

ALPHA FERRO PLATIN X

AFPX | High-performance coating specially designed for the requirements of machining steel and cast iron

The standard coatings for machining steel, such as TiAlN coatings, have become so well-established on the market thanks to their characteristically solid properties when used for universal machining.

In order to achieve this level of suitability for universal use in all steel and cast iron alloys while improving even further on the performance of the TiSiN-Alpha coating we have been using until now, we have built our new AlphaFerro Platin X based on an all-new AlCrTiN concept. This offers the following advantages over conventional coatings for machining steel and cast iron:

- Greater temperature stability for dry and wet machining
- Longer tool life thanks to improved resistance to wear
- Increased productivity thanks to faster cutting speed

NEW Outstanding layer smoothing – our new Finishing X technique

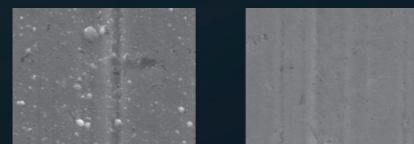
Finishing X is the name we have given to a special type of layer smoothing used in combination with AlphaFerro Platin that is characterised by unparalleled evenness, more homogeneous wear, and improved wear resistance. It has been developed specially to prevent micro-breakouts caused by droplets coming loose and guarantee a chip disposal process that will remain at its optimum level for a long time. The effects of the symbiosis between our AlphaFerro Platin and the Finishing X technique at a glance:

- Designed for wet and dry machining
- Maximum stability for coating and cutting edges
- Improved surface quality during finishing
- Optimised heat dissipation thanks to improved chip disposal during dry machining
- Absolute smoothness for a reduced friction coefficient (0.4)

ALPHA FERRO PLATIN X AFPX - AT A GLANCE

Structure	Nanostructured multilayer
Components	Aluminium chromium titanium nitride
Layer thickness	3-4 µm
Layer hardness	approx. 3500 HV
Adhesion factor	Friction coefficient: approx. 0.4 (dry on steel)
Max. operating temperature	approx. 1100°C
Cooling	Dry and wet machining
Main application	Steel and cast iron
Secondary application (limited suitability)	Stainless steel

Finishing X as viewed through a scanning electron microscope



BEFORE FINISHING

AFTER FINISHING