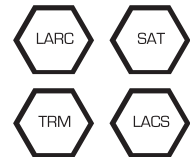


# Signature Coating PSiX

## Universal hard machining coating

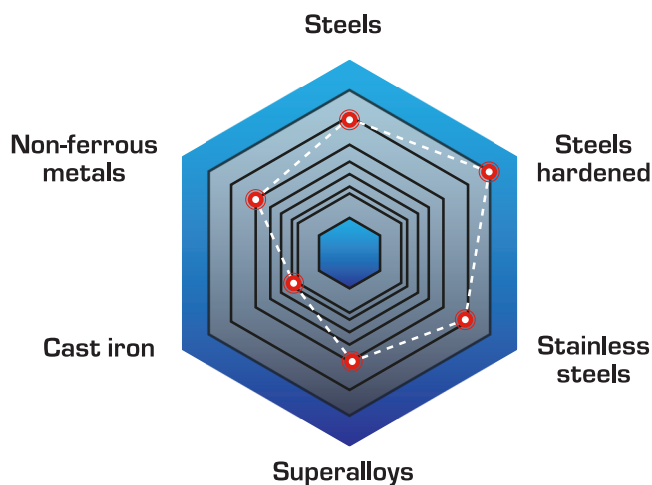
PSiX is a PLATIT nanocomposite coating with a super-hard top layer. PSiX is based on TiXCo3 but has a silicon-free AlTiN base. Therefore, the aluminum content of PSiX is higher, which increases the coating's thermal stability. The coating is temperature optimized and therefore excellent for hard machining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



### Highlights:

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

### Characteristics in cutting:

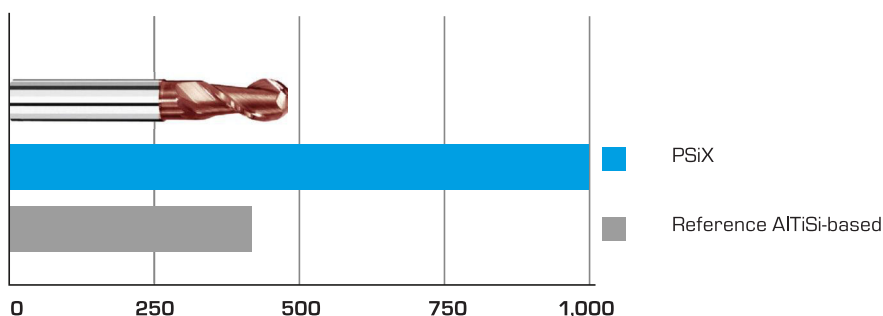


### Specifications

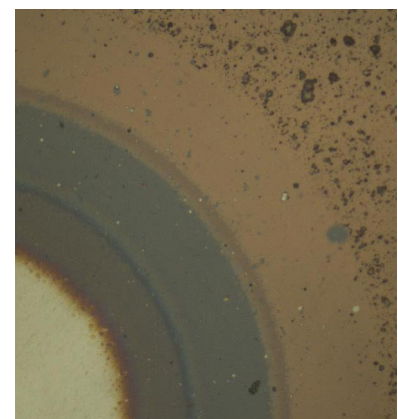
Color	red brown
Nano-hardness [GPa]	42–44
Coefficient of friction [μ] PoD (at RT, 50% humidity)	0.4
Coating thickness [μm]	1–4
Max. service temperature [°C]	1,100
Coating temperature [°C]	450–500
111 TRM	AlTi40, TiSi20
411 G3	Ti, Al, TiSi20
411 G3 LACS	Ti, Al, TiSi20, AlTi40 SCIL
1011 SAT	TiSi20, AlTi40, TiSi25, AlTi40

### Ball nose Ø 10 2-flute

Lifetime in m at VB = 200 μm



Tool: ballnose Ø 10 2-flute  
 Workpiece material 1.2379 / D2 / SKD 11 / 60-62 HRC  
 Par.:vc = 240 m/min, fz = 0.14 mm/tooth,  
 ap = 0.2 mm, ae = 0.5 mm down+up cut, cooling MQL external  
 Source: GFE Schmalkalden, Germany



### Calo: PSiX

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