



_ THE NEW FORCE

The machining
age is over.
It's time to Tiger.



Tiger-tec[®] Silver

_SILVER, BLACK, STRONG

The new force in machining.

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**.



Tiger-tec[®]Silver



**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:

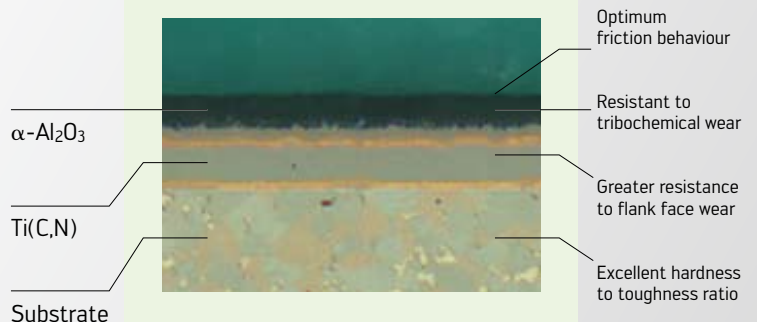
- enormous toughness and minimal formation of hairline cracks thanks to optimal residual stress
- greatly reduced tribochemical wear thanks to perfect, smooth rake faces
- unsusceptible to thermal stress variations during wet and dry machining

**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



_ EXPERIENCE, KNOWLEDGE, SOLUTIONS

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.

RAILWAY TRANSPORTATION:

e.g. rail profile



WIND ENERGY:

e.g. rotor hubs



AUTOMOTIVE INDUSTRY:

e.g. engine block



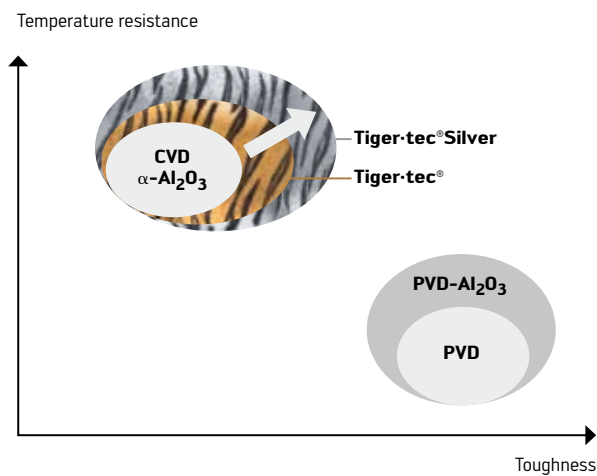
MECHANICAL ENGINEERING:

e.g. machine beds

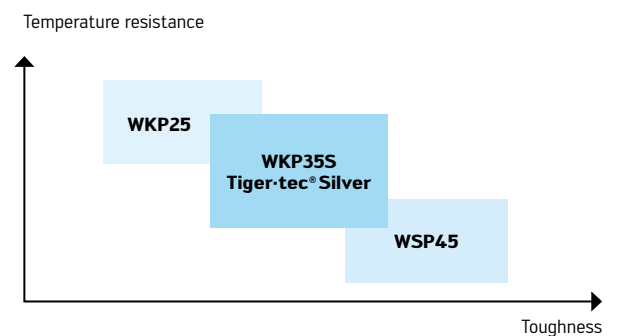


Tiger-tec®Silver

TIGER-TEC® SILVER TECHNOLOGY

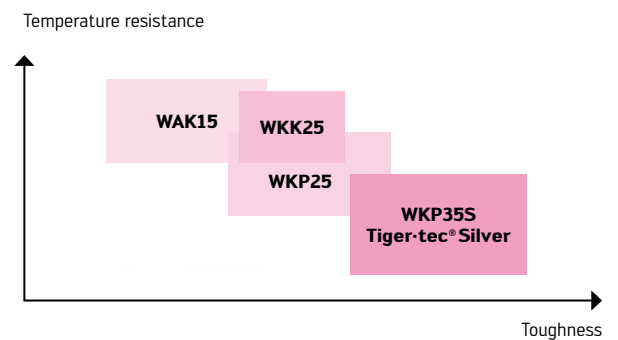


Material: steel



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.

Material: cast iron



_STRONG, RELIABLE, SUPERIOR

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.



