

CORAL HIPIMS AITISIN

Lafer S.p.A. - Strada di Cortemaggiore 31, 2012 Piacenza. Tel 0.523 517940 - info@lafera u.- www.lafer.eu Share capital € 1.040.000 i.y. - R.E.A. 80708 PI/N/C.F.R.I. Piacenza/CEE IT 00172880339 Company with quality management system certified by TÜV Italia Srf according to ISO 900 Strandard and by MiQ SpA according to ISO 13485 standard. Company with environmental management system certified by MiQ SpA according to ISO 13400 standard.



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CORAL HIPIMS



Coral is the new AITiSiN coating, deposited with HiPIMS technology and developed to improve the carbide cutting tools performances when machining of **medium and high strength steels**. The HiPIMS technology ensures excellent coating roughness, high toughness, hardness and wear resistance which allow to reduce machining time and to obtain better surface finish. The HiPIMS deposition technology also ensures an extremely **low surface roughness**.

MAIN APPLICATION

- · Machining of medium and high strength steels with carbide cutting tools
- · Microtools for drilling and milling

COATING PROPERTIES

VISUAL FEATURES

Surface



According to ISO11664-4
L* Brightness
a* Color coordinate
b * Color coordinate

NOTES:

Non-functional requirement, indicative values

PHYSICAL FEATURES

Measure	Values	Measurement	
Coating thickness*	1,5 - 4 μm	Calotest on sample	
Coating hardness**	$3100 \pm 200 \text{ HV}$	Nanoindentation 20mN/20s	
Roughness Ra**	0,03 - 0,08 μm	From sample with Ra < 0,03 μm	
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	HiPIMS
Chemical composition	Altisin
Structure	Multilayer
Coating temperature	450°C
Maximum working temperature	1100°C