



MADE IN GERMANY



UNDERGROUND TECHNOLOGIES

MINING





UNDERGROUND
TECHNOLOGIES

- FOUNDATION DRILLING
- MINING
- TRENCHLESS
- TRENCHING
- TUNGSTUDS
- DRUM CUTTERS

IN USE WORLDWIDE



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



1 CUSTOMER SERVICE

- Efficient, customised solutions based on flexible structures
- Personalised, quick response to customer requirements

2 DEVELOPMENT & CONSTRUCTION

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

3 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

4 SOLDERING PRODUCTION UNIT

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

5 AUTOMATION

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

6 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

7 TRAINING

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

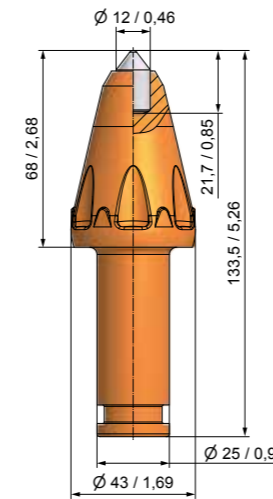
8 LOGISTICS

- Quick responses thanks to:
- the use of the very latest IT and enhanced logistics networking
 - Standard products kept in stock

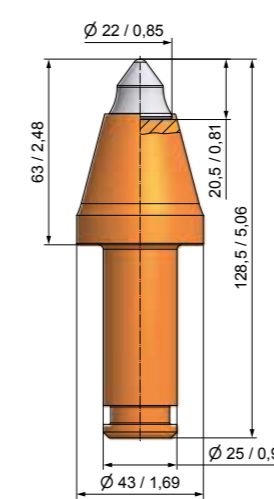
OUR KNOW-HOW COMBINED WITH STATE-OF-THE-ART PRODUCTION TECHNOLOGIES GUARANTEES THE FINEST QUALITY, MADE IN GERMANY

ROUND SHANK CUTTER BITS

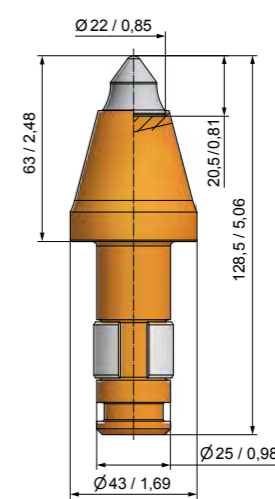
SHANK SYSTEM – Ø 25 MM/1"



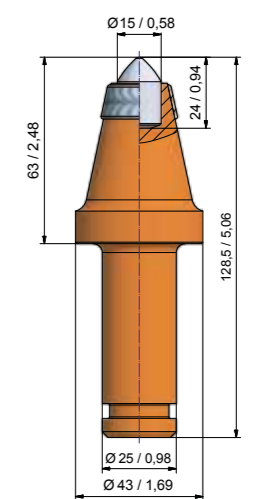
• **BTK140**
BG25P-12.4368



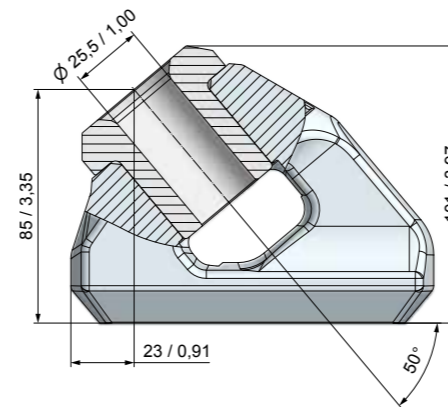
• **BTK107**
BG25P-74.4363



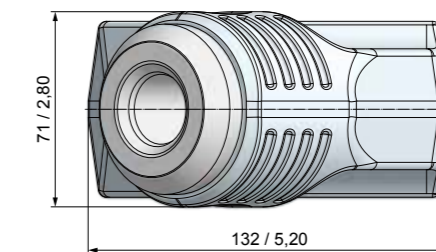
• **BTK107-DUAL**
BG25HP-74.4363



• **BTK138P**
BG25P-15.4363P



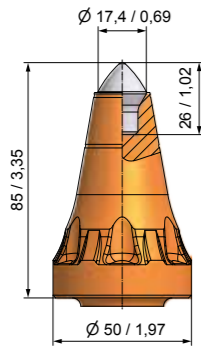
• **BHR185**
B132-101-B



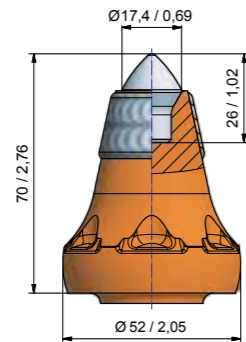
ROUND SHANK CUTTER BITS



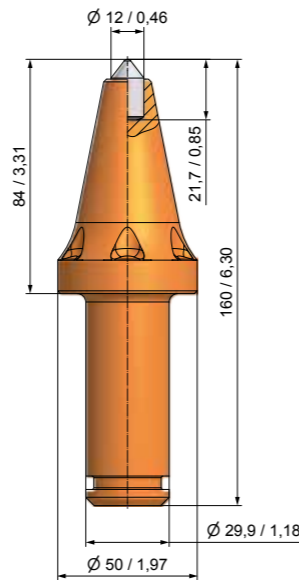
> SHANK SYSTEM – Ø 30 MM/1,18"



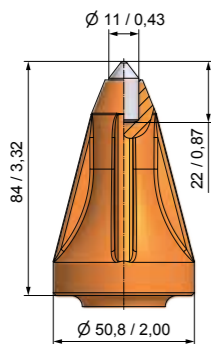
• **BGF27**
BG30P-70.5085



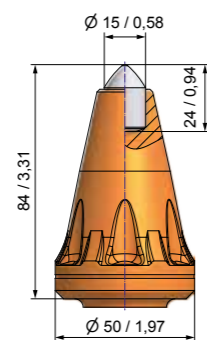
• **BGF28P**
BG30P-70.5070P



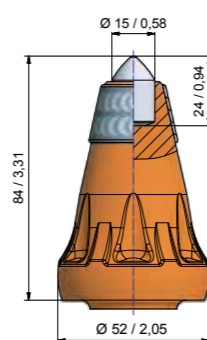
• **BGF21**
BG30P-12.5284A



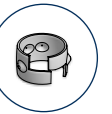
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BG30P-11.5184F



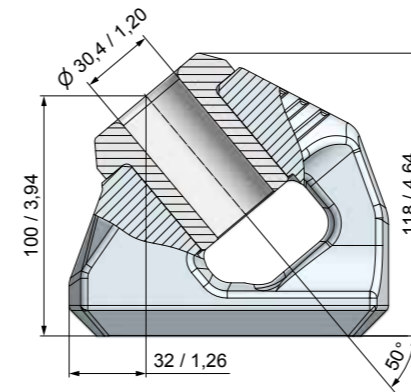
• **BGF29**
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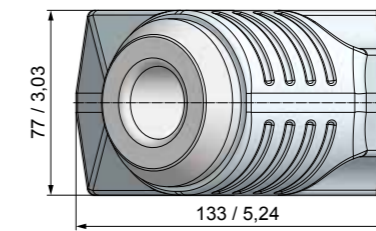
• **BGF29P**
BG30P-15.5284P



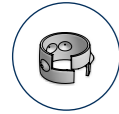
> SHANK SYSTEM – Ø 30 MM/1,18"



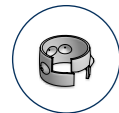
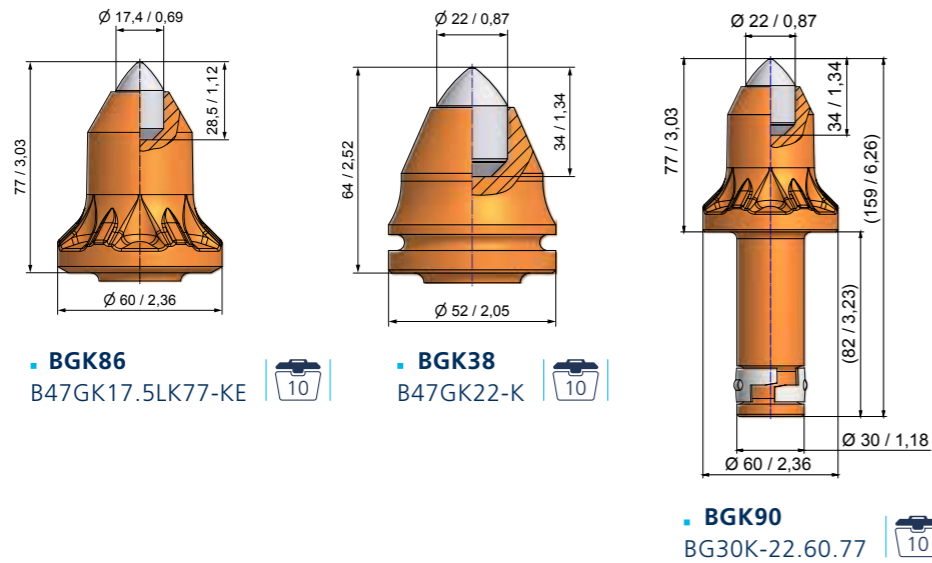
• **BHR183**
B133-118-B



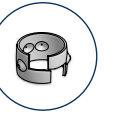
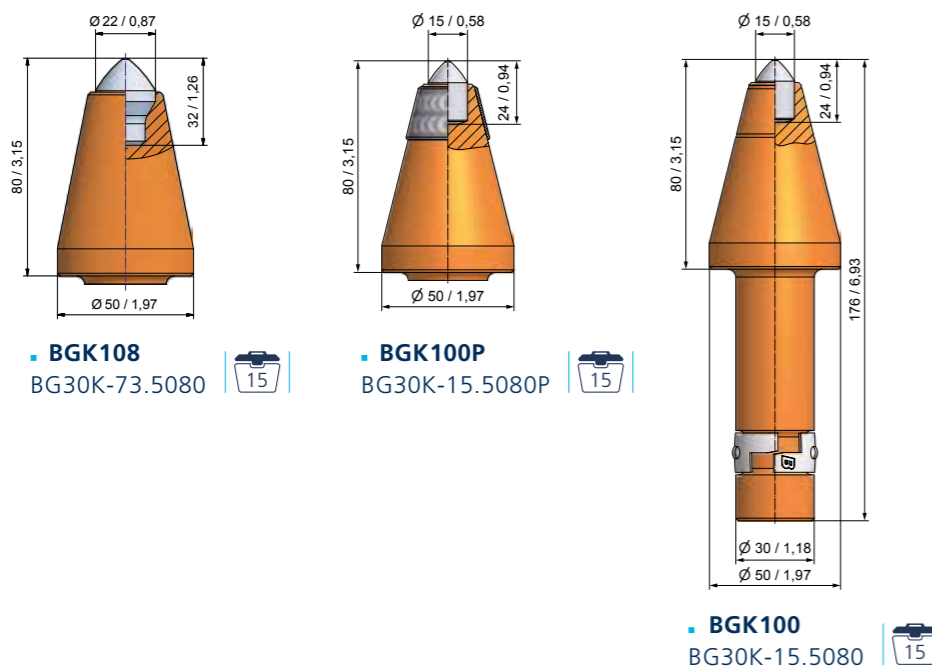
ROUND SHANK CUTTER BITS



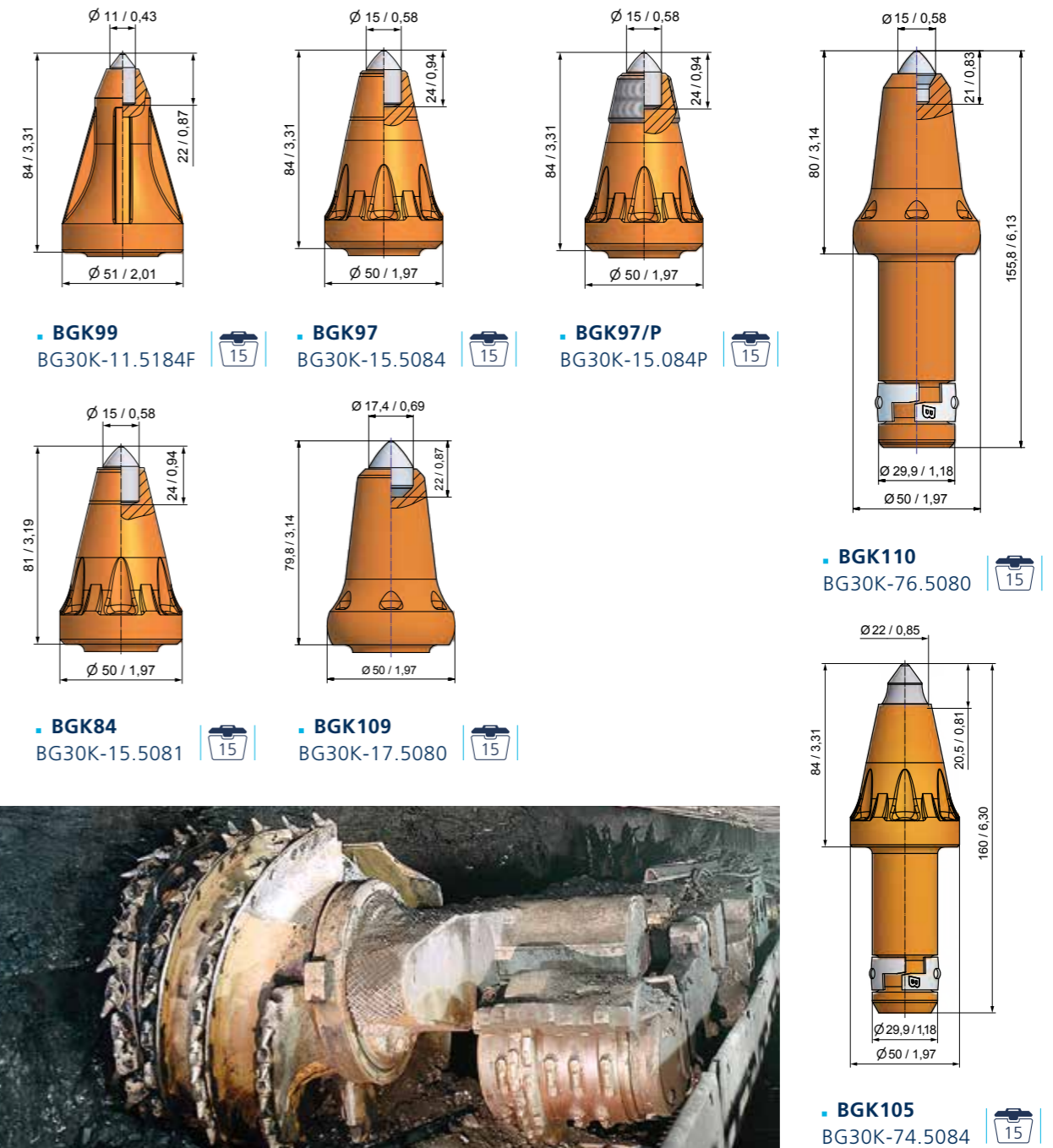
▶ SHANK SYSTEM – Ø 30 MM/1,18" SHANK 82MM/3,2"



