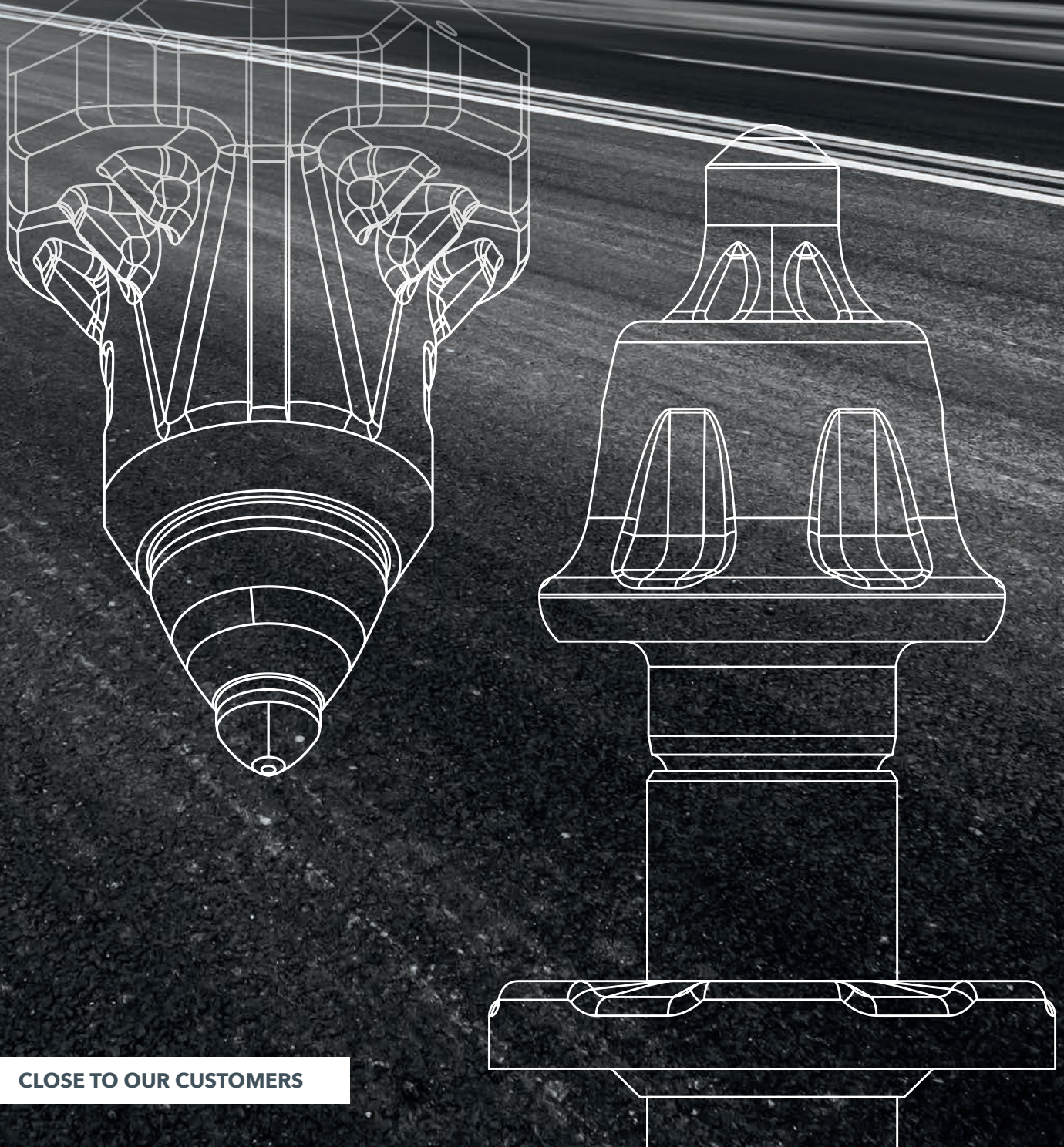




Original WIRTGEN
**CUTTING TOOLS FOR
COLD MILLING MACHINES**



CLOSE TO OUR CUSTOMERS

ORIGINAL WIRTGEN CUTTING TOOLS FOR COLD MILLING MACHINES

OPTIMAL CARBIDE UTILISATION,
LONG-TERM CUTTING CAPABILITY,
EXTREMELY LONG SERVICE LIFE





CUTTING TECHNOLOGY HAS ALWAYS TAKEN A TOP PRIORITY IN THE WIRTGEN GROUP. THAT IS WHY WE EMPHASISE CONSTANT OPTIMISATION DURING DEVELOPMENT AND PRODUCTION OF OUR KEY TECHNOLOGY, COLD MILLING MACHINES.

- > THE GENERATION X² IS THE ALL-ROUNDER AMONG THE ROUND-SHANK PICKS FOR COLD MILLING APPLICATIONS, AND IMPRESSES WITH OUTSTANDING PRODUCT FEATURES SUCH AS THE OPTIMISED WEAR PLATE WITH ITS UNIQUE GROOVED PROFILE.
- > WITH AN EXTREMELY WEAR RESISTANT POLY-CRYSTALLINE DIAMOND TIP, PCD MILLING TOOLS ARE THE IDEAL CHOICE FOR SURFACE LAYER REHABILITATION AND (MICRO) FINE MILLING. THEY ARE A PERFECT COMPLEMENT TO THE GENERATION X² ROUND-SHANK PICKS.
- > WITH AN OPTIMISED CLAMPING SLEEVE AND SHAFT GEOMETRY, GENERATION C² PICKS DELIVER PARTICULARLY IMPRESSIVE PERFORMANCE IN CHALLENGING APPLICATIONS LIKE MILLING CONCRETE.