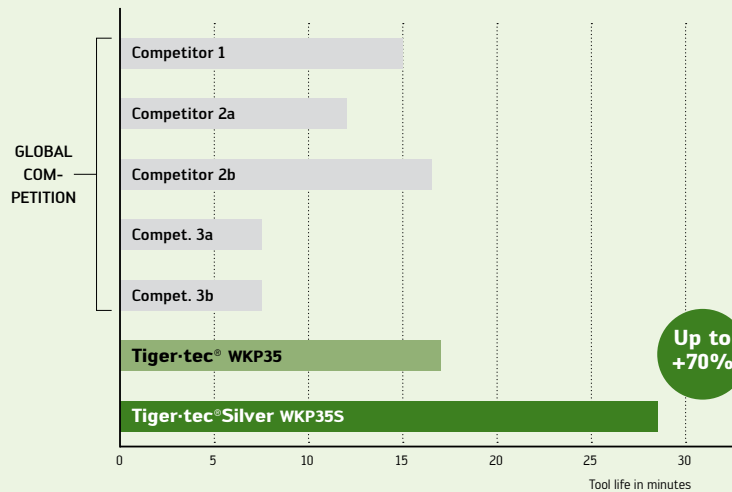
Tiger-tec® Silver

TIGER-TEC® SILVER IN COMPETITION: face milling

Workpiece material: 42CrMo4
Cutting tool material: WKP35S
Coolant: yes

Cutting data

v_c	260 m/min
f_z	0,5 mm
a_p	3 mm
a_e	50 mm

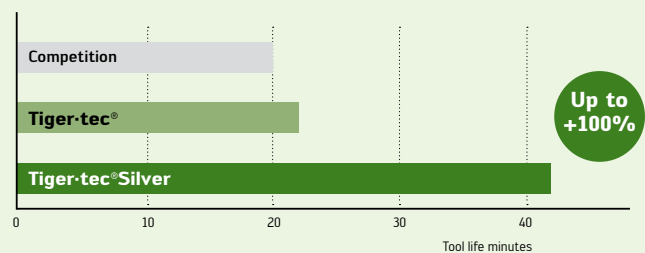


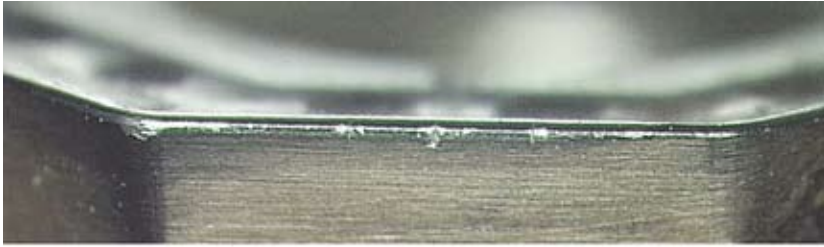
TOOL LIFE COMPARISON: BLADE MACHINING

Workpiece material: X22CrMoV12-1
Cutting tool material: WKP35S
Coolant: no

Cutting data

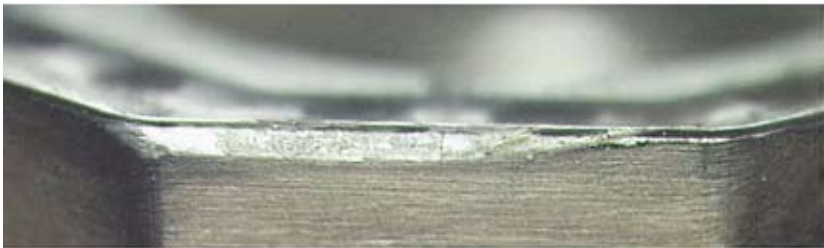
v_c	310 m/min
f_z	0,4 mm
a_p	3 mm
a_e	25 mm





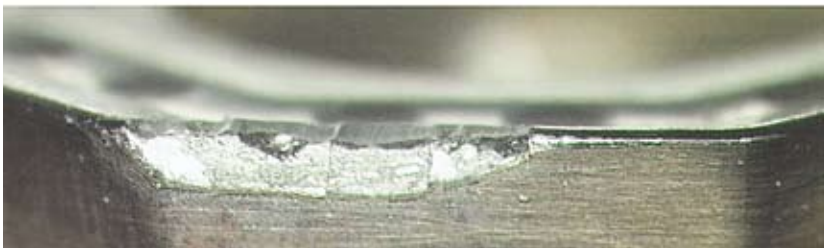
Tiger-tec® Silver

The high level of wear resistance, toughness and temperature resistance prevents the formation of hairline cracks and chipping. The insert lasts longer.



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.



COMPETITORS

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

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.

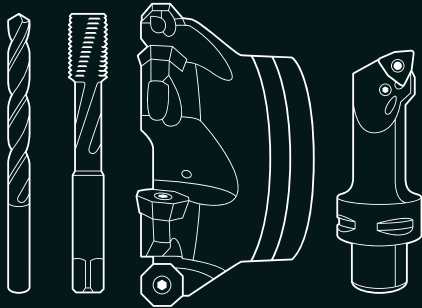
Conclusion: **With increases in output averaging 75%**, Tiger-tec® Silver from **Walter** is the new alpha leader among cutting tool materials.



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