▶ SHANK SYSTEM – Ø 30 MM/1,18" SHANK 96MM/38"



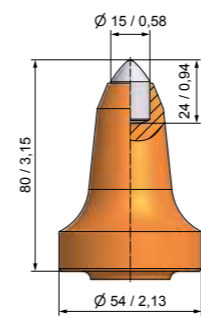
▶ SHANK SYSTEM – Ø 30 MM/1,18" SHANK 76MM/3"



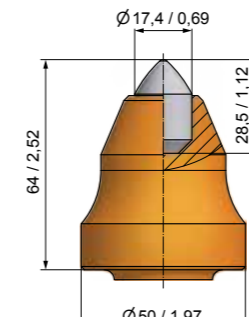


ROUND SHANK CUTTER BITS

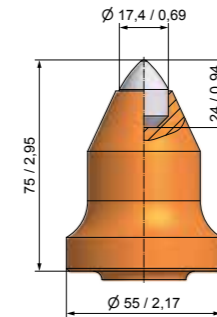
> SHANK SYSTEM – Ø 30 MM/1,18"



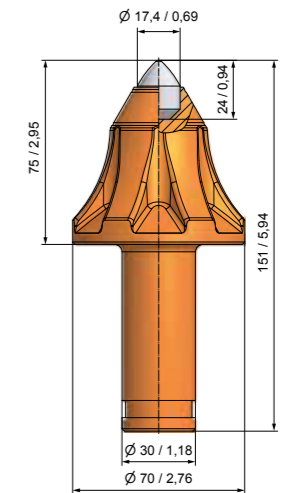
• **BGS95**
B47GK15LK80



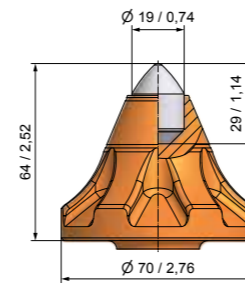
• **BGS17**
B47GK17.5



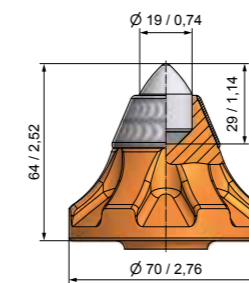
• **BGS80**
B47GK17.5LK75



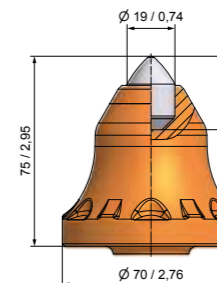
• **BGS89**
B47GK17.52K75-E



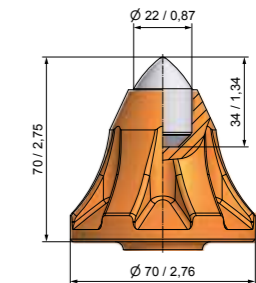
• **BGS88**
B47GK19/70-E



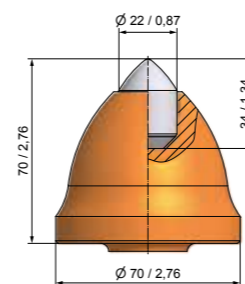
• **BGS84P**
B47GK19/70-P



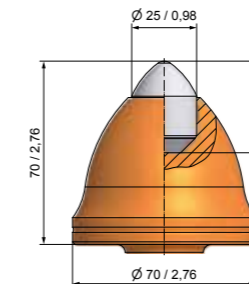
• **BGS100**
BG30W-19.7075



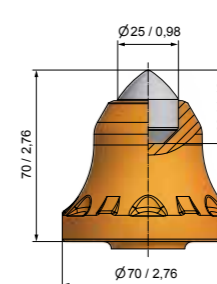
• **BGS90**
B47GK22LK70-E



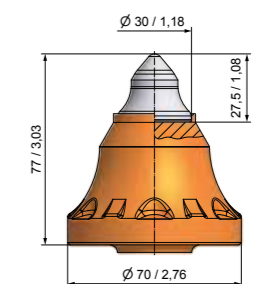
• **BGS93**
B47GK22LK70/70



• **BGS16**
BG30W-25.7070A



• **BGS105**
BG30W-25.7070

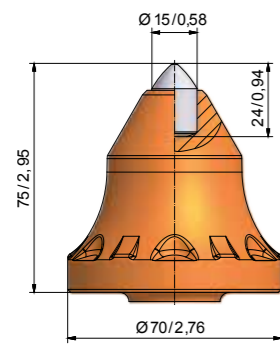


• **BGS103**
BG30W-69.7077

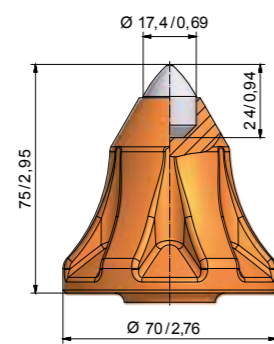
ROUND SHANK CUTTER BITS



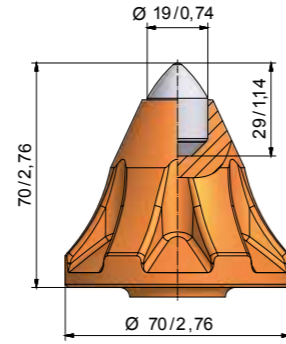
> SHANK SYSTEM – Ø 30 MM/1,18"



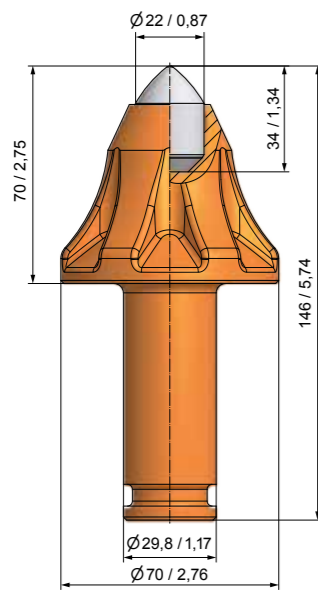
• **BGF25**
BG30F-15.7075



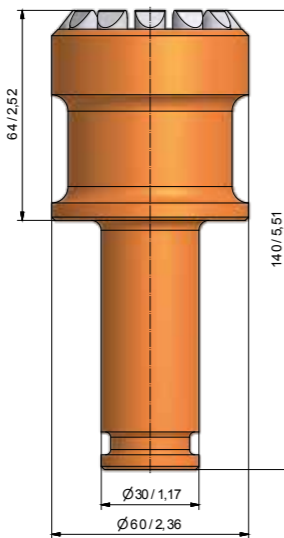
• **BGF10**
B47GK17.5LK75-E/F



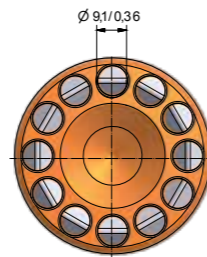
• **BGF36**
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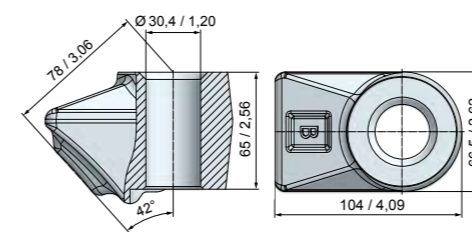
• **BGF11**
BG30F-22.7070



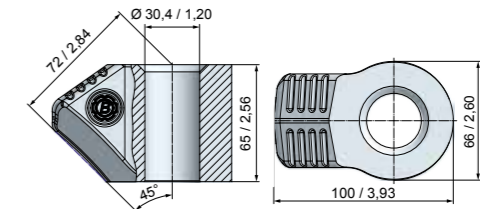
• **BSR58**
BG30F-09.6064



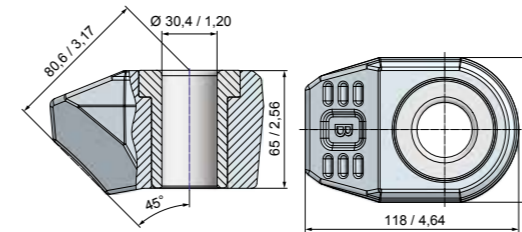
> SHANK SYSTEM – Ø 30 MM/1,18"



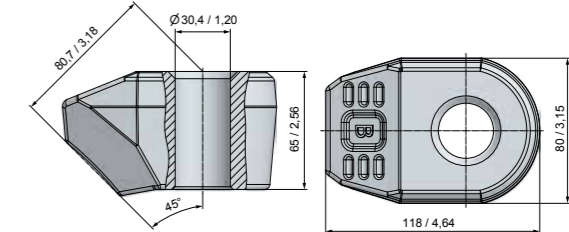
• **BHR35**
B30.65



• **BHR94**
B43G



• **BHR75**
B30.65H



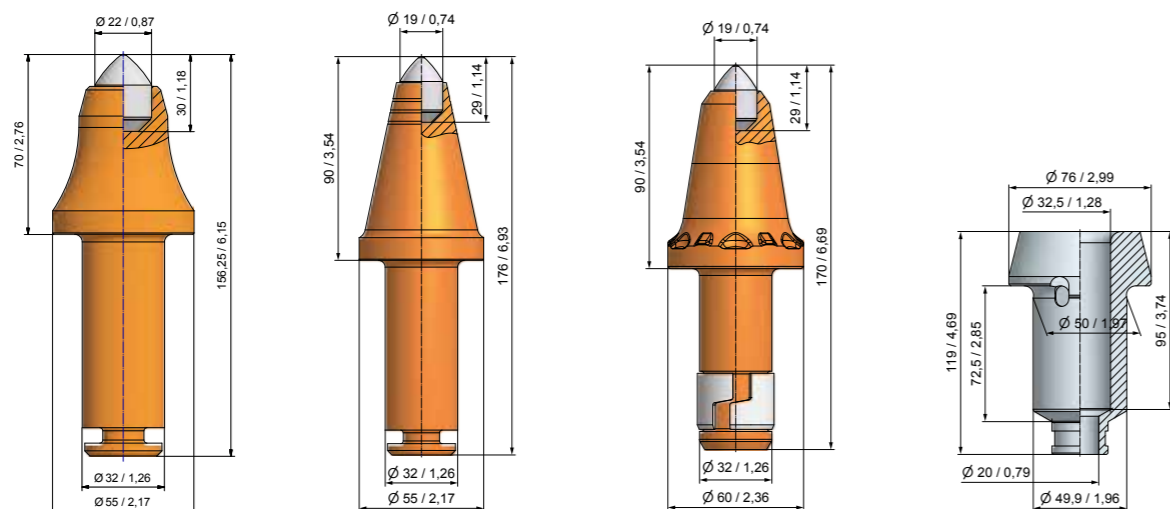
• **BHR193**
B30.8045



ROUND SHANK CUTTER BITS



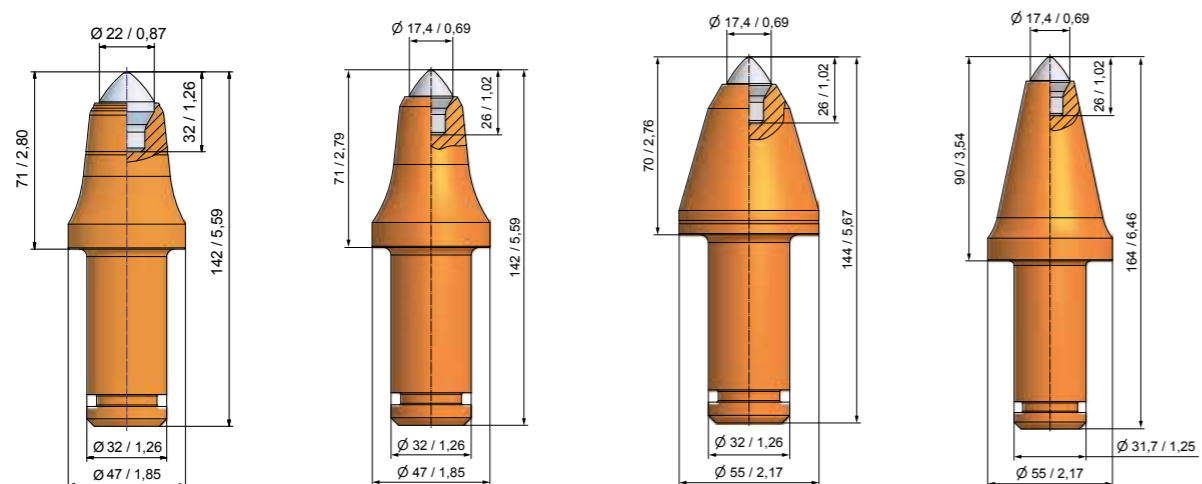
> SHANK SYSTEM – Ø 32 MM/1,26"



