

New 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:

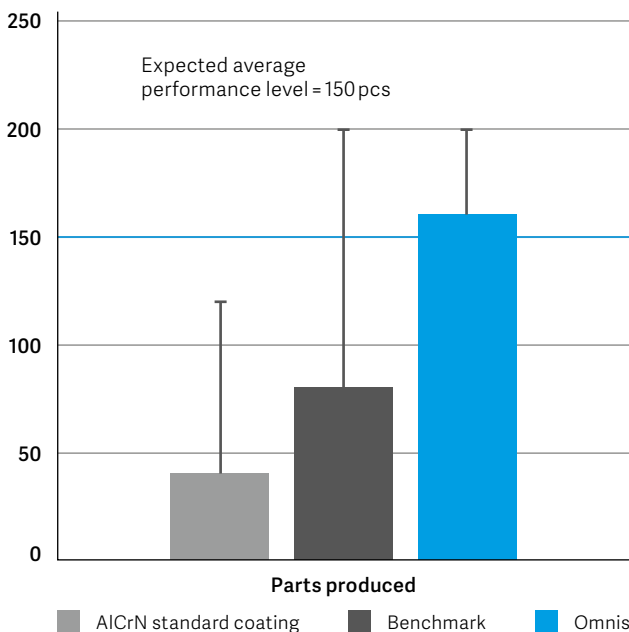
- Optimized coating properties (hardness, modulus, morphology) with advanced plasma parameters
- Higher productivity and deposition rate through increased process performance
- Advanced BIAS strategy for optimized residual stress distribution
- Use of multi-alloyed targets for maximum productivity

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 extremely short batch times, e.g., for 2.0 μm on endmill (3-fold rotation) or 4.0 μm on hob (2-fold rotation):
 - 4.0 h with Pi411 PLUS TURBO
 - 4.5 h with Pi411 PLUS ECO
 - 6.5 h with PL1011

With Omnis from PLATIT, variance between the tests is reduced:

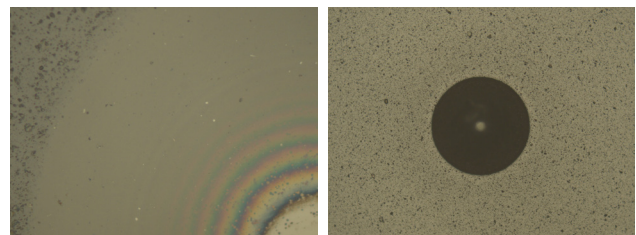
Coating performance



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

Specifications

Color	grey / anthracite
Nano-hardness [GPa]	34 ± 2
Coefficient of friction [μ] PoD (at RT, 50% humidity)	0.5
Coating thickness [μm]	0.3–6.0
Max. service temperature [°C]	1100
Coating temperature [°C]	480



Omnis