



BETEK TUNGSTEN CARBIDE TOOLS





CONTENT

WEAR PARTS FOR VSI CRUSHERS	10
WEAR PARTS FOR ROLL CRUSHERS & SIZERS	14
WEAR PARTS FOR HAMMER CRUSHERS	18
WEAR PARTS FOR MIXERS & VIBRATING TABLES	20



TUNGSTEN CARBIDE AND STEEL

Steel and carbide are two materials with totally different expansion coefficients when subjected to heat. Nevertheless, it is of steel and tungsten carbide that our tools are made, with tungsten carbide for the wear-resistant tip, and steel for the tool shank. Since tools reach high temperatures during use, extreme tensile stresses are generated. These stresses are absorbed by a special brazing material that joins the tungsten carbide tip to the steel section.

We have developed our own methods and systems for this brazing process, which is carried out on fully automated machines with the process covered in an inert protective gas. Manufacturing parameters are fully monitored and documented to ensure consistent quality. Afterwards, brazing shear strengths are checked to ensure that our "Masters of the construction site" lose no time due to broken tools!





BETEK HIGH-TECH TOOLS









CUSTOMER

SERVICE

• Efficient, customised

solutions based on

flexible structures

Personalised, quick

requirements

response to customer

DEVELOPMENT & CONSTRUCTION

- Ouick creation of samples and prototypes
- Competitive pricing thanks to close cooperation with all production units

TUNGSTEN CARBIDE **MANUFACTURING**

- High-purity raw materials are used for high strength
- Consistently high, pore-free tungsten carbide quality through precise process control thanks to years of experience and know-how

SOLDERING **PRODUCTION UNIT**

Production facilities and processes specially developed to perfection by experts in the combination of tungsten carbide and steel

















AUTOMATION

Maintaining a competitive edge on the global market thanks to a high degree of automation and flexible manufacturing facilities

QUALITY ASSURANCE

Continuous quality testing of the entire manufacturing chain all the way up to the installation site, in conformity with DIN ISO 9001:2000 and DIN EN ISO 14001

TRAINING

User training courses at BETEK or on-site for sustainable, long-term commercial success and customer satisfaction

LOGISTICS

Quick responses thanks to:

- the use of the very latest IT and enhanced logistics networking
- Standard products kept in stock

OUR KNOW-HOW COMBINED WITH STATE-OF-THE-ART PRODUCTION TECHNOLOGIES GUARANTEES THE FINEST QUALITY, MADE IN GERMANY

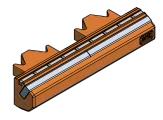


> SANDVIK

BETEK's tungsten carbide wear parts have been specifically developed for your VSI crusher. Optimized design techniques, together with brazed bonds between our tungsten carbide and the steel body result in a tremendous productivity gain as the parts last much longer than conventional ones.



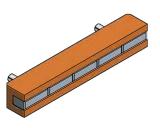
BBM95BBM 110x70x55
ROTOR TIP 110 MM



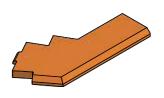
BBM282BBM 220x70x49
ROTOR TIP 220 MM



BBM250BBM 220x50x12
TRAIL PLATE 220 MM



BBM251BBM 128x20x20
BACK-UP TIP



. BBM278BBM 350x171x20
WEAR PLATE LOWER



BBM 360x181x20
WEAR PLATE UPPER



ROTOR TIPS

Betek tungsten carbide rotor tips are engineered specifically for each type of VSI-crusher and protect the rotor edges against wear.

