

FIRE/nanoFIRE

Coating colour: violet

This TiAlN/TiN multilayer coating is applied to HSS and carbide drills. It offers outstanding wear resistance in drilling operations and high heat resistance. Besides conventional wet applications this coating is suitable for minimum lubrication and dry machining, often combined with MolyGlide to optimise the running-in wear and improved resistance to galling.

TiAlN SuperA/nanoA

Coating colour: grey-violet

The well established A-coating has been developed at Guhring. By optimising the structural, chemical and mechanical properties of the new Super-A coating an extremely high hot hardness, very good oxidation resistance and excellent coating adhesion have been achieved. This coating is used exclusively on carbide cutting tools and is ideally suited for difficult to machine aerospace materials such as titanium alloys, Inconel as well as machining hardened steel materials (>52 HRC) and HSC applications.

TiAlN

Coating colour: violet

The monolayer TiAlN coating is suited for abrasive operations with carbide tools because of its high hardness and chemical resistance, e.g. hard machining and high speed cutting (HSC).

TiCN

Coating colour: grey

End mills and taps exposed to high mechanical load are coated with TiCN. With respect to the high hardness and toughness of TiCN coating the tools offer good machining results operating with interrupted cutting.

TiN

Coating colour: yellow-golden

The monolayer titanium nitride coating is standard for HSS and carbide tools. Used for drilling, tapping and milling operations. Nevertheless, most applications is steel machining.

bright

Due to their basically good properties, high speed steel and carbide tools are supplied without being surface treated, i.e. in a bright finish. Guhring offers bright tools in its standard range only as basic tools for a cost-efficient coating to customer specific requirements.