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CUTTING TECHNOLOGY**



> parts.wirtgen-group.com/guide-wirtgen-cutting-tools-milling

> OPTIMISED
CARBIDE DISTRIBUTION

> SOLID
STEEL BODY GEOMETRY

> HEAVY DUTY
WEAR PLATE WITH
OPTIMISED GEOMETRY

> UNIQUE GROOVED PROFILE
WITH INNOVATIVE
CENTRING FUNCTION

> FIELD-PROVEN
WIRTGEN CLAMPING
SLEEVE



The universal cutting tools for cold milling **GENERATION X² PICKS**

GENERATION X² round-shank picks are distinguished by unique product properties that can above all significantly reduce operating costs.

The newly developed wear plate with a special grooved profile provides validated improvement of centring and pick rotation. This assures long-

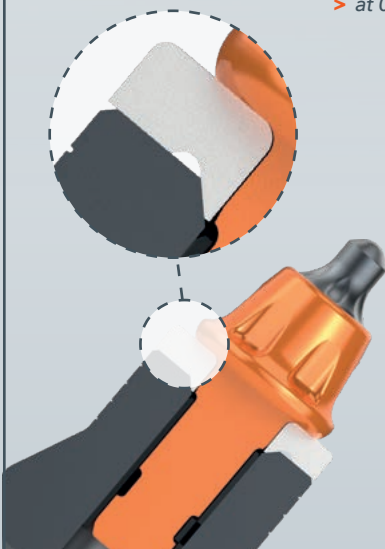
term cutting capability of the carbide tip and guarantees best possible carbide utilisation.

The grooved profile also reduces lengthwise wear of the toolholder and extends its service life by more than 25 %.

Self-forming of the toolholder centring profile over time through the use of **GENERATION X²** round-shank picks

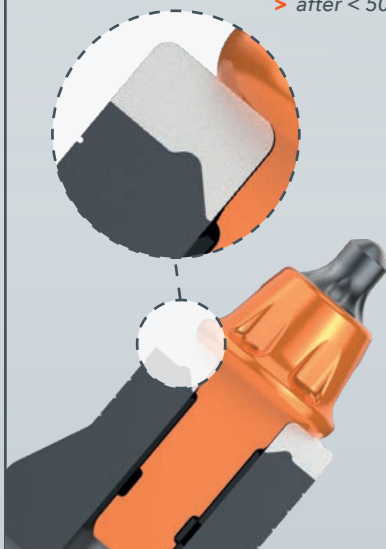
> W6/20X² with flat toolholder contact surface

> at 0 h



> W6/20X² with pronounced centring profile

> after < 50 h



> **GENERATION X²**: Carbide as a cutting material is the most economical solution, especially for the milling of non-homogeneous materials in which sudden impact load peaks can be expected. The universal **GENERATION X²** carbide round-shank picks are therefore the ideal solution for all applications - no matter whether the milling job involves soft asphalt, hard asphalt or concrete.



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Persuasive arguments:

LONG SERVICE-LIFE AND CUTTING CAPABILITY

PERSUASIVE PERFORMANCE

- > **Improved service life of the upper parts of toolholders by more than 25 %** due to the unique grooved profile on the underside of the wear plate of the **GENERATION X²** round-shank picks
- > **The enormous flexibility** of the intelligently engineered family of **GENERATION X²** round-shank picks fulfils the specific requirements of widely differing construction sites
- > **High operational reliability of the redesigned and modified carbide tip geometry** for the absorption of maximum loads while minimising the risk of carbide fracturing

> OPTIMISED CARBIDE DISTRIBUTION

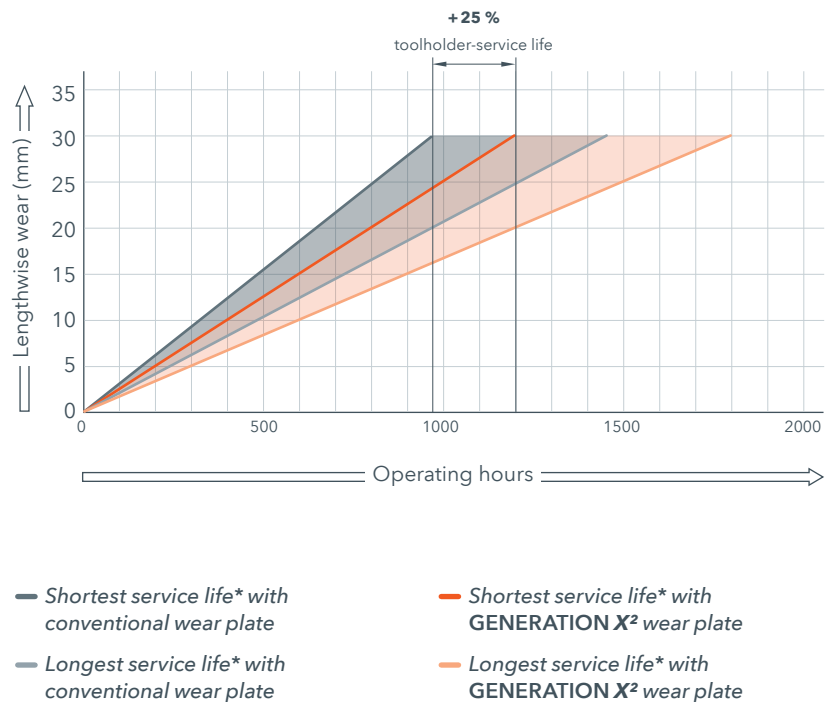
The carbide tips of **GENERATION X²** picks impress not only with better cutting performance, but also with even greater stability. Both of which significantly reduce the risk of breakage.