- **BSR295**
BG32FL-22.5570
- **BSR303**
BG32FL-19.5590
- **BSR271**
BG32H-19.6090
- **BR89**
BR50-32/K



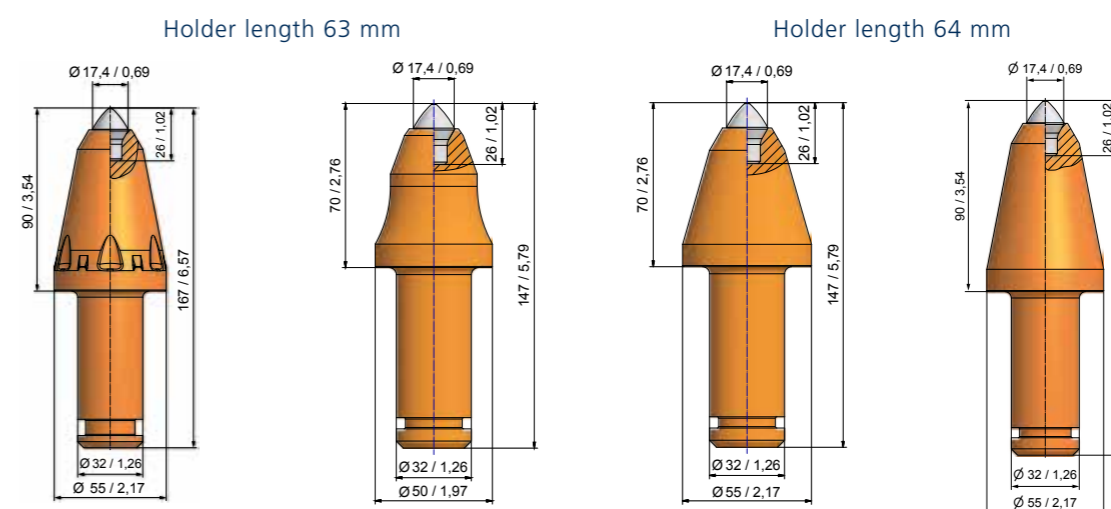
> SHANK SYSTEM – Ø 32/33 MM – 1,26/1,3"



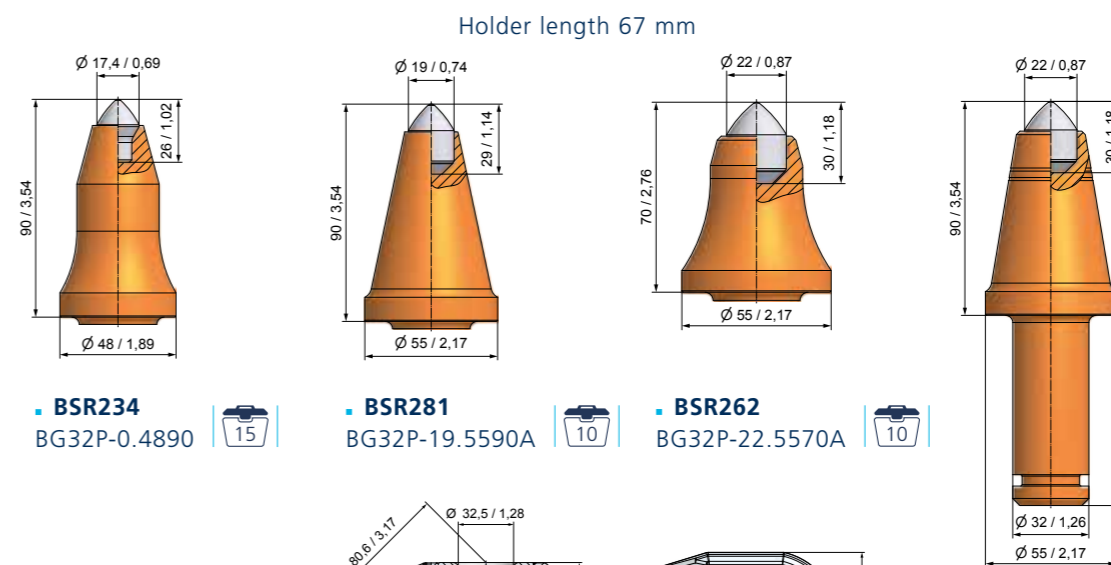
- **BSR332**
BG32P-73.4771
Holder length 58 mm
- **BSR245**
BG32P-70.4771
Holder length 58 mm
- **BSR269**
BG32P-70.55.70C
Holder length 61 mm
- **BSR255**
BG32P-70.5590A
Holder length 62 mm



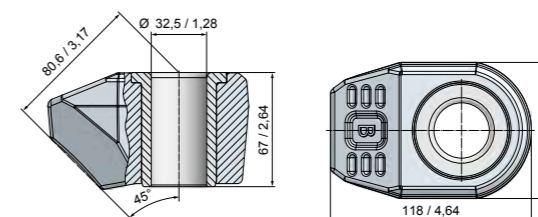
> SHANK SYSTEM – Ø 32/33 MM – 1,26/1,3"



- **BSR290**
BG32P-70.5590A
- **BSR248/2**
BG32P-70.5070
- **BSR251**
BG32P-70.5570A
- **BSR279**
BG32P-70.5590



- **BSR234**
BG32P-0.4890
- **BSR281**
BG32P-19.5590A
- **BSR262**
BG32P-22.5570A



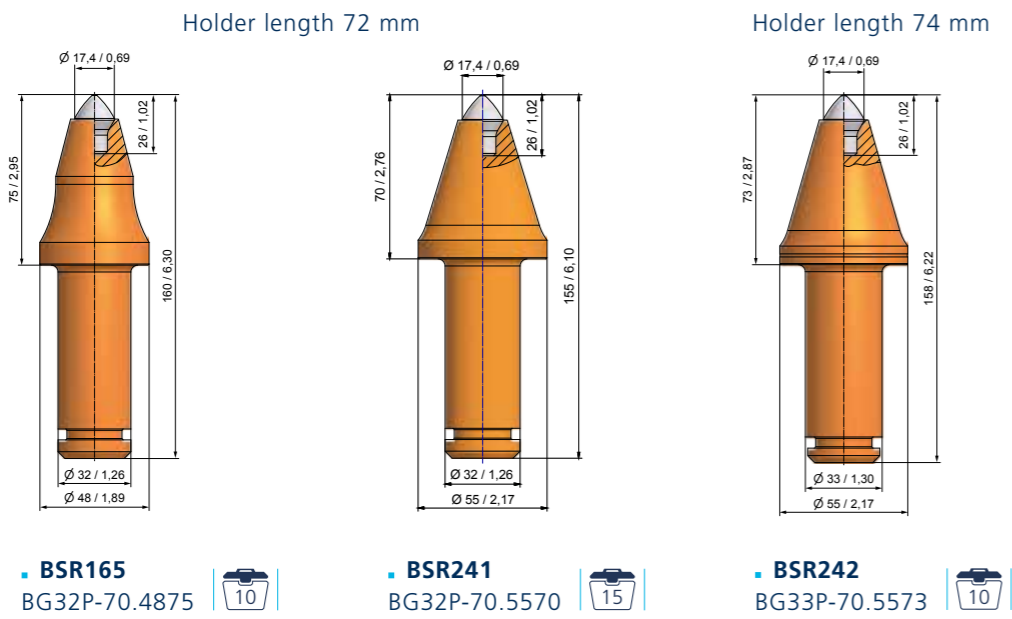
- **BHR205**
B32.67H

- **BSR294**
BG32P-22.5590A

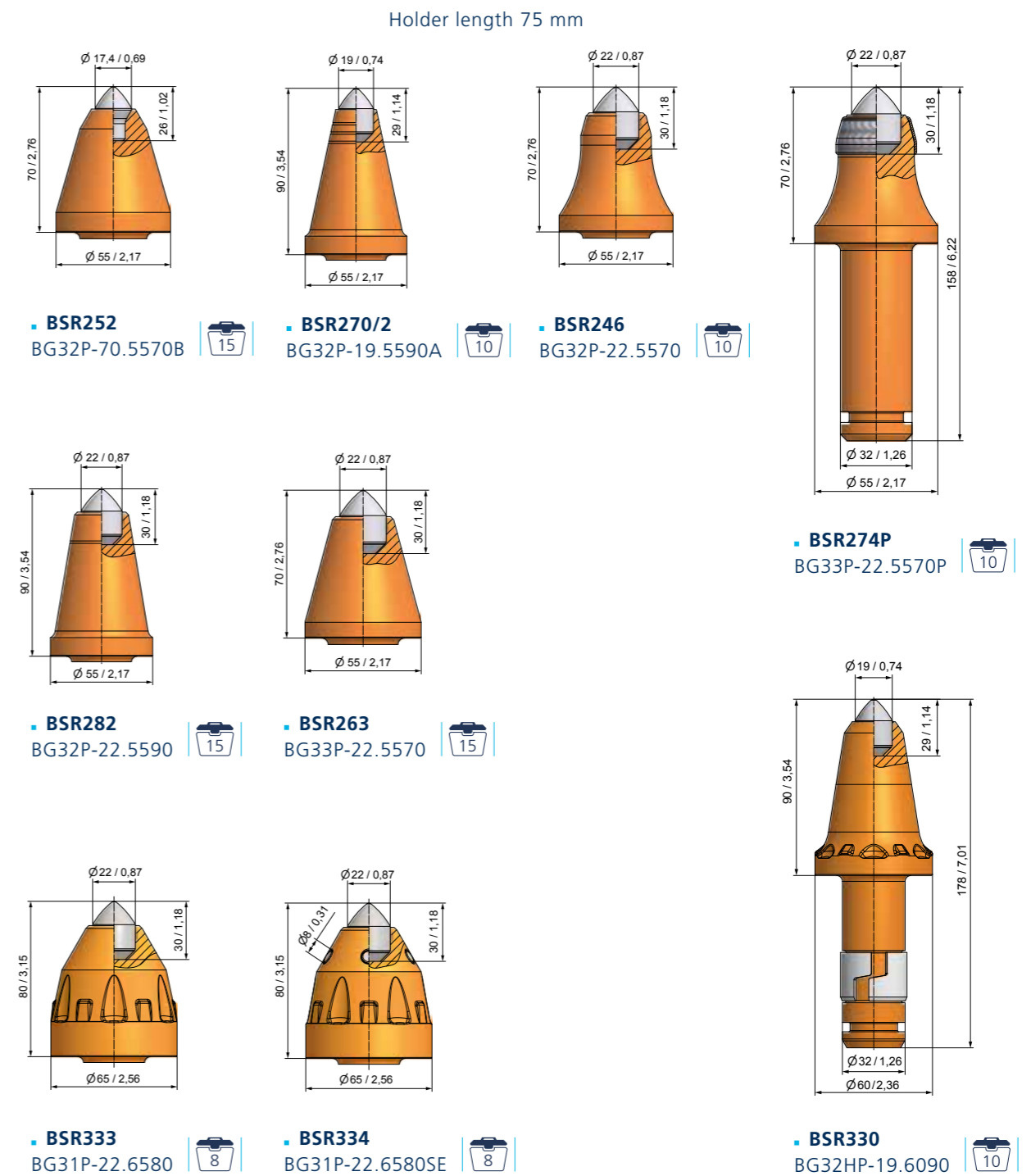
ROUND SHANK CUTTER BITS



> SHANK SYSTEM – Ø 32/33 MM – 1,26/1,3" </h2>

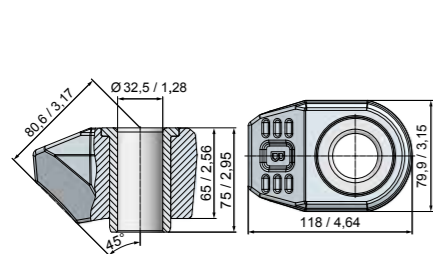


> SHANK SYSTEM – Ø 32/33 MM – 1,26/1,3" </h2>

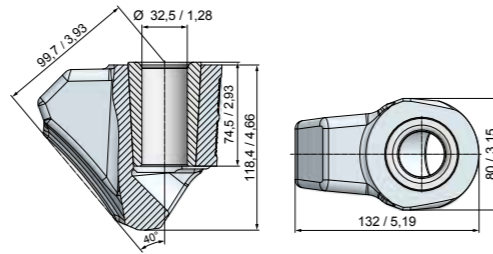


ROUND SHANK CUTTER BITS

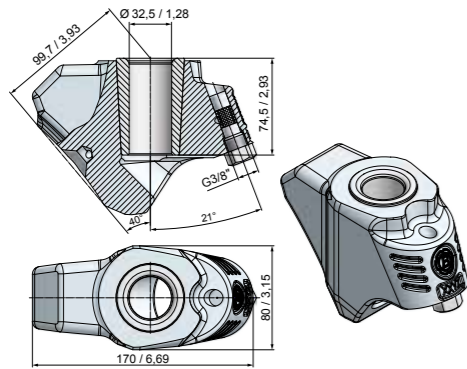
SHANK SYSTEM – Ø 32/33 MM – 1,26/1,3"



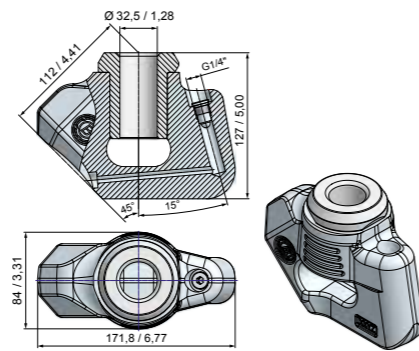
• **BHR224**
B32.75H 




• **BHR242**
B33.8040 



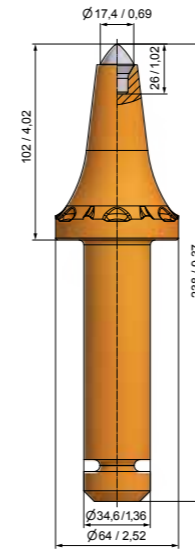
• **BHR243**
B33.8040-B 




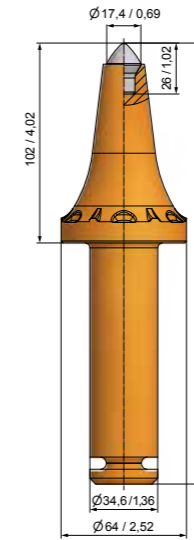
• **BHR213**
B32.8445-B 




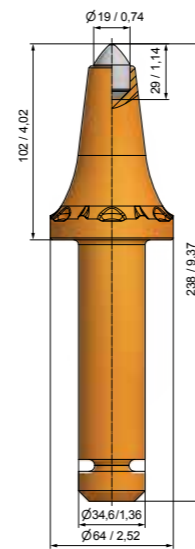
SHANK SYTEM – Ø 35 MM/1,38"




