



SINTAL

AlTiSiN

SINTAL



Sintal is the AlTiSiN coating excellent for machining applications both with carbide tools and with cutting inserts on high strength materials, such as super alloys and alloy steel. **High surface hardness, excellent wear resistance and high working temperature** make Sintal Lafer the top solution for the most heavy and demanding working conditions. Maximum working temperature 1100°C.

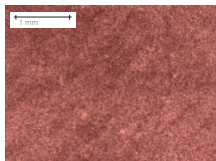
MAIN APPLICATION

- Milling of alloy and hardened steels, deep drilling
- Turning and milling of superalloys (Inconel, Incoloy, Stellite)

COATING PROPERTIES

VISUAL FEATURES

Surface



Values	Measurement parameters of color According to ISO11664-4
52 ÷ 57	L* Brightness
6 ÷ 9	a* Color coordinate
6 ÷ 9	b* Color coordinate

NOTES:

Non-functional requirement, indicative values

PHYSICAL FEATURES

Measure	Values	Measurement
Coating thickness*	2 ÷ 4 µm	Calotest on sample
Coating hardness***	3100 ± 200 HV	Nanoindentation 20mN/20s
Roughness Ra**	0,15 ÷ 0,20 µm	From sample with Ra < 0,03µm
Coefficient of friction**	0,7 ÷ 0,8	Pin on disk, dry, against Al ₂ O ₃

NOTES:

* depends on the application.

** depends on the test conditions.

TECHNOLOGICAL FEATURES

Coating technology	Arc
Chemical composition	AlTiSiN
Structure	Multilayer
Coating temperature	450°C
Maximum working temperature	1100°C
Biocompatibility	-
Food compatibility	-