> SOLID STEEL BODY GEOMETRY

The geometry of the solid steel body improves chip removal and significantly increases the service life of the round-shank pick. The height of the head of the round-shank pick has been reduced to enable optimal use of the considerably thicker wear plate with its special grooved profile. In addition, the increased steel volume in the wear-critical range also guarantees significantly longer service life of the cutting tool.



Lengthwise wear of the toolholder



* The service life may vary depending on the machine type and application.

> HEAVY DUTY WEAR PLATE WITH OPTIMISED GEOMETRY

The heavy duty wear plate protects the toolholder against wear caused by abrasive milled material. What's more, the flat wear plate geometry promotes improved rotation of the **GENERATION X²** round-shank picks.

> UNIQUE GROOVED PROFILE WITH INNOVATIVE CENTRING FUNCTION

The special grooved profile with its innovative, improved centring function increases toolholder service life by more than 25 %. With **GENERATION X²** round-shank picks, a centring profile is worked into the pick contact surface of the toolholder within fewer than 50 hours in service. This means that the advantage of **GENERATION X²** can also come into play when using conventional toolholders.

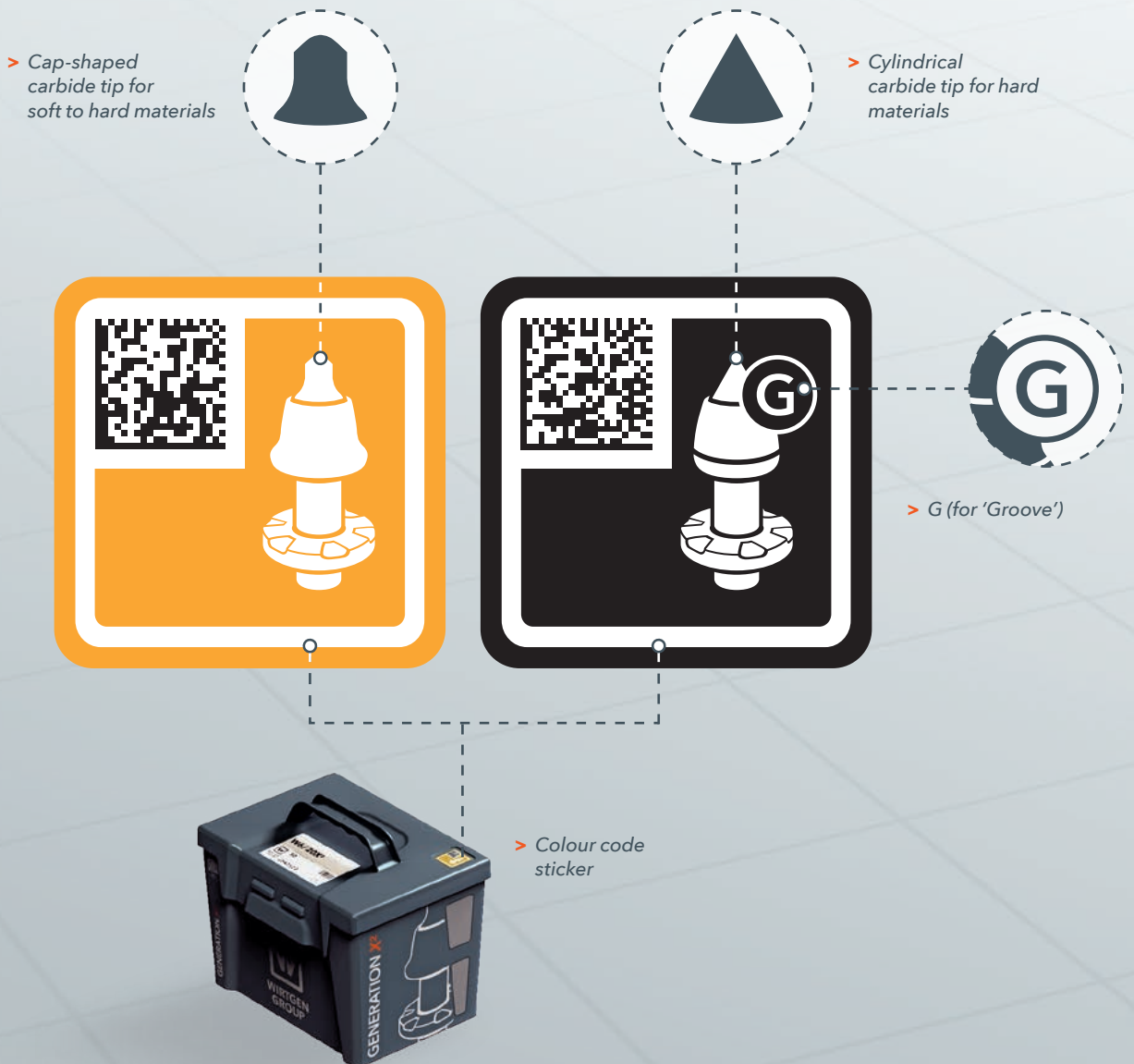
> FIELD-PROVEN WIRTGEN CLAMPING SLEEVE

The field-proven WIRTGEN clamping sleeve ensures tight, precise and long-term clamping of the round-shank pick in the toolholder.