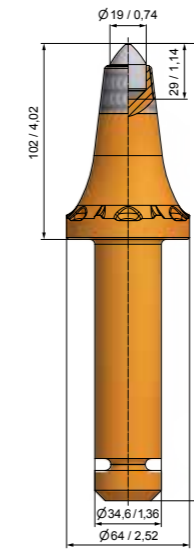
• **BSR346**
BG35X-70.64102 




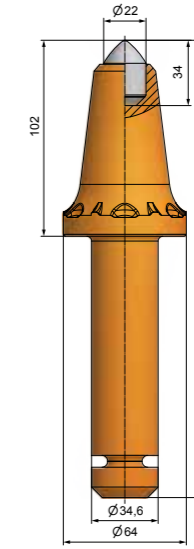
• **BSR347**
BG35X-70.64102A 




• **BSR343**
BG35X-19.64102 

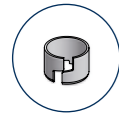


• **BSR343P**
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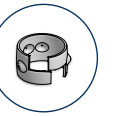
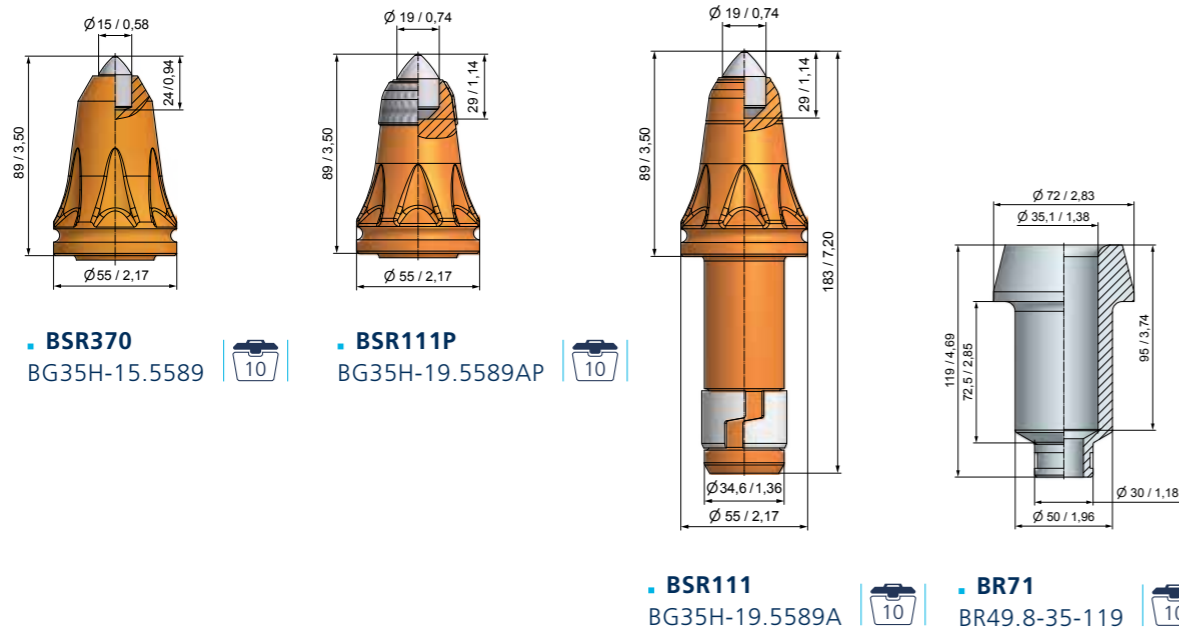


• **BSR324**
BG35X-22.64102 

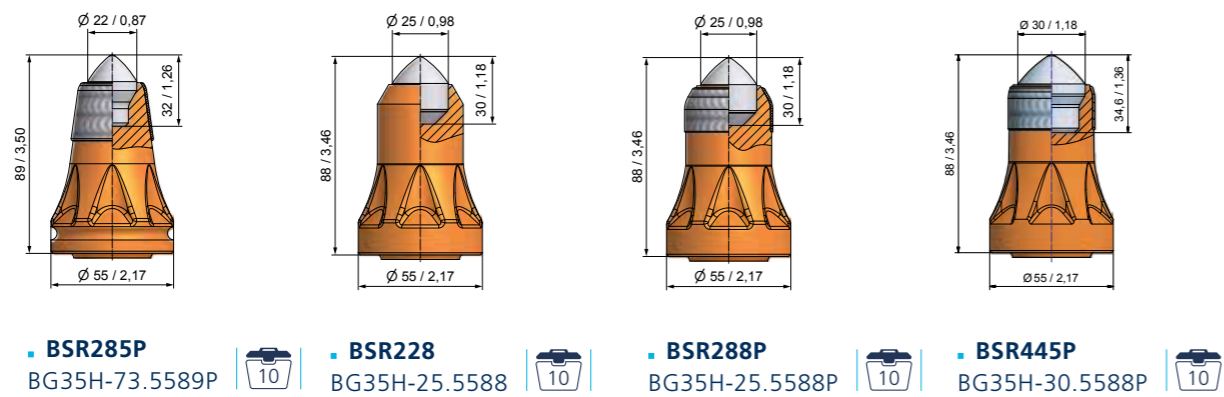
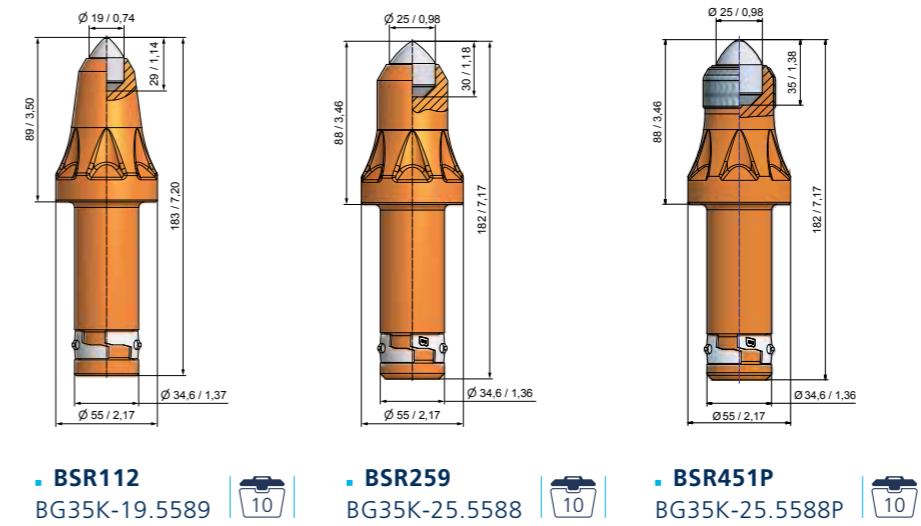
ROUND SHANK CUTTER BITS



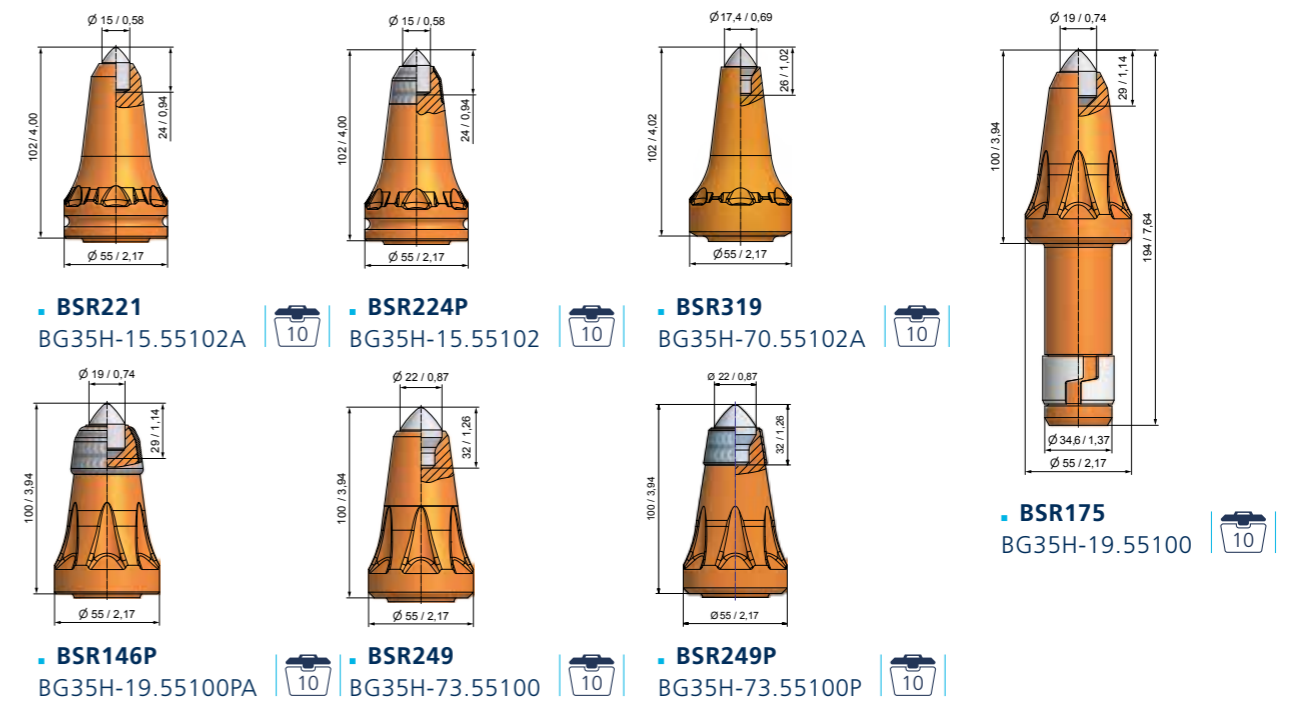
> SHANK SYSTEM – Ø 35 MM/1,38" GAUGE 89 MM/3,5"



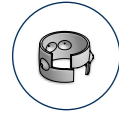
> SHANK SYSTEM – Ø 35 MM/1,38" GAUGE 89 MM/3,5"



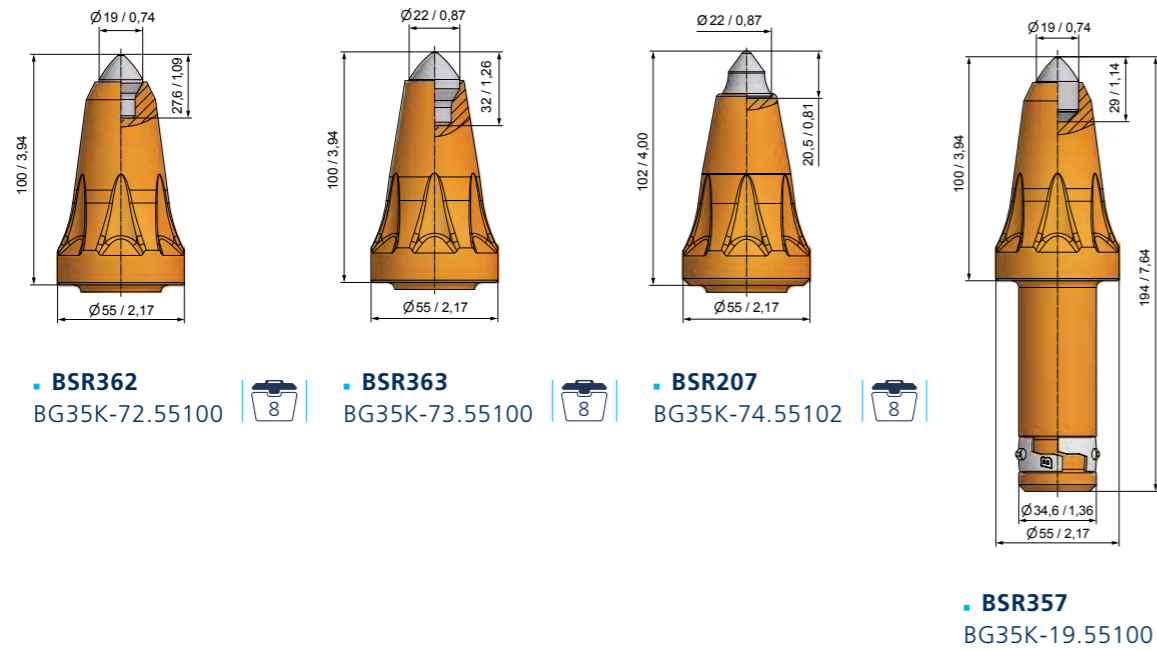
> SHANK SYSTEM – Ø 35 MM/1,38" GAUGE 100–102 MM/4"



