

Signature Coating TiXCo3



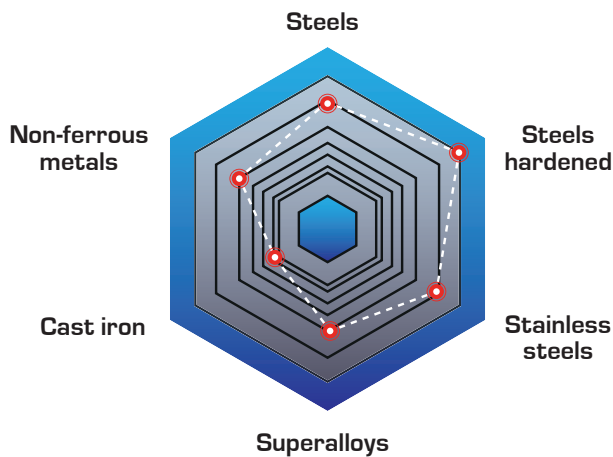
Super-hard machining coating

As our hardest nanocomposite, TiXCo3 is especially suitable for hard machining. It can be used at very high temperatures and is therefore suitable for finishing processes in milling, drilling and reaming.

Highlights:

- High surface quality
- Extremely hard and very wear-resistant
- For super-hard machining

Characteristics in cutting:

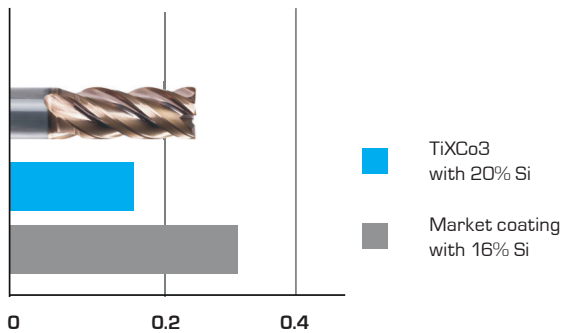


Specifications

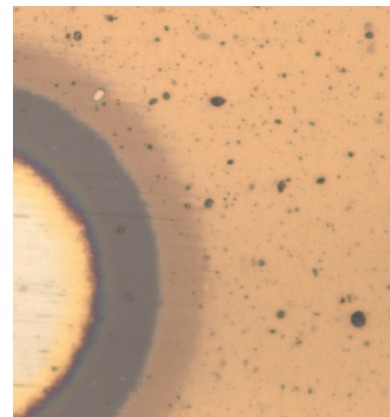
Color	copper
Nano-hardness [GPa]	42–44
Coefficient of friction [μ] PoD (at RT, 50% humidity)	0.4
Coating thickness [μm]	1–4
Max. service temperature [°C]	1,100
Coating temperature [°C]	450–500
111 G3	AlTi33, TiSi20
411 G3	Ti, Al, TiSi20

Milling in X210Cr13 with solid carbide end mill D6:

Wear Vb [μm]



Tool: solid carbide end mill; D6
 Workpiece material: X210Cr13; 1.2080; 64 HRC
 Cooling: dry air, 5 bar; ap = 0.09 mm; ae = 0.06 mm;
 n = 16 820 rpm; f = 0.1 mm / rot
 Source: South Korean tool manufacturer



Color: TiXCo3

Optional TiN adhesion layer
 AlTi(Si)N core layer
 TiSiN nanocomposite top layer