

Signature Coating PSiX

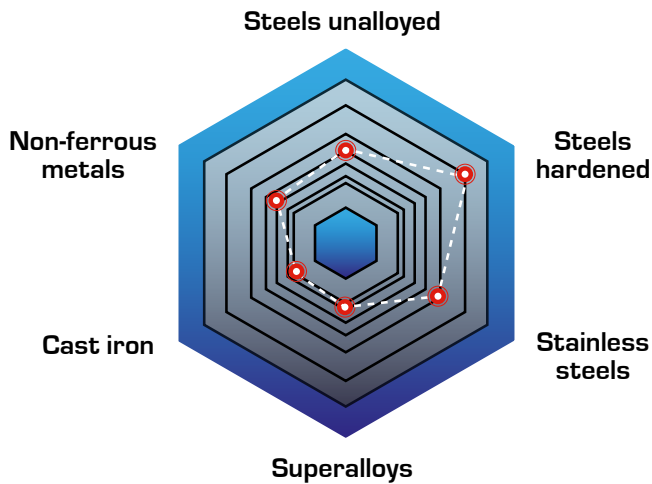
Universal hard machining coating

PSiX is a new PLATIT nanocomposite coating with a super-hard top layer. PSiX is based on TiXCo3 but has a silicon-free AlTiN base. Therefore, the aluminum content of PSiX is higher, which increases the coating's thermal stability. The coating is temperature-optimized and therefore excellent for hard machining processes like finishing and roughing.

Highlights:

- Thermal stability
- Optimized service temperature
- Low coating residual stress

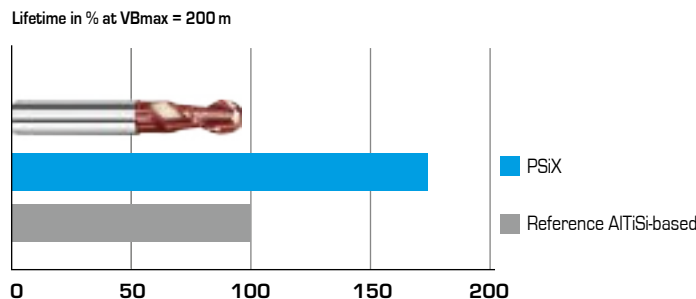
Characteristics in cutting:



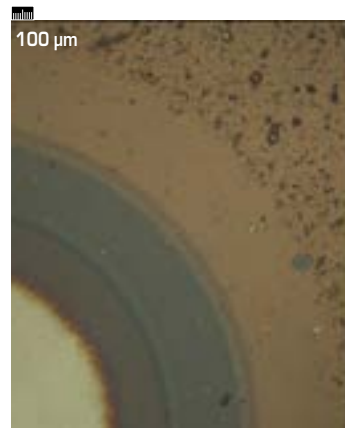
Specifications

Color	red brown
Nano-hardness [GPa]	42–44
Coefficient of friction [μ] PoD (at RT, 50% humidity)	0.4
Coating thickness [μm]	1–4
Max. service temperature [°C]	900
Coating temperature [°C]	450–500
411 PLUS ECO	(Ti, Al, TiSi20)
1011 G4	(Ti, AlTi40, TiSi20, AlTi40)
1511	(Ti, Al, TiSi20, TiSi20, AlTi33)

Ball nose end mill in 61 HRC:



Tool: ball nose end mill; D10
 Workpiece material: 1.2379; 61 HRC
 ap = 0.2 mm; ae = 0.5 mm; vc = 182 m / min; fz = 0.14 mm
 Source: GFE, Germany



Calo 3 layers

(Optional TiN adhesion layer →)
 AlTiN for reducing coating residual stress →
 AlTiN for high hardness →
 TiSiN nanocomposite top layer