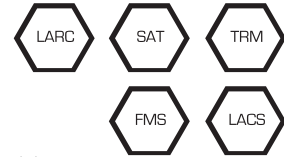


Signature Coating Omnis

Universal high-performance AlCrN-MB coating



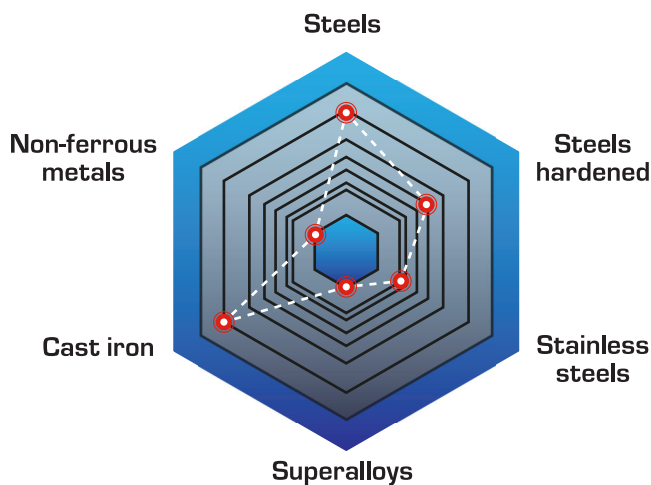
Omnis is a universal high-quality coating developed for a wide range of applications for wet and dry machining:

- Optimized coating properties (hardness, modulus, morphology) with advanced plasma parameters
- Higher productivity and deposition rate through increased process performance
- Advanced BIAS strategy for optimized residual stress distribution
- Use of multi-alloyed targets for maximum productivity

Highlights:

- Universal applicability e.g., for roughing, skiving, hobbing, finishing, forming, micro tools
- Omnis also works in applications typically covered by AlTiN and AlCrSiN coatings
- Superior and predictable wear behavior
- Fast and economical with very short batch times

Characteristics in cutting:

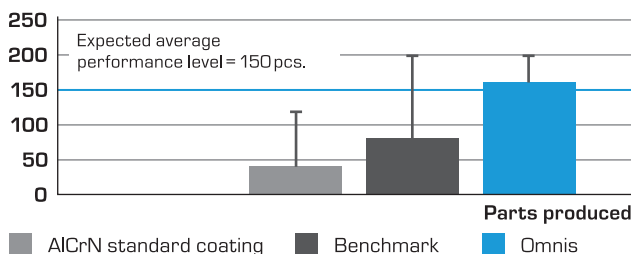


Specifications

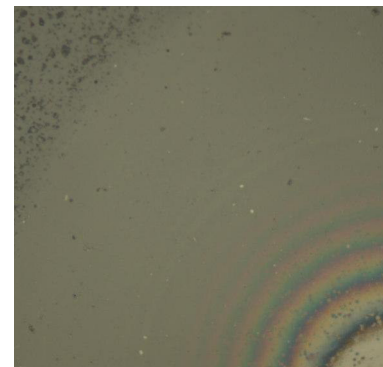
Color	grey
Nano-hardness [GPa]	33–35
Coefficient of friction [μ] PoD (at RT, 50% humidity)	0.5
Coating thickness [μm]	1–5
Max. service temperature [$^{\circ}\text{C}$]	1,100
Coating temperature [$^{\circ}\text{C}$]	480
111 G3	Al, Cr
111 TRM	AlCr35, Cr
411 G3	AlCr35, Cr, AlCr35
411 G3 SCIL/FMS	LGD, --, AlCr35 FMS
411 G3 LACS	-- Cr, AlCr35 SCIL
1011 SAT	Cr, AlCr36, AlCr36, AlCr36

With Omnis variance between tests is reduced:

Coating performance



Tool: Shaper cutter, Coating thickness: 3.5 μm
 Workpiece material: 1.7131; 33 HRC
 Wet machining
 Source: Customer in Germany



Calo: Omnis