> METSO | BARMAC



BBM160BBM 105x103x55A
ROTOR TIP



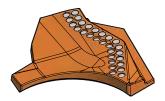
BFZ123BFZ 155x102x17
ROTOR TIP



BBM 176
BBM 192x70x23
BACK-UP TIPS LONG AND SHORT



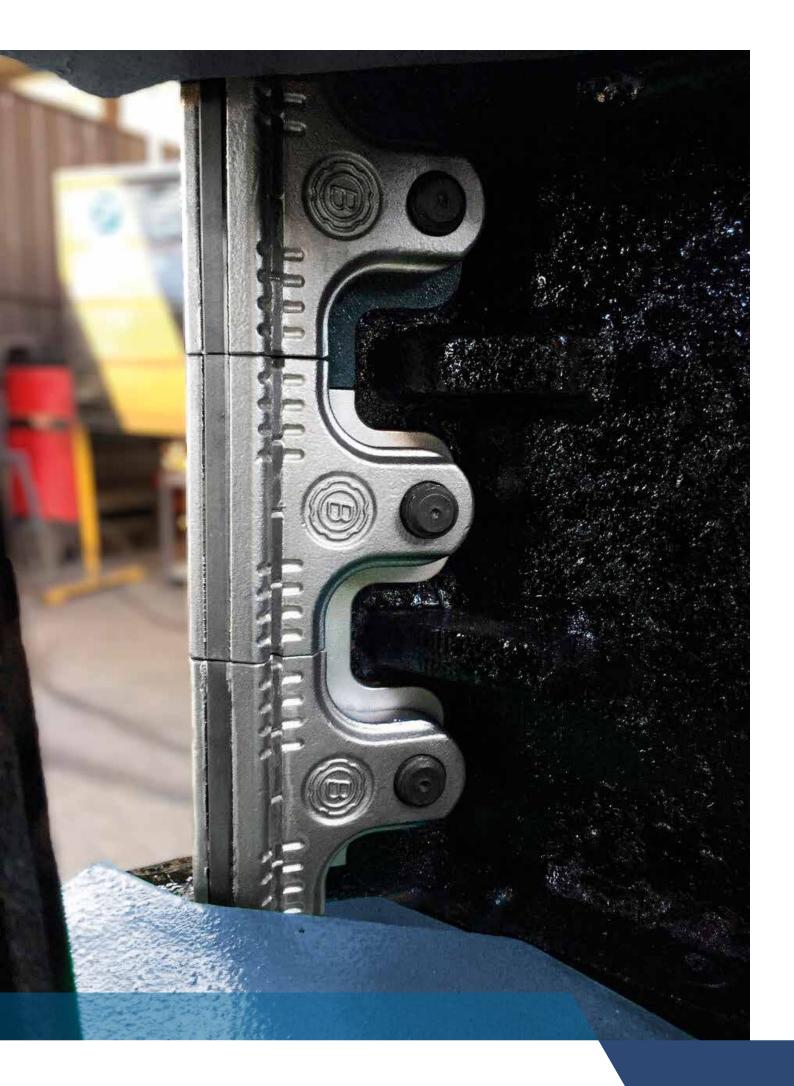
BBM183
BBM 104x97x37
CAVITY WEAR PLATES
OUTER AND MIDDLE



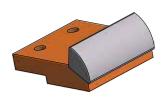
BBM253BBM 303x273x36
WEAR PLATES UPPER
AND LOWER



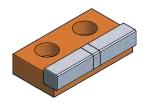
BBM275BBM 300x98
DISTRIBUTOR PLATE
HEAVY CONE



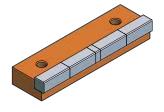
> SBM | MFL



BBM339BBM 125x107x59
ROTOR TIP



BBM314BBM 115x65x30
BACK-UP TIP



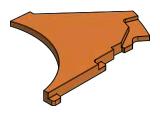
BBM315
BBM 220x65x35
TRAIL PLATE



BBM259
BBM 429x143
DISTRIBUTOR CONE



BBM260 BBM 434x343x35 WEAR PLATE UPPER



BBM261BBM 434x343x35
WEAR PLATE LOWER

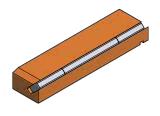
> OTHERS



■ **BBM99**BBM 224x78x38
KPI-JCI



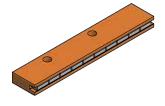
■ **BBM150**BBM 157x78x38
KPI-JCI



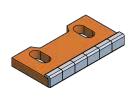
BBM221
BBM 214x50x30
TEREX CEDARAPIDS



• BBM305 BBM 300x100x40 AUSPACTOR AND ORESIZER



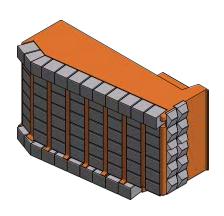
BBM215
BBM 265x50x20
AUSPACTOR



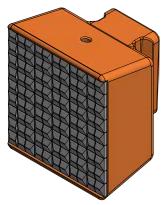
BBM64BBM 102x53x13
JÄCKERING

> OPEN ROTORS

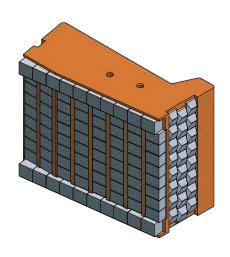
BETEK's impeller shoes for open VSI rotors equipped with tungsten carbide are a premium alternative to standard high-chrome or ceramic steel impellers.



