

_ EXPERTISE IN MACHINING

**Go for better,
go for Gold.**

Product innovations

Milling

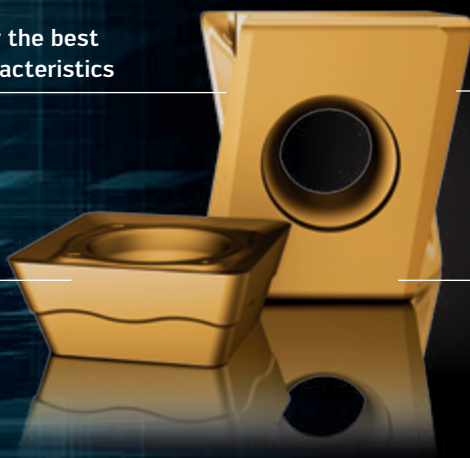


Tiger-tec[®]Gold

YOU HAVE HIGH EXPECTATIONS – WE CAN OFFER LONG TOOL LIFE.

Smooth rake face for the best possible friction characteristics

Optimum wear detection on rake face and flank face



Tough cutting edge for maximum process reliability

Latest coating technology for long tool life and excellent cutting data



Tiger-tec® Gold

Your challenges spur us on to exceed our own expectations

As an innovative company, we are frequently asked how we manage to produce fascinating and often groundbreaking technological products time and time again. The answer begins with a question we put to ourselves: How can we at Walter help you design your machining process to make it even more efficient?

Our answer is: By making your objectives our own, as your product is the best starting point for our development work.

And the result of this development strategy is remarkable: With Tiger-tec® Gold, we are providing you with a new technology that meets the most exacting requirements placed on machining.



Walter BLAXX M3024 heptagonal milling cutter, diameter 80 mm
with XNMU070508-F57 WKP35G

**Experience a new technology platform that shines
brighter than the rest with a unique coating:**

Tiger-tec® Gold

Successful companies have been relying on Walter tooling systems for years. They are now ready to go one step further together with Walter.

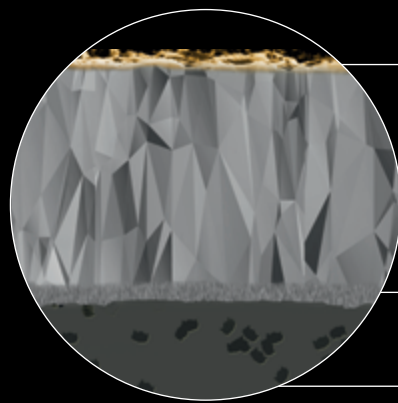
With the new Tiger-tec® Gold indexable inserts, our high-performance milling tools are achieving an unprecedented level of productivity.

The results speak for themselves: In a wide range of practical tests, Tiger-tec® Gold demonstrated its superiority with impressive values:

- Significantly longer tool life due to optimised wear characteristics
- Sustainable high cutting parameters due to a reduction in visible wear rate
- Maximum process reliability due to tough cutting edge
- Optimum wear detection due to gold-coloured top layer



HOW CAN YOU TURN AN OUTSTANDING LAYER INTO A PERFECT COATING? WITH SUPERIOR PROPERTIES.



Schematic diagram

TiN

Best friction characteristics
and wear detection

TiAlN

Resistant to abrasion, hairline cracks,
plastic deformation, oxidation

TiN

Good binding of layers

Carbide substrate

High level of toughness

Tiger-tec® Gold was developed to make your production process even more reliable and efficient

At the core of Walter's new indexable insert grade lies a particularly tough carbide substrate. Although much less material is used on the outer area, this makes it all the more advantageous: In addition to the geometry of the indexable insert, it is the coating that really makes the crucial difference.

With the new WKP35G milling grade, manufactured using the innovative ultra low pressure method (ULP-CVD), you can benefit from tomorrow's technology right now.

The superior properties of Tiger-tec® Gold are based on several related factors

The standout feature is the extremely tough and resistant TiAlN layer, with an extremely high aluminium content. This is located directly underneath the TiN top layer and protects the substrate against abrasion, hairline cracks, plastic deformation and oxidation. The eye-catching, gold-coloured top layer enables outstanding wear detection and boasts impressive friction characteristics. Another, delicate TiN layer is located between the carbide substrate and the TiAlN layer, ensuring excellent binding of the layers.

IMPRESSIVE PERFORMANCE, WINNING SOLUTION.

Reduced wear



Practical example

Workpiece	Three-jaw chuck cover					
Material	40CrMnNiMo8-6-4, ISO P					
Tool	M4132 shoulder milling cutter, diameter 50, Z4					
Indexable insert	SDMT09T308-F57 WKP35G					
v_c	180 m/min					
f_z	0.16 mm					
v_f	733 mm/minute					
a_p	2.5 mm					
a_e	35 mm					
					+ 200 %	
		Existing	Tiger-tec® Gold WKP35G			
	Number of components	0	50	100	150	200

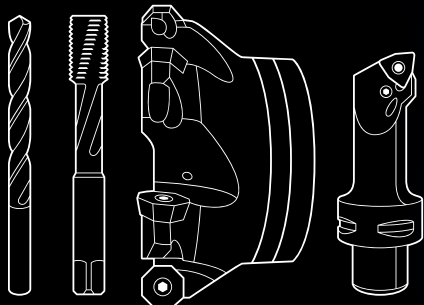
Further application examples

Material		Tool / indexable insert	Increase in tool life
Steel	42CrMo4	F4042 / ADMT160608R-F56	+ 68 %
Cast iron, spheroidal graphite	GJS 600	F4033 / SNMX1205ANN-F57	+ 50 %
Cast iron, vermicular graphite	GJV 450	F5041 / LNHU090404R-L55T	+ 50 %
Steel	52CrMoV4	F5041 / LNHU090404R-L55T	+ 60 %
Steel	S355J2G3	F4042 / ADMT160608R-D56	+ 192 %

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