PRACTICAL COLOUR-CODING

The practical **GENERATION X²** colour coding system makes finding the right pick for the job even quicker. The various carbide sizes are coded with different colours (e.g. W1-10-G... = black, W6... = orange etc.). The letter G (for 'Groove') displayed on the pick icon enables immediate identification of picks with an extractor groove.














RECOMMENDED USE

GENERATION X²:

THE UNIVERSAL ROUND-SHANK PICKS

WIRTTGEN



Material to be milled	Carbide size	Performance class, machine type		Small milling machines			Compact milling machines	Large milling machines
		Pick designation, order no.		0.35 m	0.5 m	1 m rear end		
		with extractor groove	without extractor groove					
Asphalt (cap-shaped carbide tips)	W4	 W4-G/20X² # 2642519		● ●	● ●	●	○	○
	W5	 W5-G/20X² # 2642520	 W5/20X² # 2642521	○	●	● ●	●	○
	W6	 W6-G/20X² # 2642522	 W6/20X² # 2642523	○	○	●	● ●	●
	W7	 W7-G/20X² # 2642530	 W7/20X² # 2642532	○	○	○	●	● ●
	W8	 W8-G/20X² # 2642535	 W8/20X² # 2642537	○	○	○	○	●
Concrete (cylindrical carbide tips)	W1	 W1-10-G/20X² # 2642516		● ●	● ●	● ●	● ●	●
		 W1-13-G/20X² # 2642517		○	○	○	○	● ●

● ● Highly recommended

● Recommended

○ Conditionally recommended

Table also applies for all 'i' version machines



PCD

MILLING TOOLS

IDEAL FOR
SURFACE COURSE REHABILITATION
AND (MICRO) FINE MILLING

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The specialist for surface course rehabilitation and (micro) fine milling

PCD MILLING TOOLS

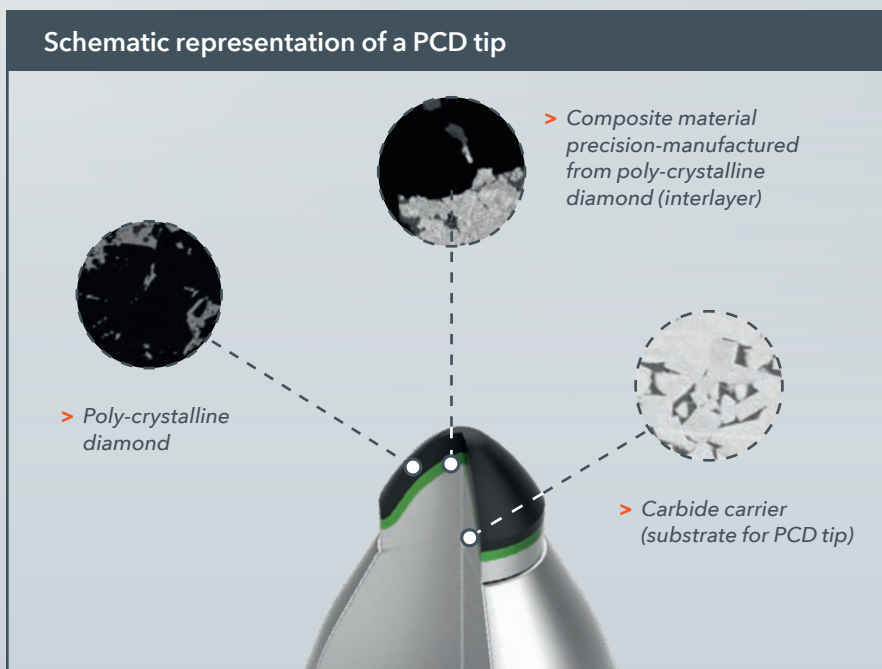
Thanks to the tool geometry and materials, PCD milling tools are the perfect choice for applications from surface course rehabilitation to (micro) fine milling.

They have a highly wear-resistant tool tip made of poly-crystalline diamond (PCD) with an extremely long service life.

The only slight incidence of length-wise wear leads to extreme evenness of the milled surface and a constantly high machine advance rate.

Depending on the application, PCD milling tools are a practical supplement to your existing programme of round-shank picks with conventional carbide tips.

Schematic representation of a PCD tip



> PCD milling tools: As a cutting material, poly-crystalline diamond (PCD) is the ideal solution for milling homogeneous asphalt packages in which no abrupt impact load peaks are to be expected. In particular, PCD milling tools are a cost-effective alternative for surface course rehabilitation to depths of up to 8 cm and in the area of (micro) fine milling of asphalt surfaces.



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Persuasive arguments:

PRODUCTIVITY AND EVENLY MILLED SURFACES

PERSUASIVE PERFORMANCE

- > **Uniform milling pattern** is maintained by significantly reduced longitudinal wear
- > **Increased machine productivity** thanks to no longer necessary or fewer tool changes and constantly high machine advance rate
- > **Lower operating costs** as a result of lower maintenance requirements
- > **Constantly high cutting capability** due to minimal wear of the tip geometry

> **EXTREMELY WEAR-RESISTANT PCD TIP**

The considerably reduced lengthwise wear of the PCD tip results in a consistent, even milling pattern throughout the tool's entire service life.