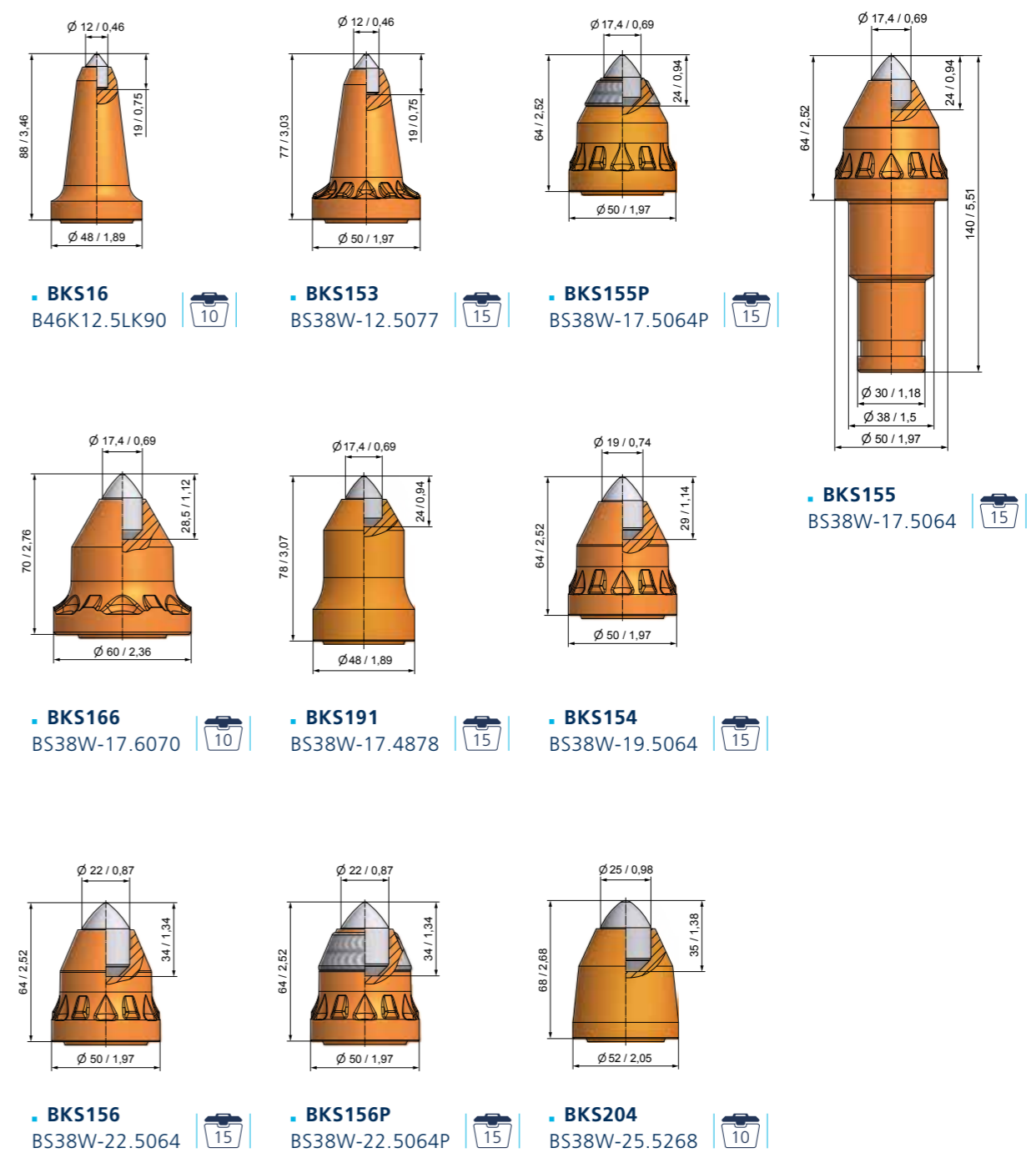
ROUND SHANK CUTTER BITS



▶ SHANK SYSTEM – Ø 35 MM/1,38" GAUGE 100–102 MM/4"



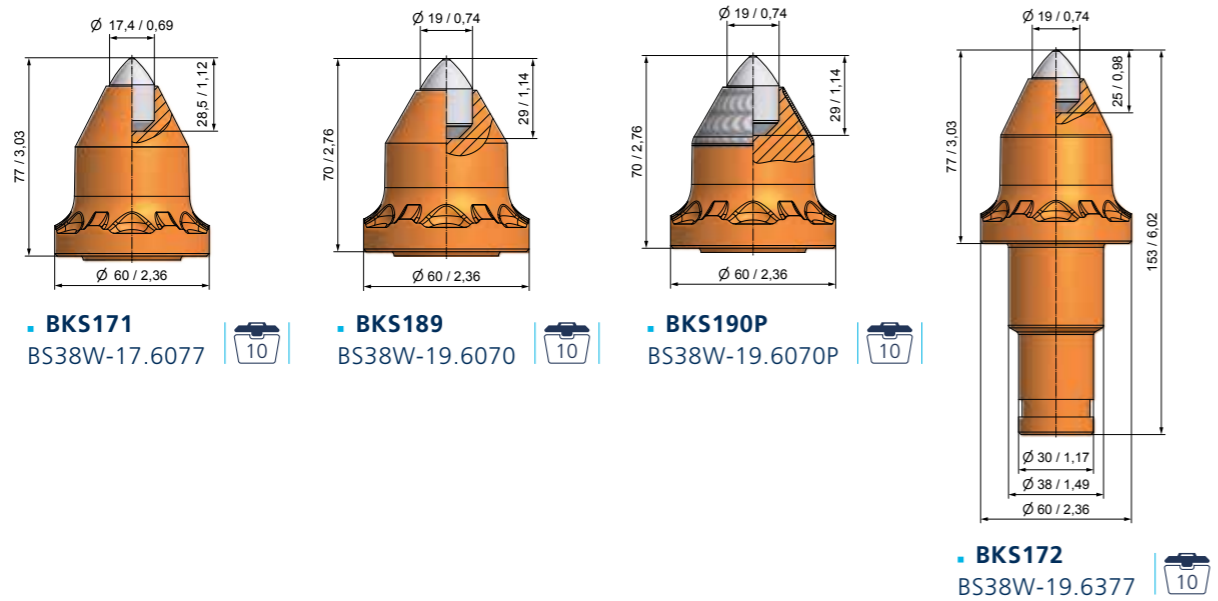
▶ SHANK SYSTEM – Ø 38/30 MM-1,5/1,18"



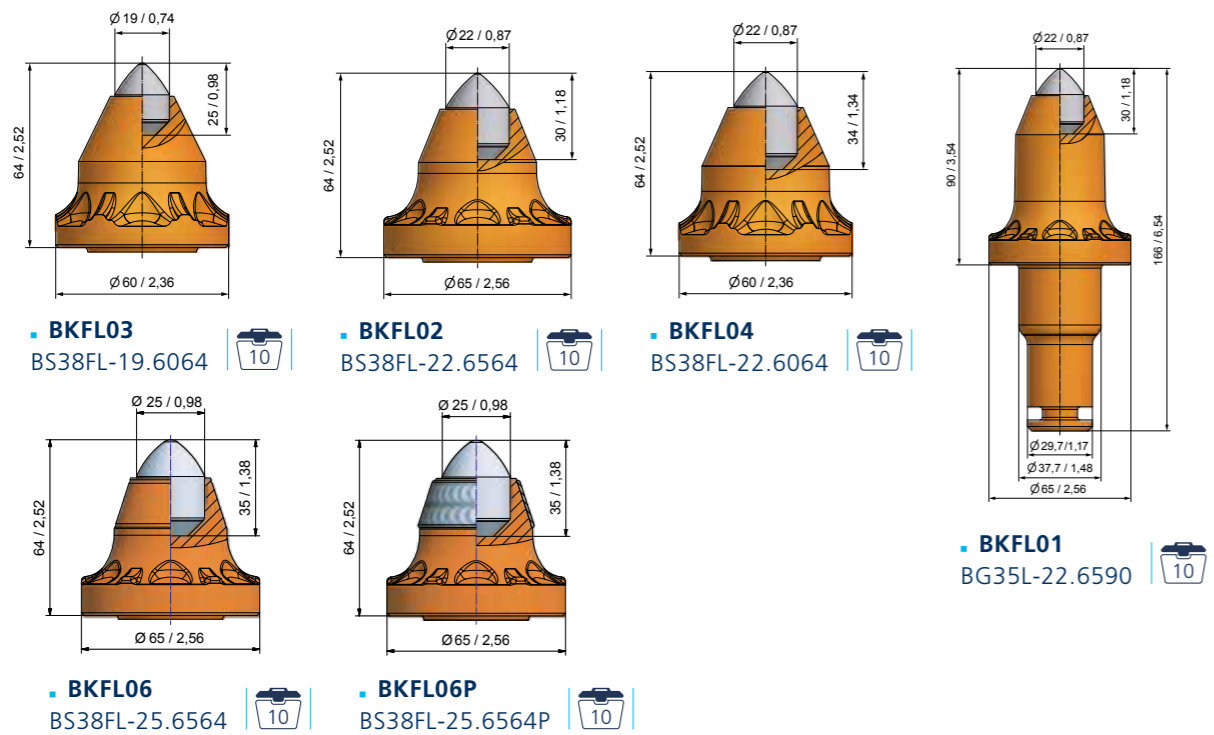
ROUND SHANK CUTTER BITS



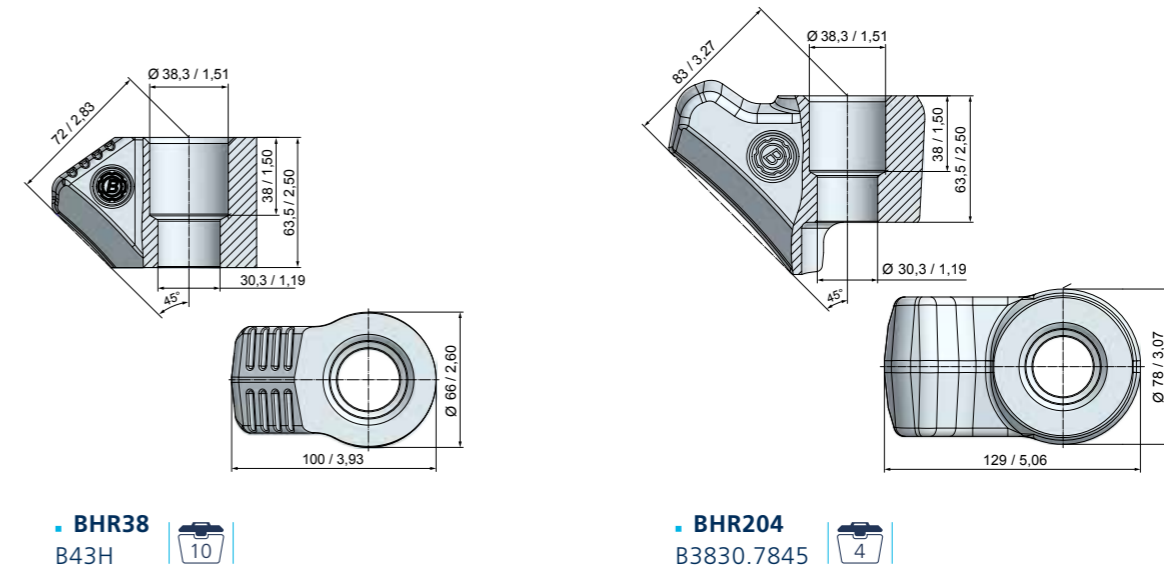
> SHANK SYSTEM – Ø 38/30 MM-1,5/1,18"



> SHANK SYSTEM – Ø 38/30 MM-1,5/1,18"



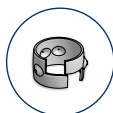
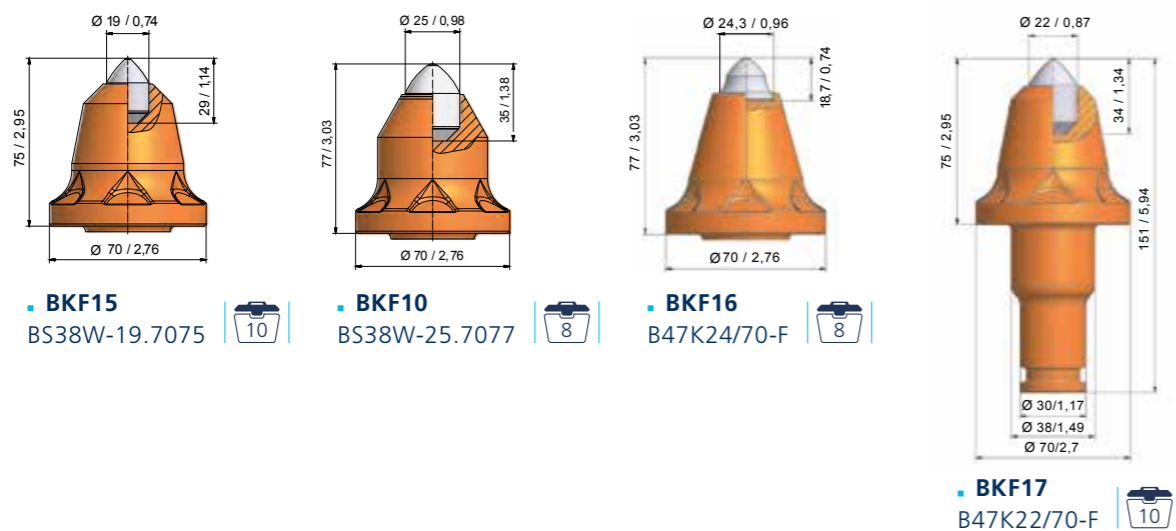
> SHANK SYSTEM – Ø 38/30 MM-1,5/1,18"