BBM170
BBM 300x180x200
MAGOTTEAUX



BBM 316
BBM 277x250x199
MAGOTTEAUX



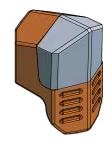
BBM239BBM 309x240x176
ISC



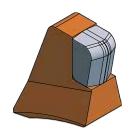
WEAR PARTS FOR ROLL CRUSHERS AND SIZERS

> WELDING TEETH

BETEK's tungsten carbide weld-on teeth for roll crushers are used to crush various minerals. The long-lasting, sharp cutting edges guarantee consistently high productivity for your crushing needs.



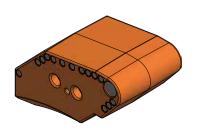
BBM79BBM 88x50x62



BBM292BBM 116X97X45



BBM274BBM 109X64X50



BBM293BBM 248X165X146



BBM177BBM 101x60x50



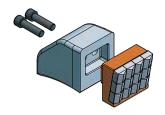
BBM75BBM 25x50

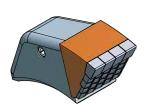
CRUSHER TEETH

Betek's crushing tooth has proven itself to be very efficient in various applications, including the crushing of limestone, coal and various types of ore. In order to ensure optimum results, the teeth can be fitted to suit any particular application and machine.



> QUICK-CHANGE SYSTEMS







E2699BBM 203x108x150

E2622BBM 345x140x130

BHS62 + BFS142BBM 150x40x110



WEAR PARTS FOR ROLL CRUSHERS AND SIZERS

> ROUND SHANK CUTTER BITS

BETEK's round shank cutter bits come with additional tungsten carbide (WSC) hard facing. In highly abrasive applications, our premium hardfacing of the steel body guarantees much better performance over ferrochromium (FeCr) hardfacing.



. BSR331 BG38SW-25.7077 WITH HARD FACING



BSR331 + BHR257BG38SW-25.7077 + B38.7845
HOLDER SYSTEM



. BSR218 BG52W-22.70122P WITH HARD FACING



BGB66 B47GK100LK71/2



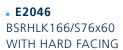
BKF10 BS38F-25.7077



BSR435BG38S-22.8358P
WITH HARD FACING

> ROUND SHANK CUTTER BITS







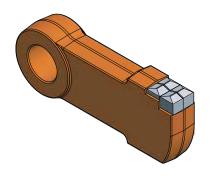
BSR367 BS76X-D70.160150

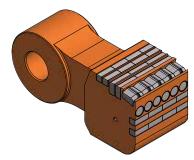


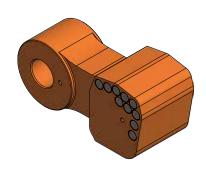
WEAR PARTS FOR HAMMER CRUSHERS

> TUNGSTEN CARBIDE HAMMERS

BETEK's tungsten carbide hammer heads are the perfect solution for your hammer crusher. Middle hard rock, as well as different kind of ores can be crushed without any wear problems



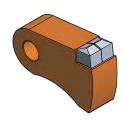




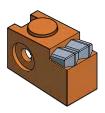
E3677BBM 335x125x59

BBM197BBM 495x210x200

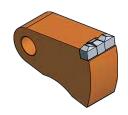
BBM198BBM 505x230x200



E3417BBM 157x101x48



E3967BBM 120x87x172



E3418BBM 221x142x78

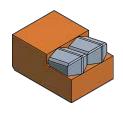


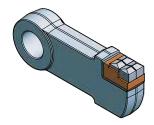
HAMMER HEADS

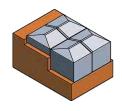
Tungsten carbide gives our hammer heads the ability to keep their original edge for an extended period of time, therefore improving crushing capacity.

> QUICK-CHANGE SYSTEMS

Tungsten carbide keeps the cutting edges in original condition and is prevents the hammer head from rounding off. The result is improved crushing productivity and profitability.







E3822BBM 120x85x88

E3636 + E3637BBM 335x125x59

E3637BBM 75x50x47

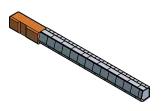




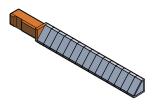


WEAR PARTS FOR MIXERS AND VIBRATING TABLES

> MIXERS



BBM44BBM 585x44x44/OL
MIXING ARMS



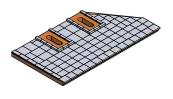
BBM73
BBM 585x54x54
MIXING ARMS



BBM 577x43x39/CL MIXING ARMS



BBM45
BBM d=40x585
MIXING ARMS



E2454BBM 450x252x22
WALL SCRAPERS

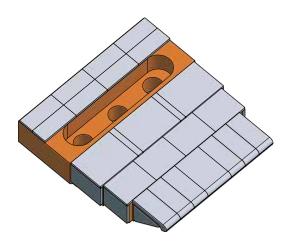


MIXING ARMS

This tool is used as a blunger in batch mixing units and is protected against wear by Betek tungsten carbide.