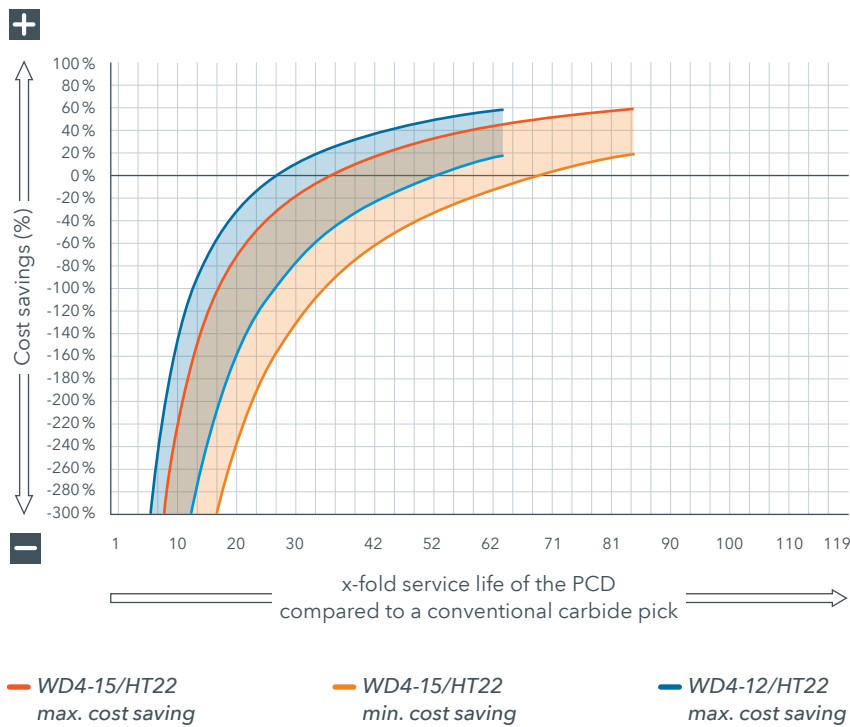
> **HIGH RESISTANCE OF THE TIP**

So called interlayers dampen impacts caused between the carbide carrier and the highly wear-resistant polycrystalline diamond contact surface during penetration and thus ensure the high resistance of the PCD tip.

> **HIGH PROPORTION OF CARBIDE**

The volume of the carbide substrate that acts as the base of the PCD tip is particularly large. This assures greater wear resistance and optimal utilisation of the polycrystalline diamond tip.

PCD performance evaluation



> Under consideration of all variables and, above all, the application, savings on the cost of tools of around 60 % per ton of material milled can be achieved. Here, only the potential tool costs and maintenance expenses are taken into consideration. Other potential cost savings such as reduced fuel consumption are not taken into account in this chart.

> SOLID CHIP-BREAKING WEB

The solid chip breaking web, which provides considerably longer protection of the carbide base against washouts, extends the potential service life of the tool.

> RELIABLE HT22 INTERFACE

The reliable HT22 interface guarantees low-maintenance and reliable utilisation of WIRTTGEN PCD milling tools.

> OPTIMISED STEEL BODY GEOMETRY

The optimised steel body geometry ensures better protection of the bottom part of the toolholder when milling in abrasive materials.

RECOMMENDED USE

PCD MILLING TOOLS AS AN IDEAL
COMPLEMENT TO GENERATION X²

Recommended cutting tools, dependent on material and milling drum

RECOMMENDED
MILLING DEPTHS
AT MILLING DRUM
LINE SPACINGS

LA 5 / LA 6
LA 8 / LA 10
LA 12 / LA 15 / LA 18

TYPICAL
CONSTRUCTION
OF AN ASPHALT ROAD

PCD TOOLS

CARBIDE
CUTTING
TOOLS



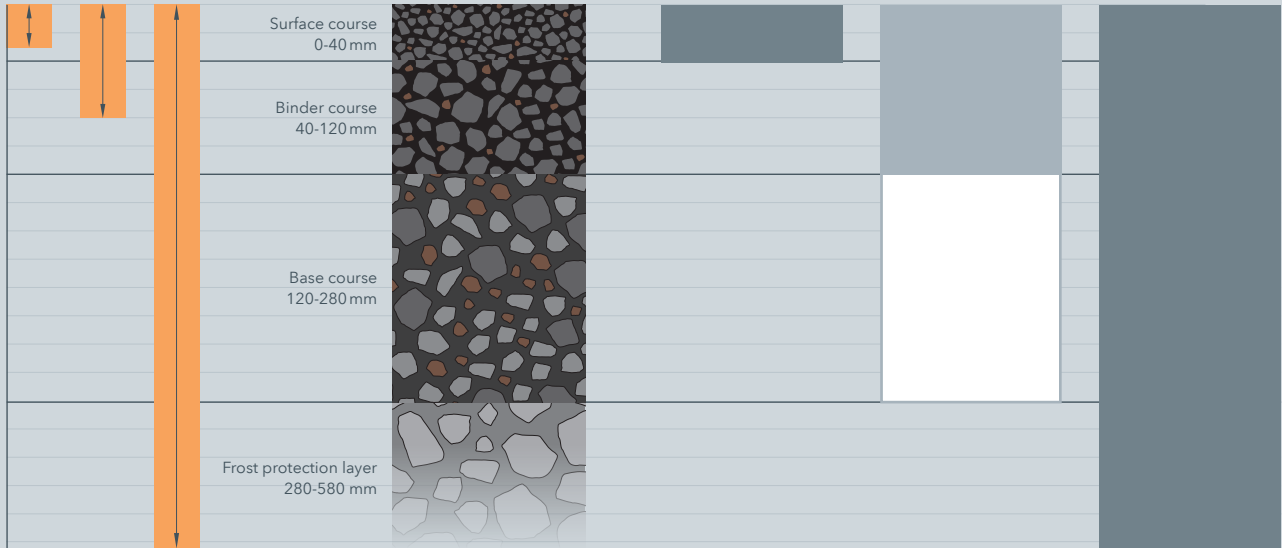
> WD4-12/HT22



> WD4-15/HT22





> GENERATION X²



> The decision whether to use carbide or PCD milling tools is dependent on the required surface texture and the generally expected milling depth. In the case of shallow milling depths, PCD milling tools are recommended for both wide and narrow line spacings (LA). PCD milling tools can achieve maximum efficiency, particularly in the case of narrow line spacings with shallow milling depths.

