

80 ÷ 85 L* Brightness

0 ÷ 7 a* Color coordinate

44 ÷ 45 b* Color coordinate

NOTES:

Non-functional requirement, indicative values

PHYSICAL FEATURES

Measure

Values

Measurement

Coating thickness* **1 ÷ 6 µm** Calotest on sample

Coating hardness*** **2500 ± 200 HV** Nanoindentation 20mN/20s

Roughness Ra** **0,06 ÷ 0,09 µm** From sample with Ra < 0,03µm

Coefficient of friction** **0,7 ÷ 0,8** Pin on disk, dry, against Al₂O₃

NOTES:

* depends on the application.

** depends on the test conditions.

TECHNOLOGICAL FEATURES

Coating technology **Arc**

Chemical composition **TiN**

Structure **Single layer**

Coating temperature **450°C**

Maximum working temperature **520°C**

Biocompatibility **Non-cytotoxic according to ISO10993-5:2009**

Food compatibility **-**