NMS and NRS geometries for high temperature alloys

When machining materials that are difficult to cut (ISO S), there is a wider range of workpiece materials than with steel and cast iron machining. Walter has therefore developed two geometry ranges for ISO S machining. Walter NMS and NRS for high temperature alloys, such as Inconel 718, and Walter NFT, NMT and NRT for titanium alloys, such as Ti_6Al_4V.

The main sign of wear when machining high temperature alloys is the formation of notches and cutting edge build-up. In contrast to this, in titanium machining, indexable inserts must above all be resistant to crater wear.

Facts and advantages:

- low cutting pressure for reliable machining of unstable components (e.g. turbine housings)
- reduced heat development when machining highly heat-resistant alloys
- up to 150% increases in tool life for NMS and NRS geometries thanks to Tiger•tec® WSM10 and WSM20 coating.
- NMS geometry - medium machining/semi-finishing
- NRS geometry - roughing

ISO turning - NRS geometries for high temperature alloys

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