Highly recommended
 Recommended
 Conditionally recommended

OPTIMAL FOR SURFACE COURSE
REHABILITATION AND (MICRO) FINE MILLING

Material to be milled	Performance class, machine type	Compact milling machines + large milling machines						
	Tool designation Part no.	W 100 Fi, W 120 Fi, W 130 Fi, W 120 FTi, W 100 F, W 120 F, W 130 F, W 100 CF, W 120 CF, W 130 CF, W 150, W 150 CF, W 1500, W 1900, W 195, W 2000, W 200, W 200 F, W 207 Fi, W 205, W 200 H, W 215, W 210, W 210 Fi, W 210 XP, W 2100, W 220, W 2200, W 250, W 220 Fi, W 250 Fi, W 240 CR, W 380 CR						
		Milling drum line spacing (LA)						
HT22	LA5	LA6	LA8	LA10	LA12	LA15	LA18	
Asphalt	 WD4-12/HT22 # 2805803	● ●	● ●	● ●	● ●			
	 WD4-15/HT22 # 2788432	●	●	●	●	○	○	○

 *Highly recommended*
 *Recommended*
 *Conditionally recommended*

Table also applies for all 'i' version machines



GENERATION **C²** CUTTING TOOLS

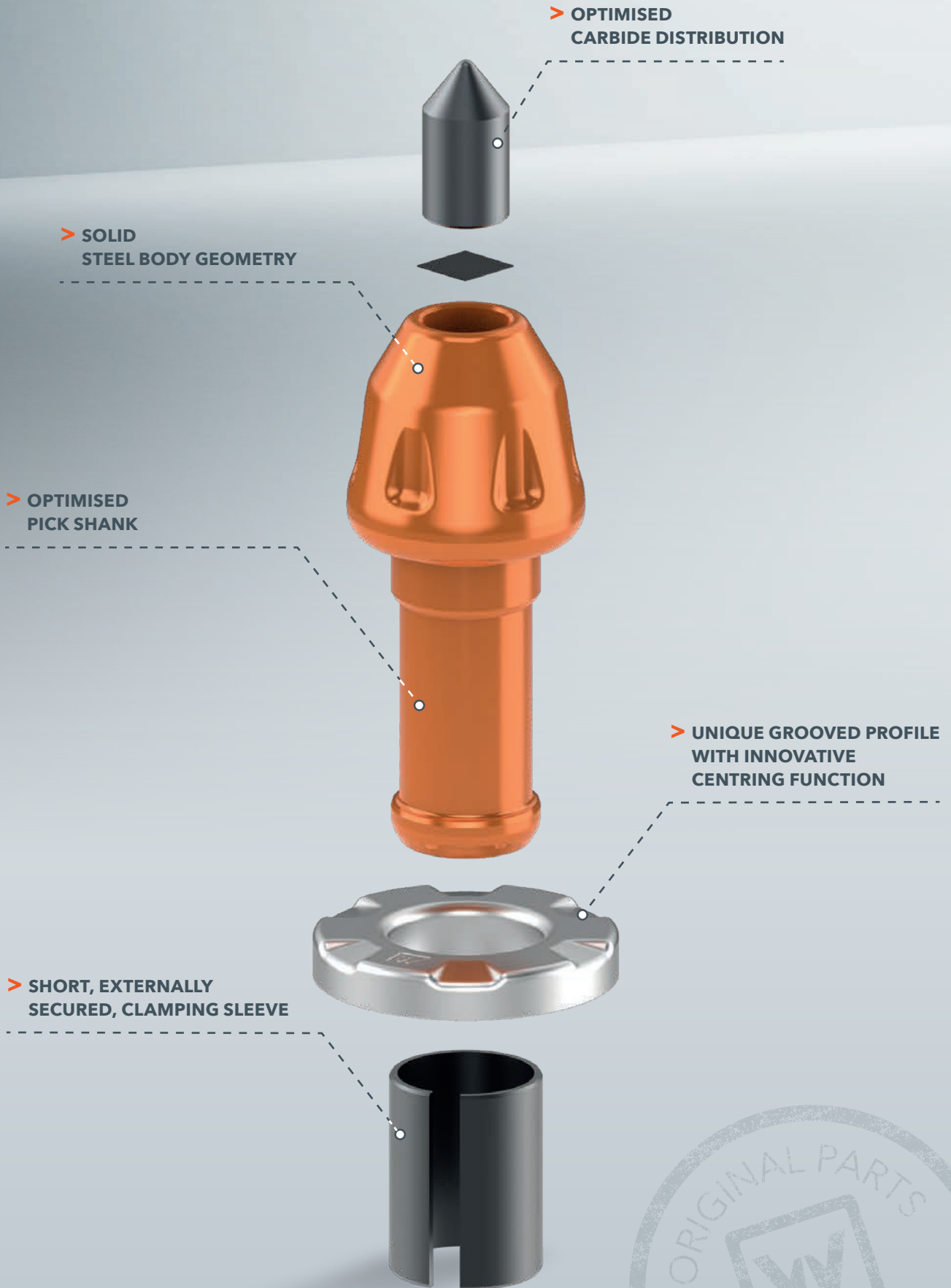
THE IDEAL AND UNIQUE
SOLUTION FOR MILLING CONCRETE



