THE NEW FORCE

The machining age is over. It’s time to Tiger.
Average increase in output of 75 percent in milling cast iron and steel.

Extremely stable cutting edges for high level of process reliability.

Extremely smooth rake face for excellent tribo-chemical wear resistance

Silver coloured flank face for very easy wear detection during use.
THE TECHNOLOGY: UNIQUE THROUGHOUT THE WORLD
Thanks to its new, thoroughly unique CVD coating technology, Tiger-tec®Silver is forging ahead into completely new dimensions with increases in output of up to 100%. The essential benefits of the new technology are:
- enormous toughness and minimal formation of hairline cracks thanks to optimal residual stress
- greatly reduced tribochemical wear thanks to perfect, smooth rake faces
- unsusceptible to thermal stress variations during wet and dry machining

THE CUTTING TOOL MATERIAL: PERFORMANCE WITHOUT LIMITS
With Tiger-tec® cutting tool materials, we have been setting new standards in machining for many years. The new Tiger-tec®Silver cutting tool material is another giant step on the way to the perfect cutting tool material. It is ideal for dry and wet machining in automotive engineering and railway vehicle manufacturing, in power engineering, toolmaking and mould and die construction, aerospace engineering and in general mechanical engineering.

TIGER-TEC®SILVER TECHNOLOGY
Completely new CVD technology:
- combines wear resistance and toughness
- for cast iron and steel materials
Industry-specific solutions with bite.

Our engineering specialists have been at home in the most varied of sectors for decades. Knowledge, experience and the ability to listen carefully are the basic requirements for their successful engineering work.

With increases in output averaging 75%, the new Tiger-tec® Silver cutting tool material enables our engineers to develop even more efficient and productive machining processes for the dry and wet machining of steel and cast iron components.

Every sector, every component and every material has its own special characteristics when it comes to machining. The new Tiger-tec® Silver inserts produce an irrepressible bite anytime, anywhere and guarantee extremely high cutting data in everyday use and, as a result, offer greater cost efficiency in machining.
With the new Tiger·tec®Silver technology, the special coating combination also receives a completely new surface treatment. Because of the optimal residual stress, the toughness of the wear-resistant Tiger·tec®Silver cutting tool material increases enormously. It is this combination of a high level of wear resistance and toughness that gives Tiger·tec®Silver superior power in machining.
The test winner
Tiger·tec® Silver.

You can make all sorts of claims on paper, but your customers want results now. They want high-quality components at competitive unit prices.

Our engineers have pitted the new Tiger·tec® Silver cutting tool material against the competition in extensive tests. The results are convincing.

When wet milling 42CrMo4 heat treatable steel (which is frequently used in vehicle construction, for example), Tiger·tec® Silver achieved a higher tool life of around 70 percent. With performance like that, Tiger·tec® Silver beats not only comparable products from other manufacturers, but even Walter Tiger·tec® WKP 35 cutting tool materials.

The comparison tests have shown that Tiger·tec® Silver from Walter is continuing to write the success story of the technology brand Tiger·tec® and has all the characteristics of a benchmark product.

**TIGER-TEC® SILVER IN COMPETITION: face milling**

<table>
<thead>
<tr>
<th>Workpiece material: 42CrMo4</th>
<th>Cutting tool material: WKP355</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coolant:</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Cutting data**

- $v_c$: 260 m/min
- $f_z$: 0.5 mm
- $a_p$: 3 mm
- $a_e$: 50 mm

**Global Competition**

- Competitor 1
- Competitor 2
- Competitor 2b
- Competitor 3a
- Competitor 3b

- Tiger·tec® WKP35
- Tiger·tec® Silver WKP35s

**Tool life Comparison: Blade Machining**

<table>
<thead>
<tr>
<th>Workpiece material: X22C:MoV12-1</th>
<th>Cutting tool material: WKP355</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coolant:</td>
<td>no</td>
</tr>
</tbody>
</table>

**Cutting data**

- $v_c$: 310 m/min
- $f_z$: 0.4 mm
- $a_p$: 3 mm
- $a_e$: 25 mm

**Up to +70%**

**Up to +100%**
The high level of wear resistance, toughness and temperature resistance prevents the formation of hairline cracks and chipping. The insert lasts longer.

**Tiger-tec Silver**

The detailed photographs of the cutting edges after milling 42CrMo4 heat treatable steel show quite clearly: due to the revolutionary coating, Tiger-tec Silver also has no trouble in handling high cutting speeds and exhibits no appreciable signs of wear.

Conclusion: **With increases in output averaging 75%**, Tiger-tec Silver from Walter is the new alpha leader among cutting tool materials.

**COMPETITORS**

Competitor products exhibit heavy, clearly visible wear on the cutting edge and significant chipping.

**Tiger-tec**

Relatively even signs of wear and a low formation of hairline cracks demonstrate the performance of the legendary Tiger-tec cutting tool materials.