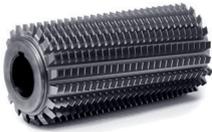


KRONOS
AlCrN

KRONOS

Kronos Lafer is the AlCrN based coating with excellent wear resistance, **high hardness and oxidation temperature**. Kronos Lafer is deposited using the latest generation of cathodic arc technology and is suitable for both, **dry and wet machining applications, with severe cutting parameters and chip thickness**.

If applied for moulding applications, Kronos is the solution for **Aluminium, Zamak and Magnesium die-casting**. Its chemical composition **reduces metallization problems** and combines the high wear resistance, typical of Chrome-based coatings, with the high temperature resistance, typical of Aluminium-based coatings.



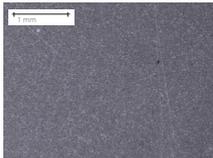
MAIN APPLICATION

- Coating of HM and HSS hobs, shaper cutters and stick blades
- Cutting tools
- Metal stamping tools
- Mould for Aluminium, Zamak and Magnesium alloys die-casting

COATING PROPERTIES

VISUAL FEATURES

Surface



Values Measurement parameters of color

According to ISO11664-4

53 ÷ 57	L* Brightness
-1 ÷ 0	a* Color coordinate
-3 ÷ -1	b* Color coordinate

NOTES:

Non-functional requirement, indicative values

PHYSICAL FEATURES

Measure	Values	Measurement
Coating thickness*	2 ÷ 6 µm	Calotest on sample
Coating hardness***	3000 ± 200 HV	Nanoindentation 20mN/20s
Roughness Ra**	0,15 ÷ 0,20 µm	From sample with Ra < 0,03µm
Coefficient of friction**	0,5 ÷ 0,6	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	AlCrN
Structure	Single layer
Coating temperature	450°C
Maximum working temperature	1100 °C
Biocompatibility	-
Food compatibility	-