

TiN-ULTRAFINE

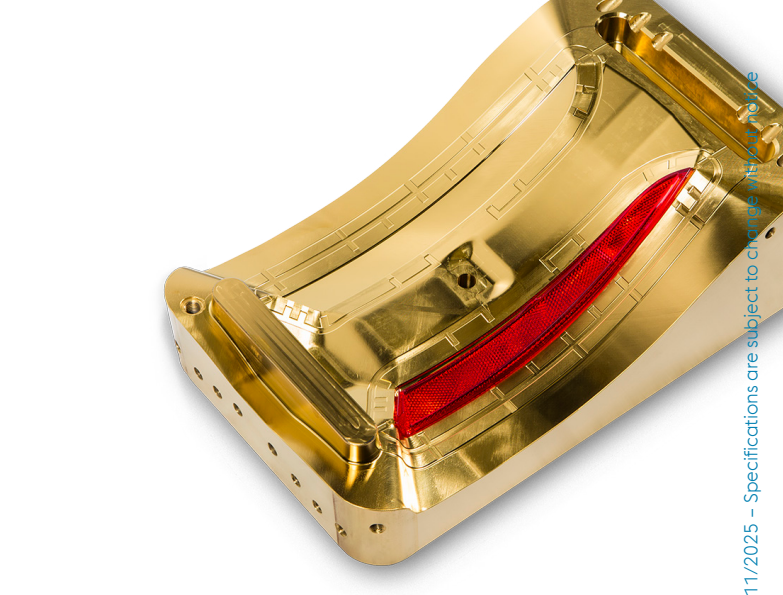
Smooth and dense PVD arc coatings

TiN-ultrafine is the designation for our especially smooth titanium nitride arc all-round coating, which in comparison to the standard arc TiN coatings has a defect-free surface layer enabling it to achieve high performance in the area of forming, plastic moulding and an improved demoulding of injection moulds. Furthermore, its gold-like colour makes TiN-ultrafine also suitable for use in decorative applications, particularly if there are high requirements in regard to abrasion resistance.

The smooth and glossy TiN-ultrafine layer is achieved through the use of our ultrafine-technology. This technology describes our special PVD arc coating process, in which we can produce excellent coating properties using innovative gas control.

COATING PROPERTIES

Hardness	2,800 ±150 HV
Coating thickness	2 – 4 µm
Max. operating temperature	500 °C / 930 °F
Colour	Gold
Coating composition	TiN-based



11/2025 – Specifications are subject to change without notice



Fig. 1: Surface with calotte grinding of a standard TiN (top) and a TiN-ultrafine (bottom).