WEAR PARTS FOR MIXERS AND VIBRATING TABLES

> MIXERS



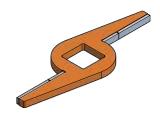
BFS 160x140x40
WEAR PADDLE



E3520BBM 375x100x24
MIXER BLADE



BFS415 197-15 / S-C-H MIXER BLADE



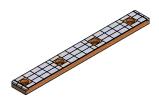
BBM30
BBM 150x50x6
MIXER PADDLE

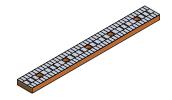
MIXER PADDLE

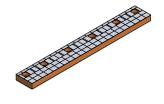
Betek's mixer paddles are successfully used in mobile asphalt mixing plants.



> VIBRATION BARS



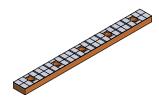




BBM70BBM 525x60x20

BBM111BBM 850x100x30

BBM112BBM 740x100x30





BBM113BBM 740x70x30

BBM80BBM 1378x112x30



MIXER BLADE

Our tungsten carbide equipped mixer blade is ideally suited for mixing and crushing very abrasive materials, such as quartz sand or ceramic raw materials.



WEAR PADDLE

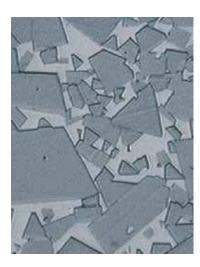
Betek tungsten carbide protects the paddle against wear caused by abrasive material.

TUNGSTEN CARBIDE IS NOT JUST TUNGSTEN CARBIDE

High levels of hardness in combination with optimum durability and aligned to the specific purpose ensure the tools have exceptional life time.

Since best quality comes first at BETEK, we only use the highest quality and purest raw materials.

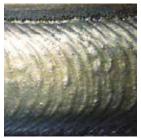






FLEXIBLE WEAR PROTECTION

> BeCoat® HARDFACING TYPES



FeCr hardfacing



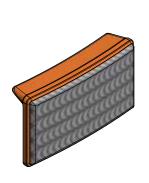
NiCr + FTC hardfacing



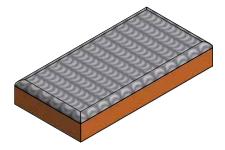
TC grit hardfacing

> BeCoat® ADVANTAGES

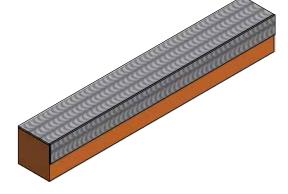
- Cost reduction due to less downtime
- Coating thickness ≤ 6mm
- Evenly distributed fused tungsten carbide (FTC) and low dilution
- Engineering and consulting
- Proven to withstand even the harshest environments