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The solution for milling concrete

GENERATION C² PICKS

GENERATION C² round-shank picks are specially designed for milling concrete and asphalt with ECO Cutter milling drums. In combination with the shortened clamping sleeve, the optimised pick shank ideally conducts the milling forces to the upper part of the toolholder and relieves the forces acting on the clamping sleeve. The shortened clamping sleeve secures the round-shank pick precisely and permanently in the toolholder. The revised shank geometry further increases resistance to fracturing,

All in all, **GENERATION C²** round-shank picks offer optimised carbide distribution with improved cutting performance and increased resistance to fracturing. The solid steel body geometry improves chip removal and extends their service life.

WEAR PLATE AND CLAMPING SLEEVE GEOMETRY

The unique grooved profile of the wear plate with its innovative centring function reduces wear and increases the service life of round-shank picks and toolholders.

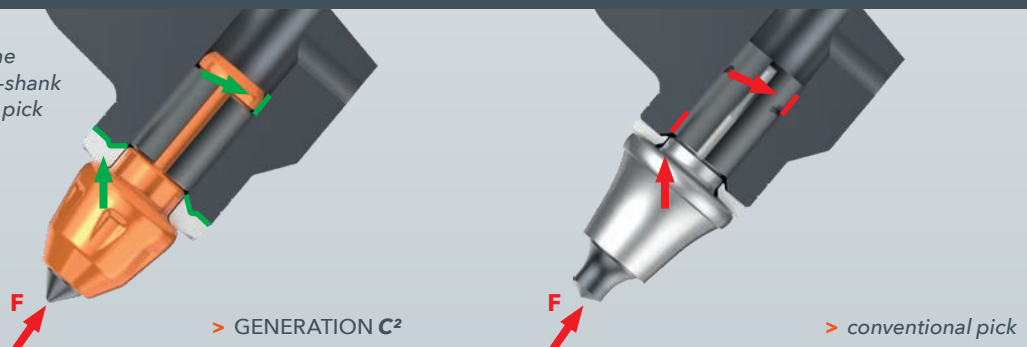
The wear plate has been reinforced and its shape has been optimised to offer maximum protection of the toolholder.

The new, short clamping sleeve geometry minimises mechanical loading on the clamping sleeve and assures optimal clamping force throughout the entire service life. The wear plate's geometry, with the grooved profile on the underside, is a characteristic feature of the **GENERATION C²** and enables positive locking of the pick in the toolholder.

The transmission of force from the pick into the upper part of the toolholder takes place via the WIRTGEN wear plate with the centring groove and the optimised pick shank with the shortened clamping sleeve. In contrast to the case with conventional picks, this reduces the load on the clamping sleeve and increase the service life. Thanks to the minimal play and ideal centring of the pick, this also increases the service life of the upper part of the toolholder.

Optimised pick centring and reduction of load on the clamping sleeve

> Comparison between the **GENERATION C²** round-shank pick and a conventional pick



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HT22 QUICK-CHANGE TOOLHOLDER SYSTEMS

UPPER PART HT22 PLUS

> More wear volume in the shoulder area ensures better protection of the bottom part of the toolholder when milling in abrasive materials for longer periods of time.*

> Less maintenance effort due to longer torque checking intervals for toolholder bolts (every 500 hours).



> In combination with **GENERATION X²** round-shank picks, the innovative centring recess in the pick contact surface assures maximum toolholder utilisation rates from the start (see chart below).*

> Long service life of upper part due to an extremely high wear distance.

> Optimised shank geometry (larger transition radii) and further improved heat treatment allow maximum loading.*

PERSUASIVE PERFORMANCE

- > Maximised cost/performance ratio thanks to ideally matched system components. The centring recess in the upper part of the **HT22 PLUS** stabilises the **GENERATION X²** round-shank pick in its optimum position and thus promotes rotary motion.
- > Improved operational reliability of the upper parts of toolholders due to a revised toolholder shank geometry and optimised heat treatment. This enables them to absorb enormous loads.
- > The greater wear volume in the shoulder section of the upper part of the toolholder maximise service life and ensures high machine utilisation rates. This modification helps to assure the best possible protection of the bottom part.



* Only available with the **HT22 PLUS** top part



MILLING DRUMS WITH THE HT22 QUICK-CHANGE TOOLHOLDER SYSTEM

> PCD milling tools



> Dummy HT22



> HT22 PLUS (ø 20 mm)



> W6/20X²



> W7-G/20X²



> W8/22Z²



> W1-17/22Z²



> W1-13/22C²



> HT22 PLUS HD (ø 22 mm)

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INNOVATIVE, ERGONOMICALLY DESIGNED TOOLBOX

> Label with item designation, part number and number of tools contained.

> Ergonomic handle for improved carrying comfort.



> QR code safety instructions are available online and can be accessed at any time from a mobile device.

> Ergonomically designed flap for easier opening of the toolbox.


The stylish toolbox impresses with considerably improved carrying comfort. Its ergonomically designed handle enables it to be carried comfortably over longer distances. Other convenient features: while the colour-coded sticker enables quicker selection of the right picks, the side window provides a clear view of exactly what's inside.



> Colour-coded stickers make it easier to select the right picks for a specific application and the machine type being used for the job.

> The window in the side of the box makes it easier to see exactly what's inside.