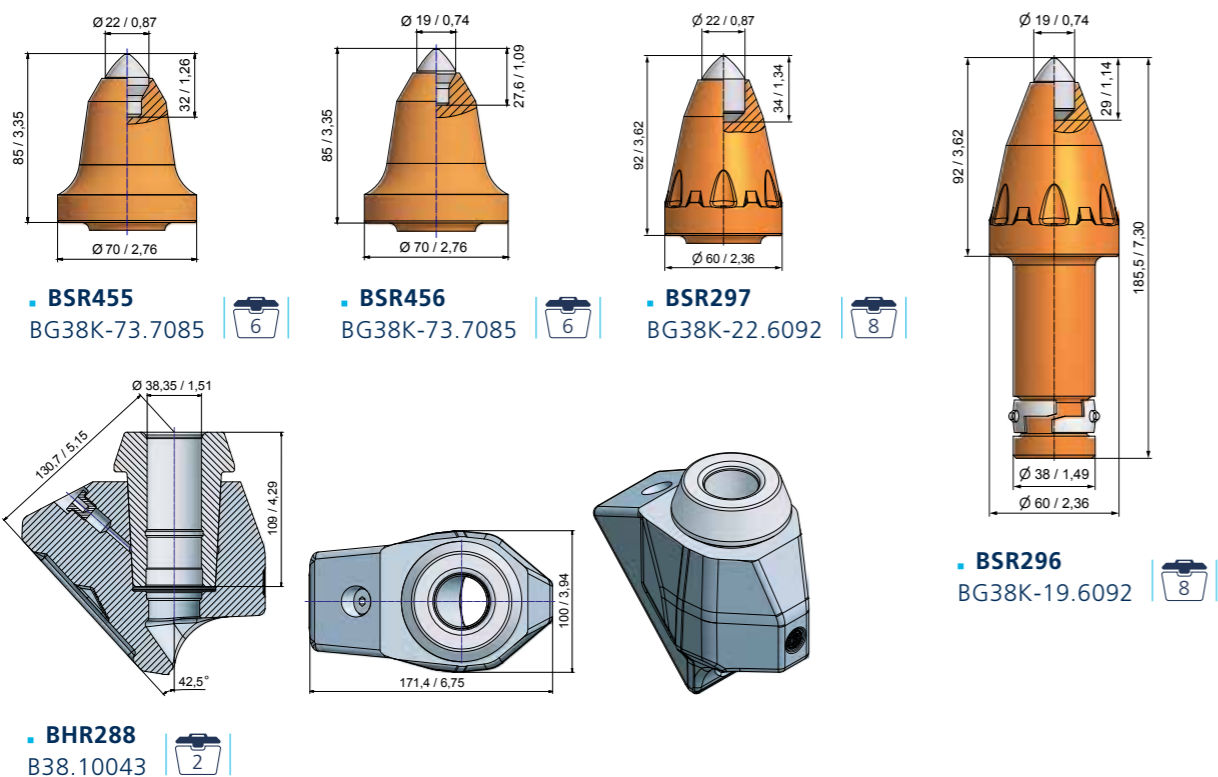
ROUND SHANK CUTTER BITS



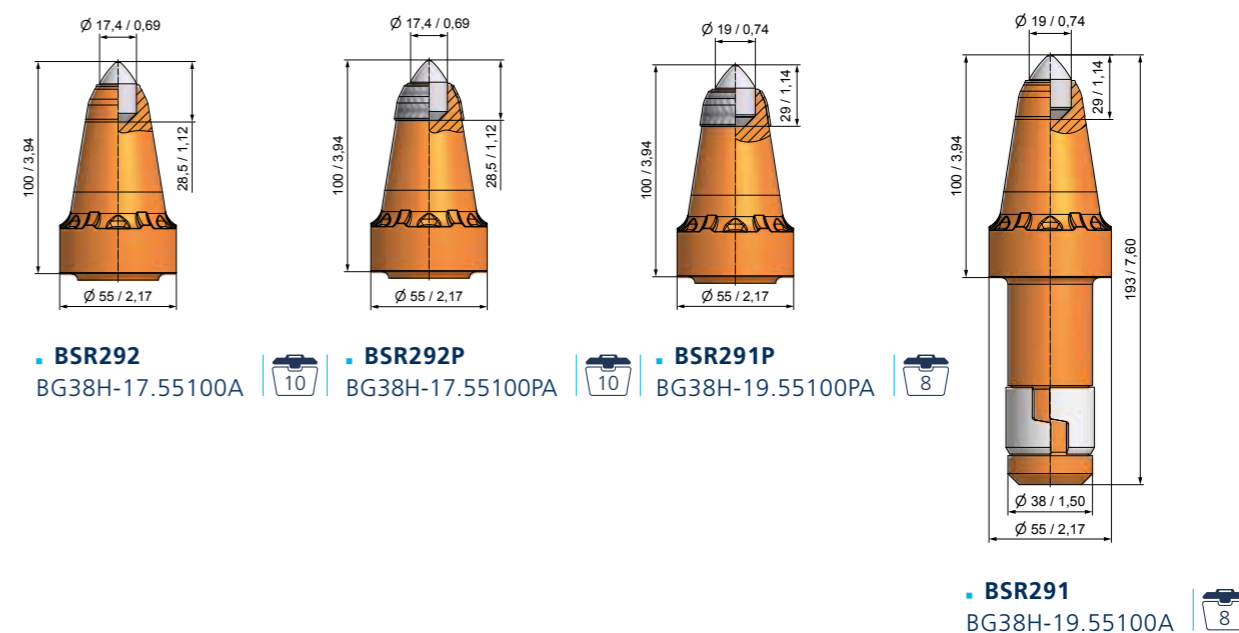
> SHANK SYSTEM – Ø 38/30 MM-1,5/1,18"



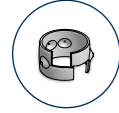
> SHANK SYSTEM – Ø 38 MM/1,5"



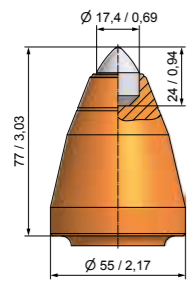
> SHANK SYSTEM – Ø 38 MM/1,5"



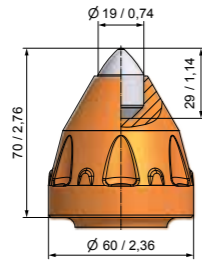
ROUND SHANK CUTTER BITS



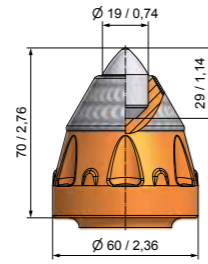
▶ SHANK SYSTEM – Ø 38 MM/1,5"



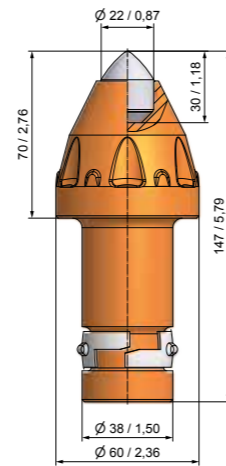
• **BSR286**
BG38K-17.5577A



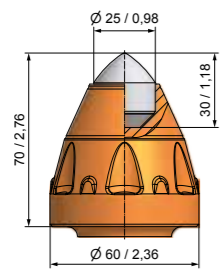
• **BSR188**
BG38K-19.6070



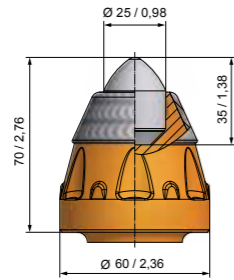
• **BSR202P**
BG38K-19.6070P



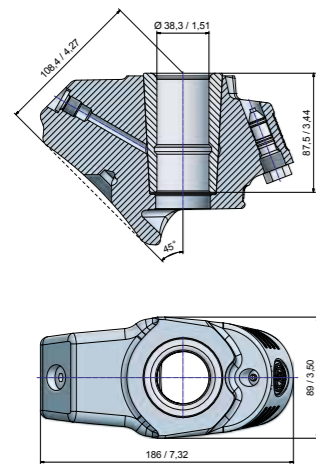
• **BSR189**
BG38K-22.6070



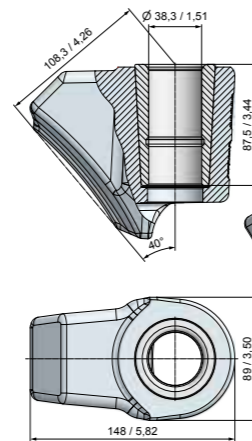
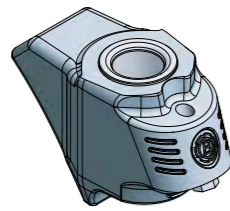
• **BSR190**
BG38K-25.6070



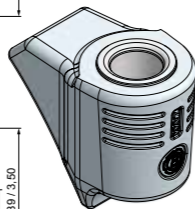
• **BSR190P2**
BG38K-25.6070P2



• **BHR222**
B38.8945-B



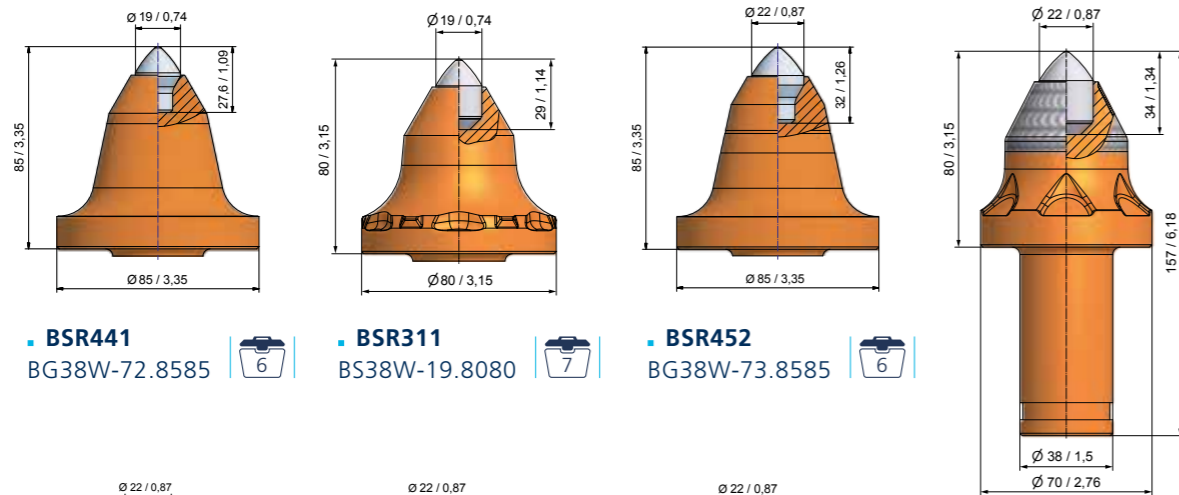
• **BHR219**
B38.8940



ROUND SHANK CUTTER BITS



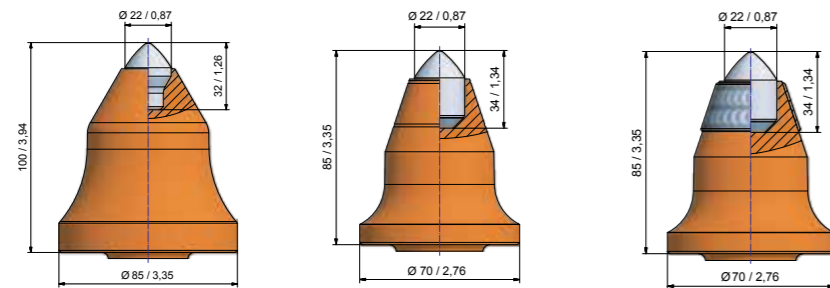
▶ SHANK SYSTEM – Ø 38 MM/1,5" HOLDER LENGTH 65 MM/2,6"



• **BSR441**
BG38W-72.8585

• **BSR311**
BS38W-19.8080

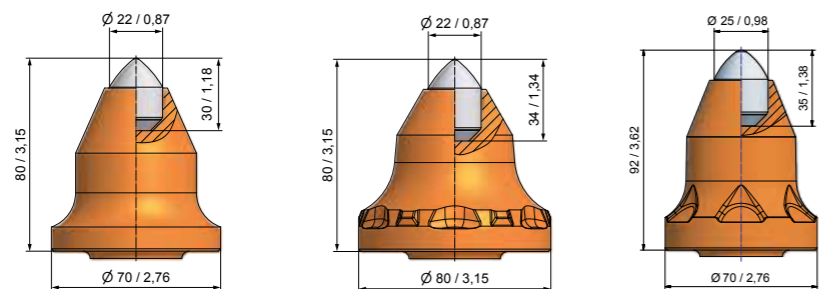
• **BSR452**
BG38W-73.8585



• **BSR436**
BG38W-73.85100

• **BSR379**
BG38W-22.7085

• **BSR379P**
BG38W-22.7085P



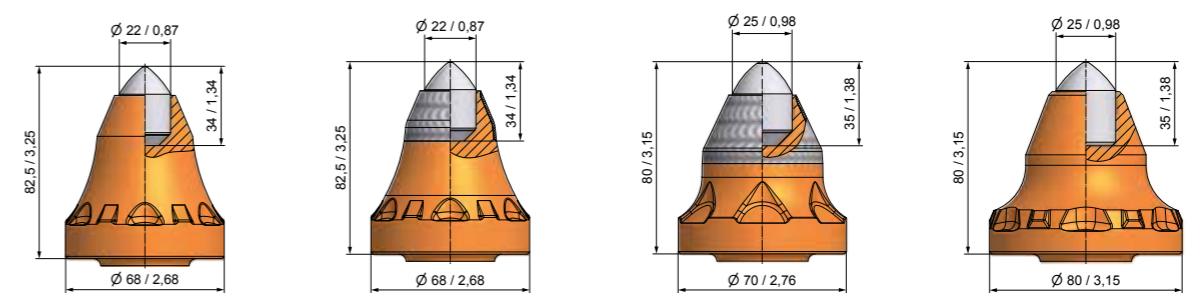
• **BSR140**
BS38W-22.7080

• **BSR198**
BS38W-22.8080A

• **BSR444-A**
BG38W-25.7092



▶ SHANK SYSTEM – Ø 38 MM/1,5" HOLDER LENGTH 65 MM/2,6"