BA73BA 72x40x17



BBM386BBM 100x50x16



BBM391BBM 180x26x26

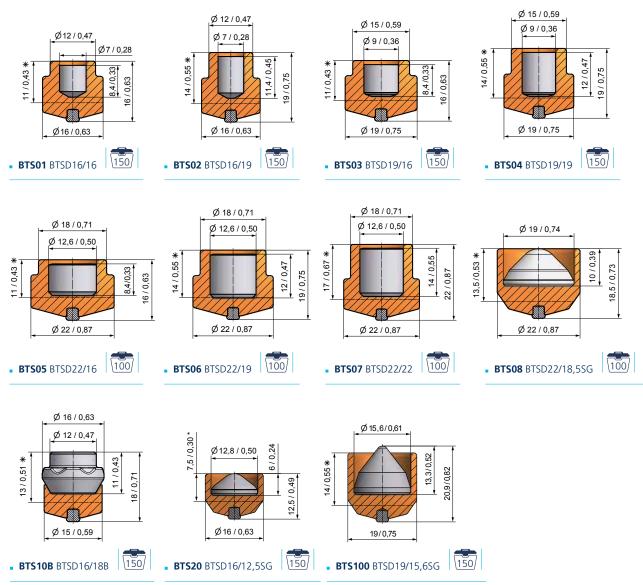


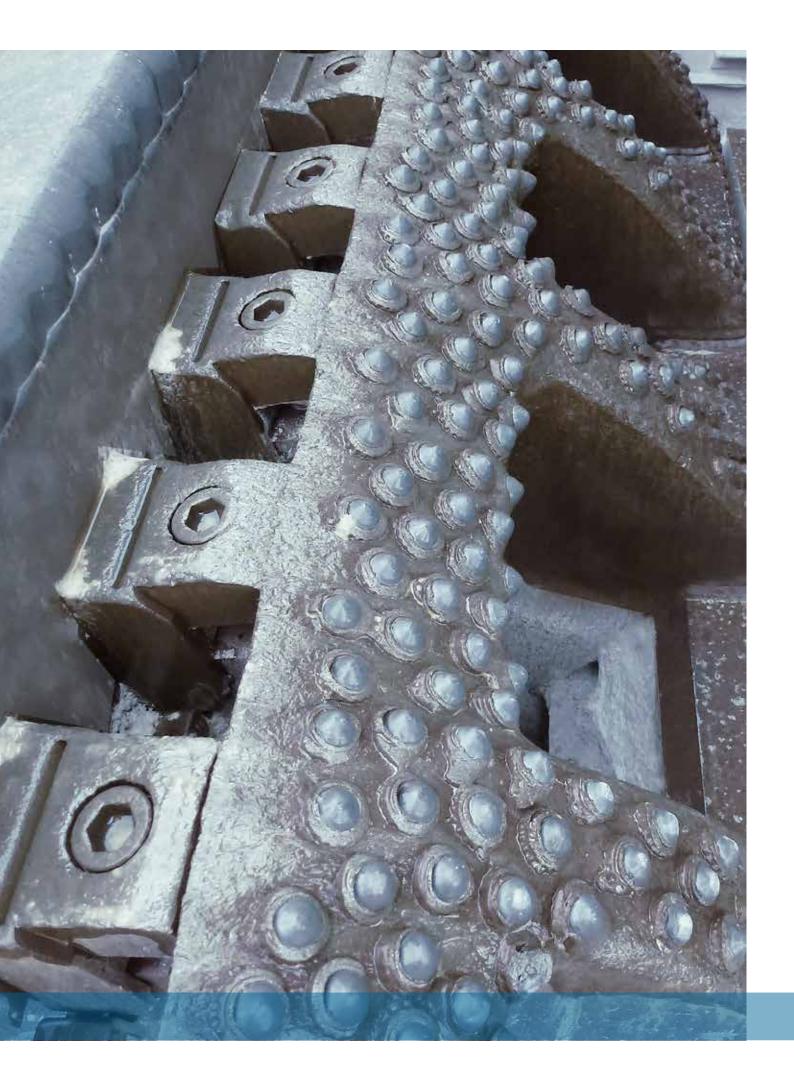
EXTENSIVE WEAR PROTECTION



> OVERVIEW

Betek can provide the appropriate stud welding machine for the TungStuds wear protection system.







YOUR INQUIRY

For your inquiry we need some additional information. Please send us the following data together with your inquiry to the contacs below, or give us a call.

> CRUSHING - YOUR DATA

- Machine
- Crusher type
- Application
- Feeding material
- Feeding material size
- Crushing tons per hour

Please send your request for quotation to info@betek.de call us: +49 (0)7422-565-7025







> MIXING - YOUR DATA

- Mixing machine
- Mixer type
- Capacity
- Application/ industry (e.g. concrete mixing,...)
- Feeding material size
- Wet/ dry operation/ additives
- Time per mixing cycle

Please send your request for quotation to info@betek.de call us: +49 (0)7422-565-7025













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·> BETEK



SURFACE TECHNOLOGIES

- ROAD MILLING
- SURFACE MINING
- STABILISING
- FOUNDATION DRILLING
- MINING
- TRENCHLESS
- TRENCHING
- TUNGSTUDS
- DRUM CUTTERS

UNDERGROUND TECHNOLOGIES



ENVIRONMENTAL TECHNOLOGIES

- AGRICULTURE
- GRADER TOOLS
- FORESTRY & RECYCLING



INDUSTRIAL TECHNOLOGIES

- CRUSHING & MIXING
- TUNGSTEN CARBIDE
- RAIL TRACK CONSTRUCTION
- INDUSTRIAL SOLUTIONS

Service number +49 (0) 7422. 565-0

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