

# CROSAL®-PLUS

To enable your tools to withstand even the highest temperatures

CROSAL®-plus from voestalpine eifeler represents the next generation of AlCrN-based hard coatings. The new coating system is an advanced development of our well-established CROSAL® coating. As a result of optimized process parameters and a tailor-made coating microstructure, this versatile high-performance coating covers all key requirements:

- » High oxidation resistance
- » Excellent hot hardness
- » Outstanding adhesive strength

#### YOUR PLUS IN METAL CUTTING

CROSAL®-plus from voestalpine eifeler is perfectly suited for the challenging areas of dry cutting, as well as the numerous applications for punching and forming, all of which benefit from the enhanced properties profile of CROSAL®-plus.

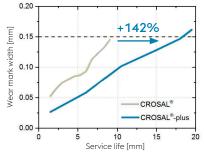
#### **APPLICATIONS**

Cutting	High-performance cutting Toothing Dry broaching
Punching and forming	Precision cutting Hot pressing Al die casting

# COATING PROPERTIES

Hardness	3,200 ± 300 HV
Max. application temperature	1,100 °C / 2,012 °F
Coefficient of friction against steel	0.45
Coating thicknesses	2 - 5 μm
Colour	slate grey

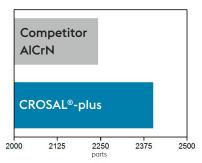
#### CROSAL®-PLUS FOR YOUR PLUS IN SERVICE LIFE



# HARD CUTTING IN VANADIS10,

H=61 HRc, hard metal end mill Z=6,  $v_c$ =100 m/min,  $f_z$ =0.07 mm/tooth,  $v_f$ =1337 mm/min,  $a_p$ =10 mm,  $a_e$ =0.2 mm

### CROSAL®-PLUS FOR YOUR PLUS IN NUMBER OF ITEMS



# HOBBING 2-CUTTECHNIQUE,

PM hob, dry, 5th speed, 16MnCr5 Roughing: 180 m/min Finishing: 360 m/min