

Signature Coating TiB2

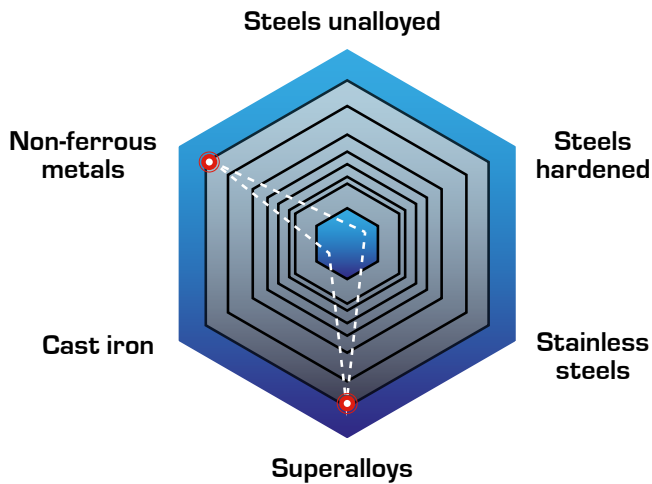
SPUTTER coating for aluminum machining

TiB2 is one of the most efficient PLATIT SPUTTER coatings. With a SCIL® configuration (SPUTTERED Coating Induced by Lateral Glow Discharge) nano-hardness of 32 GPa is achieved, which can be increased to 38 GPa with a hybrid LACS® configuration (Lateral ARC with central SPUTTERING). That means Ti alloys can be machined as well.

Highlights:

- Universal applications in aluminum
- Available in two versions: SPUTTERED SCIL® or hybrid LACS® coating
- Reduces adhesion between cutting-edges and workpiece
- Increased wear-resistance

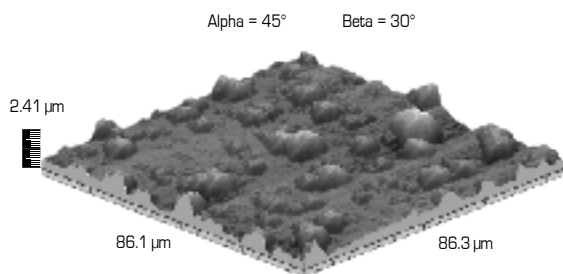
Characteristics in cutting:



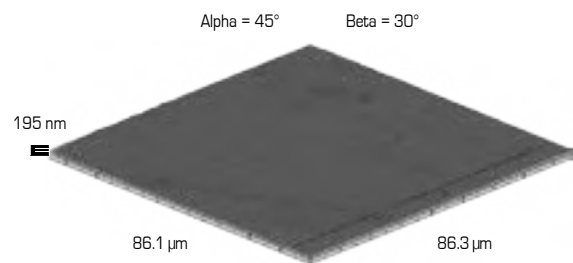
Specifications

Color	satin silver
Nano-hardness [GPa]	32 / 38
Coefficient of friction [μ] PoD (at RT, 50% humidity)	0.4
Coating thickness [μm]	1–5
Max. service temperature [°C]	600
Coating temperature [°C]	200–400
411 PLUS SCIL®	(LGD, -, -, TiB2 SCIL)
411 PLUS LACS®	(Ti, -, -, TiB2 SCIL)

Comparison of the roughness of coatings for aluminum machining:



ZrN
Coated with Pi411 PLUS ECO



TiB2
Coated with Pi411 PLUS SCIL®

Measured with AFM on a carbide test piece, same scale