A close-up, profile view of a man with a goatee, wearing a high-visibility yellow safety jacket with reflective silver stripes. He is looking down and to the right, focused on his work. The background is blurred, showing industrial machinery and a blue sky.

**IN THE DEVELOPMENT OF
WIRTGEN GROUP ORIGINAL SPARE PARTS,
WE DRAW ON DECADES OF REAL-WORLD
EXPERIENCE FROM CONSTRUCTION SITES
AROUND THE GLOBE.**

They are perfectly tailored to the requirements of our high-performance machines and enable them to deliver the efficiency and productivity you need.

With WIRTGEN GROUP original spare parts, you can always be certain that you are doing the best for your fleet. Even short machine downtimes cost you time and money. Put your trust in what only genuine spare parts produced using state-of-the-art manufacturing processes can offer you - top quality for maximum reliability and a long service life.



WIRTGEN GROUP original spare parts **ONLY THE ORIGINAL PARTS WILL FULFIL YOUR EXPECTATIONS.**

PROMPT DELIVERY

Our local service specialists provide in-depth advice during the purchasing process and ensure that your order is processed smoothly and quickly. Thanks to our well-stocked worldwide spare parts warehouses and our sophisticated logistics system, we will immediately and reliably deliver the genuine part or parts you need anywhere in the world, even in the event of longer import times. The reliable WIRTGEN GROUP spare parts service will even reach you at the most remote construction sites.

WIRTGEN GROUP original spare parts - maximum reliability, long service life and rapid availability.

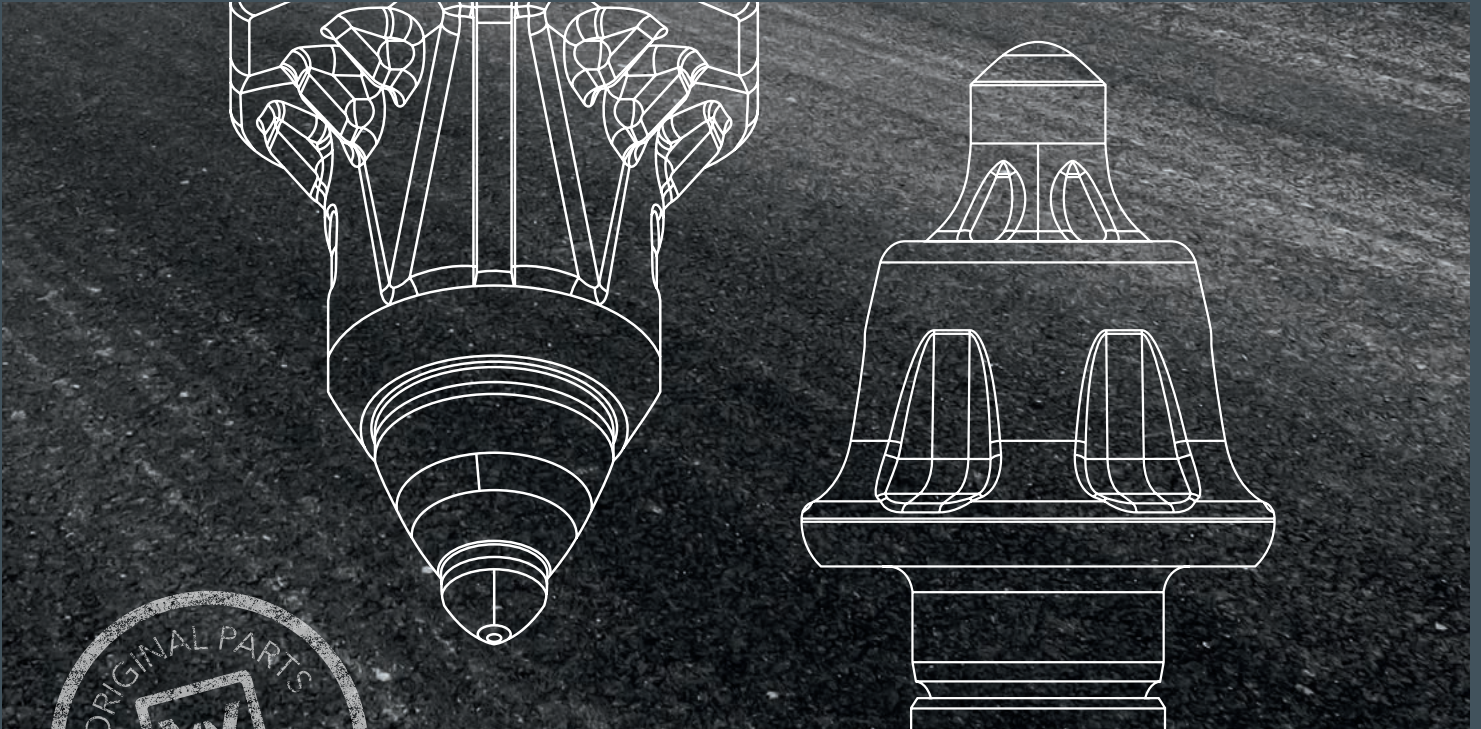
YOUR BENEFITS

- > *HIGHEST QUALITY: For a long machine life*
- > *IDEAL AVAILABILITY: Rapid delivery thanks to high storage capacities and the very latest logistics*
- > *EXPERT ADVICE: Service specialists with sound technical knowledge*
- > *FIRST-CLASS SUPPORT: Fast, reliable order processing*
- > *IDEALLY SORTED: Extensive, thematically coordinated service and maintenance packages*





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