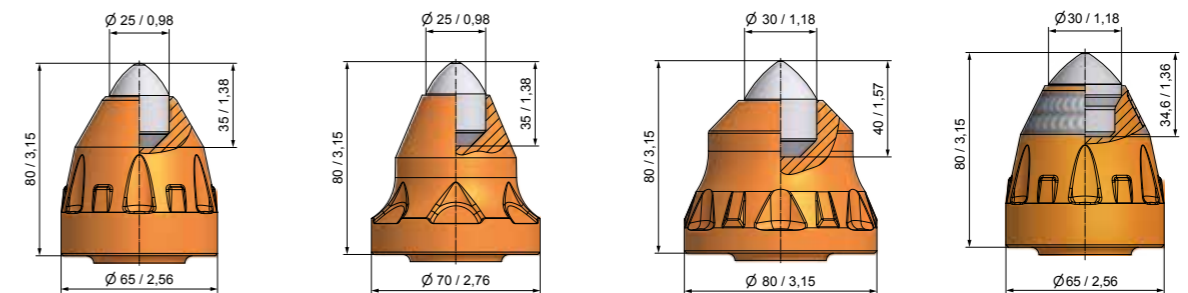


• **BSR237**
BS38W-22.6883A

• **BSR240P**
BS38W-22.6883PA

• **BSR200P**
BS38W-25.7080P

• **BSR201**
BS38W-25.8080A

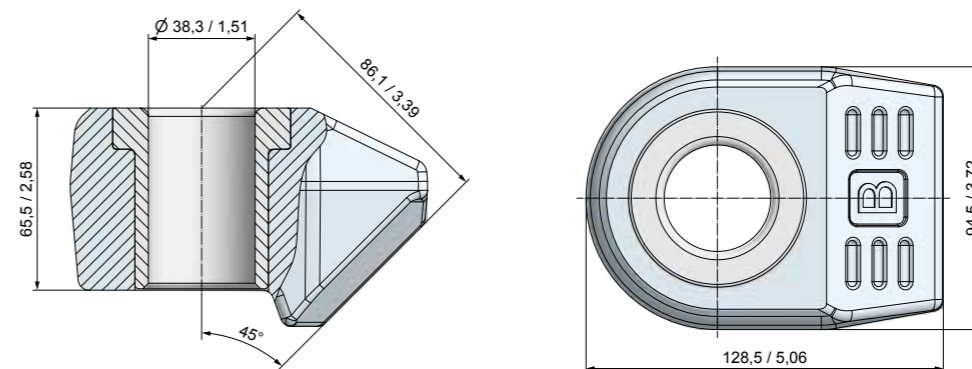


• **BSR312**
BS38W-25.6580

• **BSR287**
BS38W-25.7080

• **BSR197**
BS38W-30.8080A

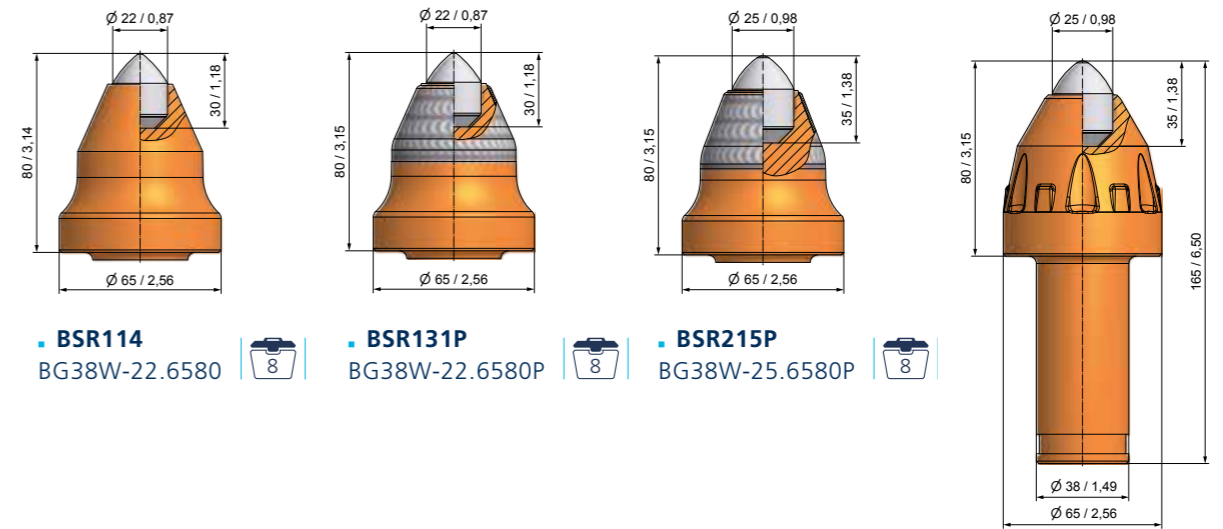
• **BSR338P**
BS38W-75.6580PA



• **BHR169**
B38H

ROUND SHANK CUTTER BITS

► SHANK SYSTEM – Ø 38 MM/1,5" HOLDER LENGTH 75 MM/3,0"



• **BSR114**
BG38W-22.6580



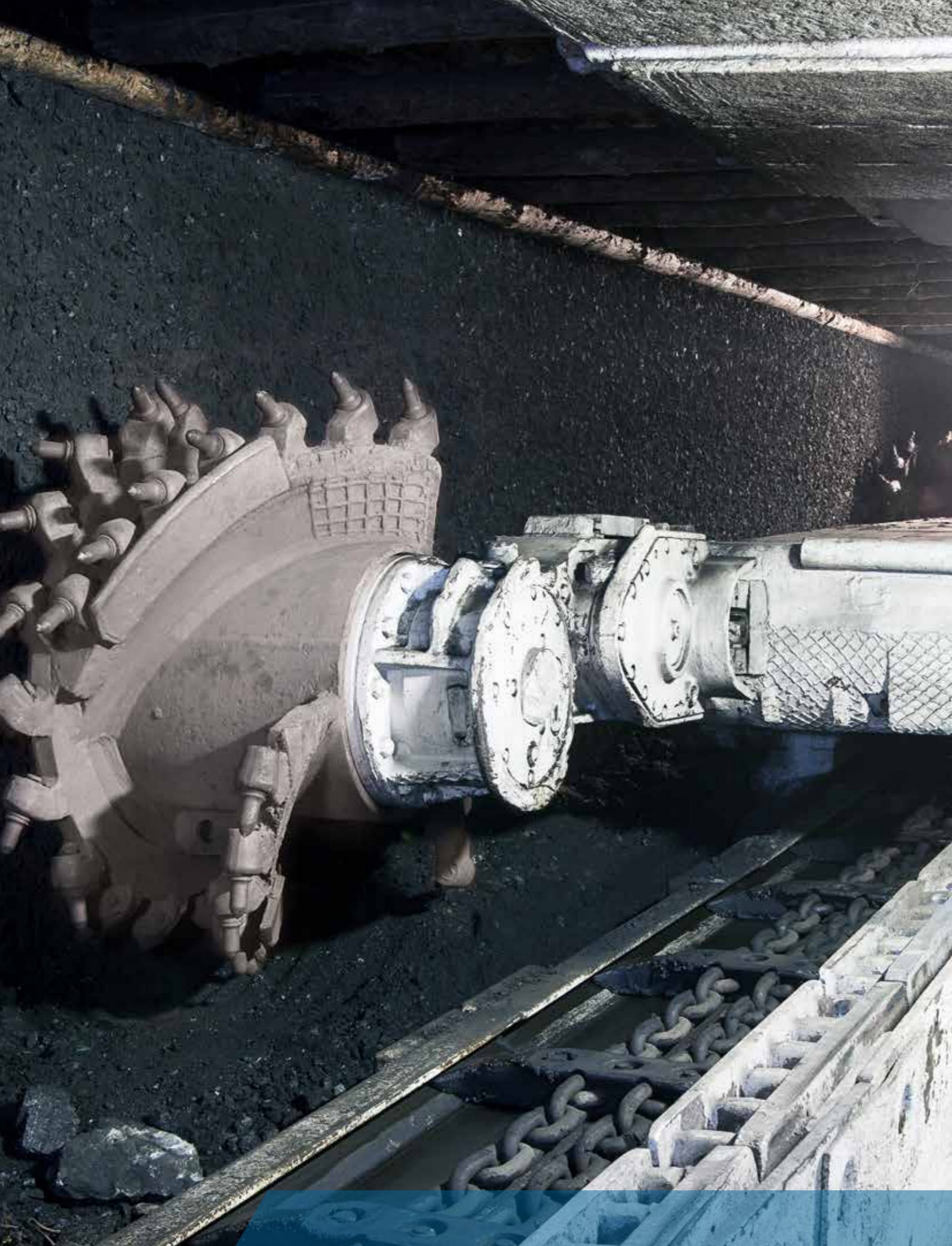
• **BSR131P**
BG38W-22.6580P



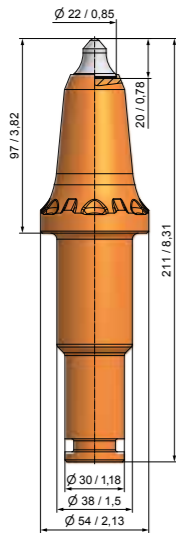
• **BSR215P**
BG38W-25.6580P



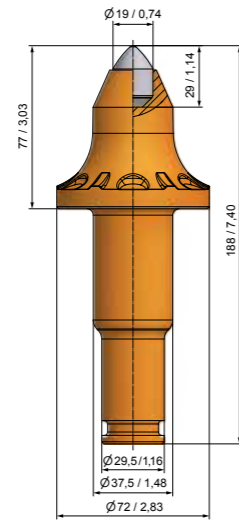
• **BSR193**
BG38W-25.6580



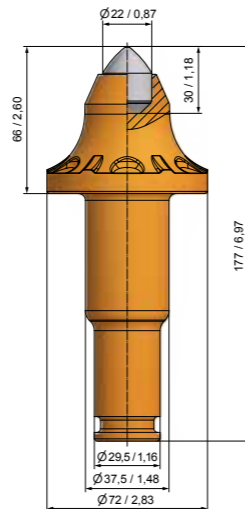
SPECIAL SHANK SYSTEM



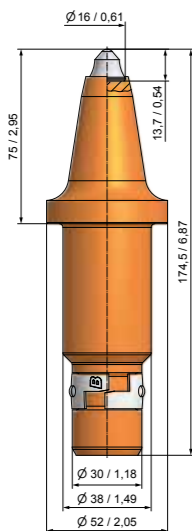
■ **BKF23**
BS38F-67.5497



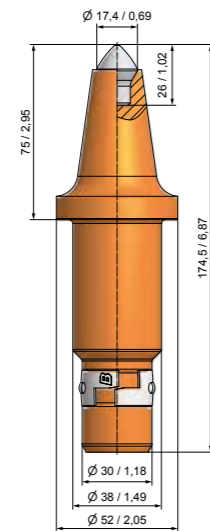
■ **BKFX57**
BS38F-19.7277



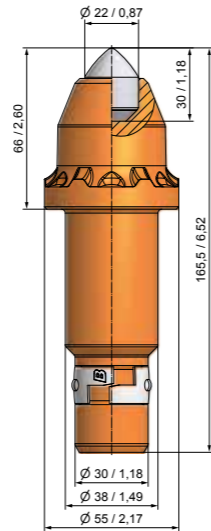
■ **BKFX58**
BS38F-22.7266



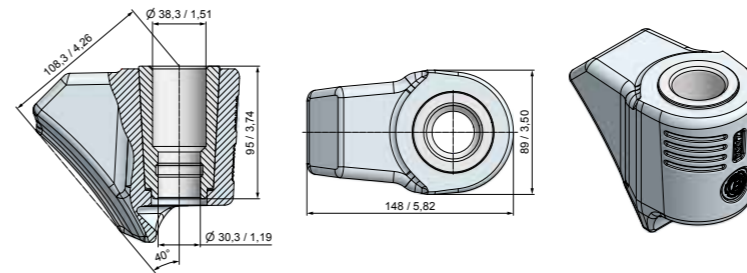
■ **BLK10**
B46K2L



■ **BLK14**
BS38K-70.5275

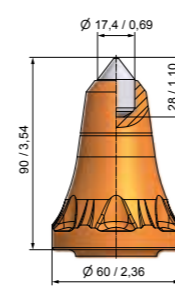


■ **BLK12**
BS38K-22.5566

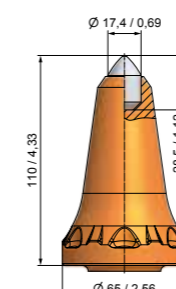


■ **BHR191**
B3830.8940

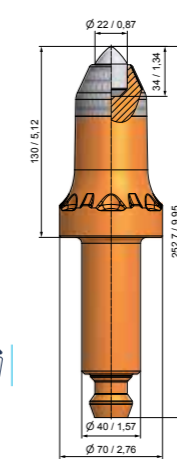
ROUND SHANK CUTTER BITS



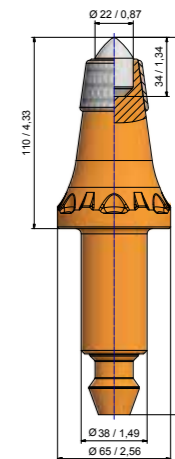
■ **BKR27**
BG38X-17.6090



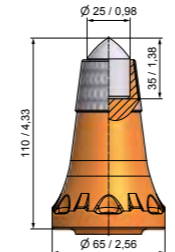
■ **BKR33**
BG38X-17.65110



■ **BKR30P**
BG40X-22.70130PA



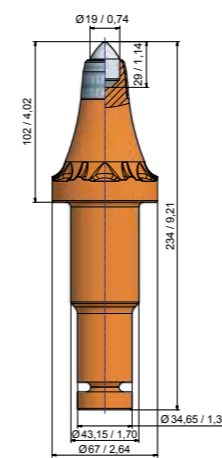
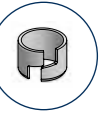
■ **BKR31/2P**
BG38X-22.65110PB



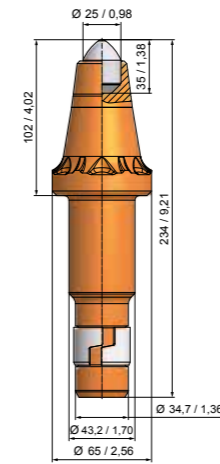
■ **BKR32P**
BG38X-25.65110P

ROUND SHANK CUTTER BITS

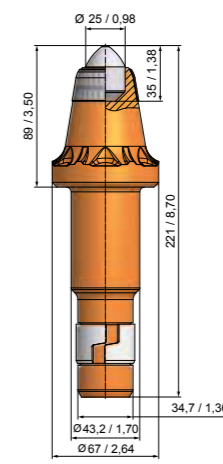
► SHANK SYSTEM – Ø 43/35 MM-1,70/1,38"
GAUGE 102 MM/4,0" | 89 MM/3,5"



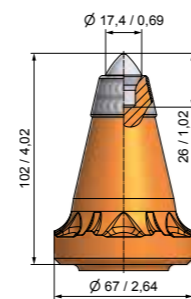
• **BSR284P**
BS43X-19.67102P



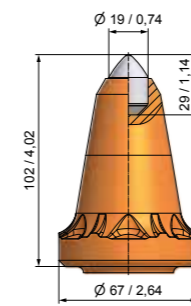
• **BSR258**
BS43H-25.65102



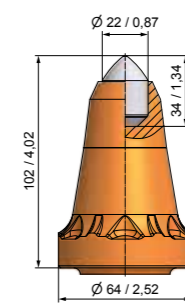
• **BSR265P**
BS43H-25.6789P



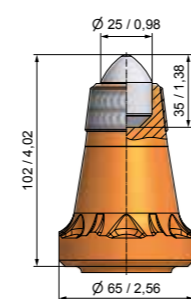
• **BSR230P**
BS43H-70.67102P



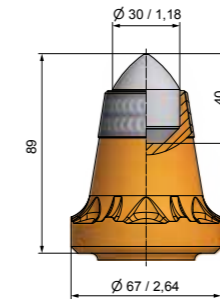
• **BSR204**
BS43H-19.67102A



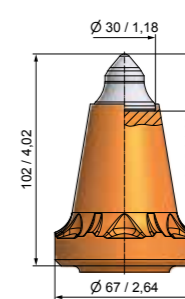
• **BSR236**
BS43H-22.64102



• **BSR258P**
BS43H-25.65102P



• **BSR369P**
BS43H-30.6789P



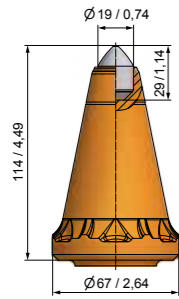
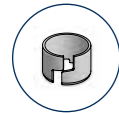
• **BSR181**
BS43H-69.67102A



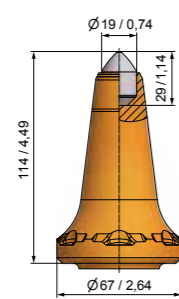
ROUND SHANK CUTTER BITS



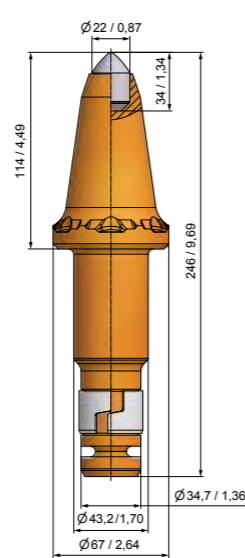
▶ SHANK SYSTEM – Ø 43/35 MM-1,70/1,38" GAUGE 114 MM/4,5"



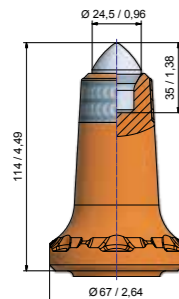
• **BSR182**
BS43H-19.67114



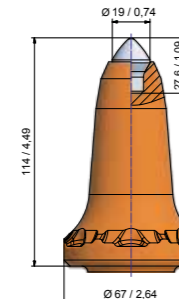
• **BSR184S**
BS43H-19.67114S



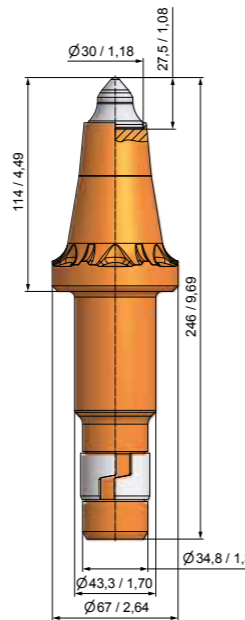
• **BSR231**
BS43HF-22.67114



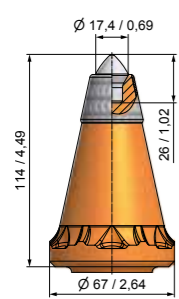
• **BSR417P**
BS43H-71.67114P



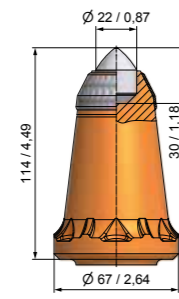
• **BSR418**
BS43H-72.67114



• **BSR203**
BS43H-67.67114

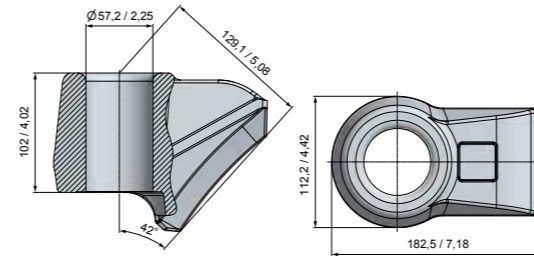


• **BSR211P**
BS43H-70.67114AP

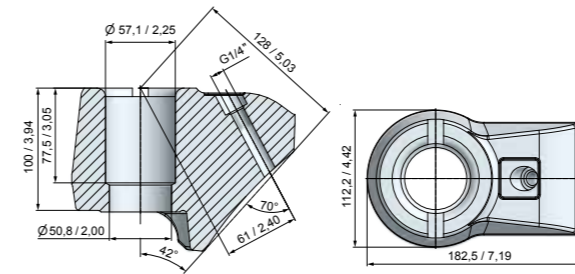


• **BSR178P**
BS43H-22.67114P

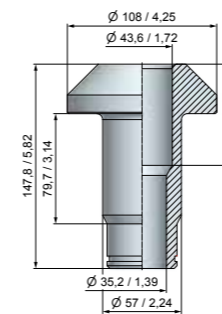
▶ SHANK SYSTEM – Ø 43/35 MM-1,70/1,38"



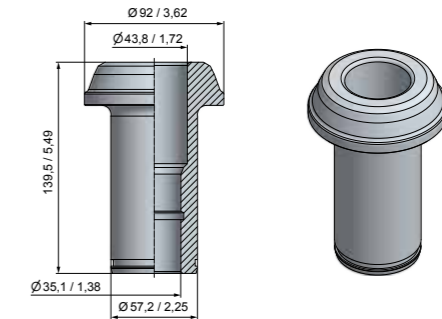
• **BHR261**
B300



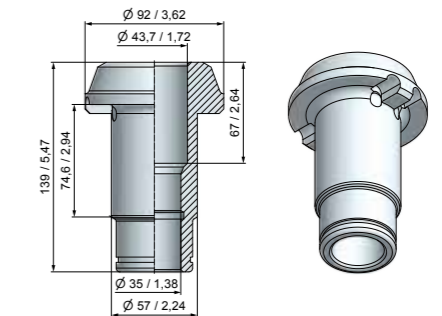
• **BHR159**
B300



• **BR79**
BR57-44-144

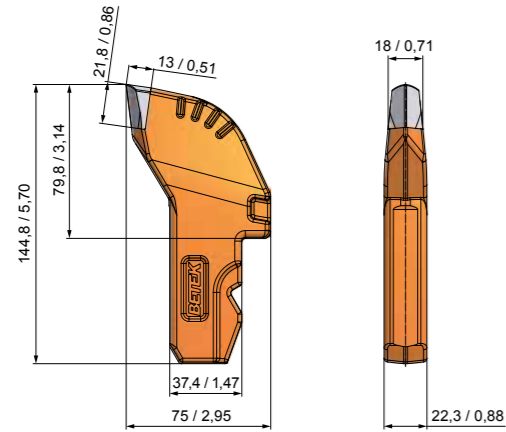
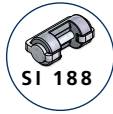


• **BR94**
BR57-44A

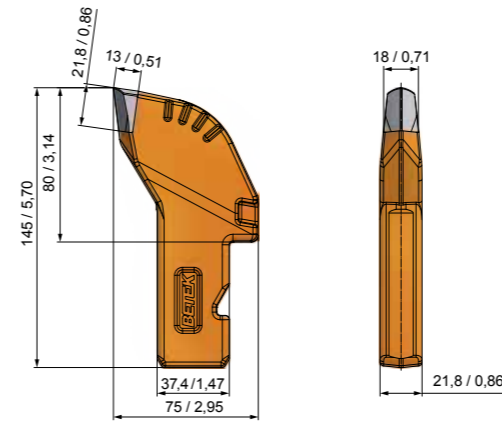


• **BR74**
BR57-44

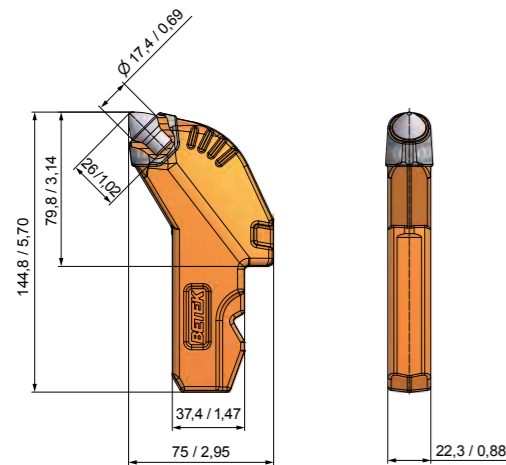
RADIAL BITS



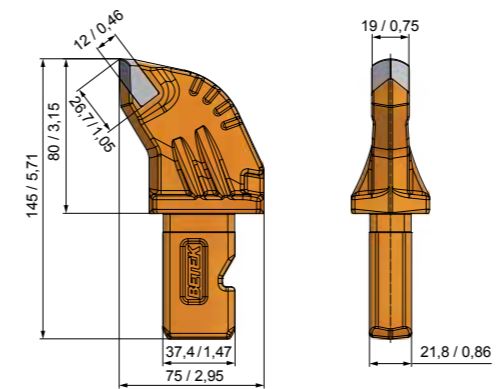
• **BF56**
BF145x38x22/2



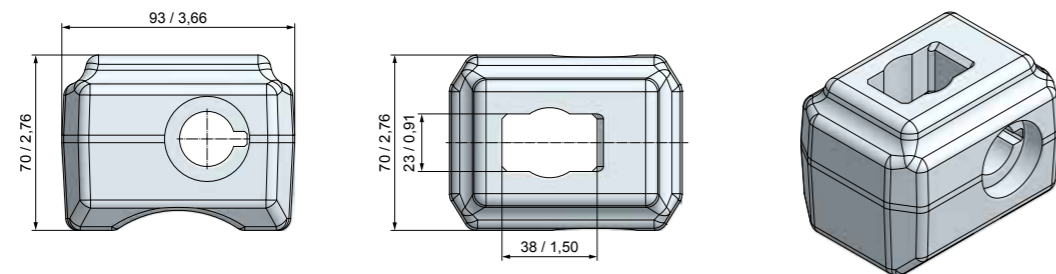
• **BF58/3**
BF145x38x22/4



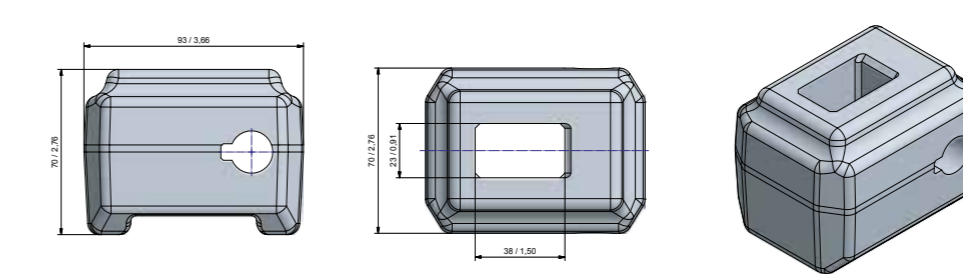
• **BF57**
BF145x38x22/3P



• **BF66**
BF145x38x22/HD

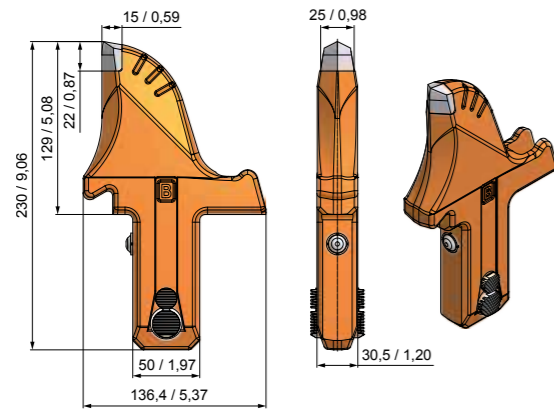


• **BHF19**
BHF38x23

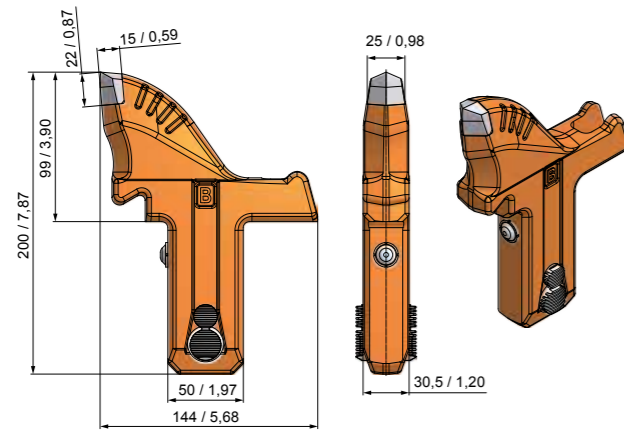


• **BHF33**
BHF38x23/LR

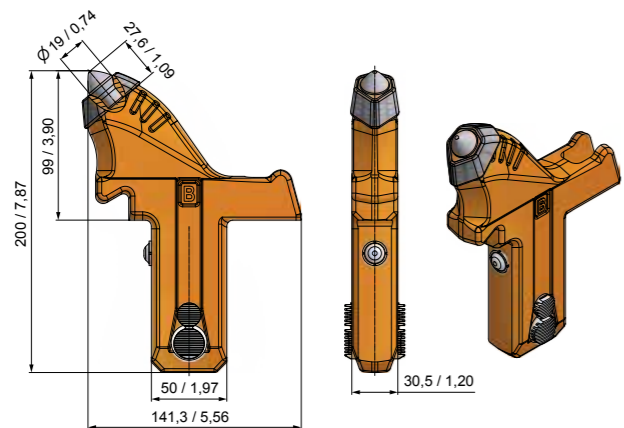
RADIAL BITS



• **BF38**
BF230x137x30.6



• **BF45**
BF200x137x30.6



• **BF65**
BF200x145x30.5P



ACCESSORIES



▪ **BZ44**
Bit extractor for Mini bit



▪ **BZ42**
Bit extractor for BSH on BC-Series



▪ **BZ43**
Bit extractor for BSH and BC-Series



▪ **BZ38**
Wedge puller for shaft diameter 20-25



▪ **BZ35**
Assembly tool for SI239



▪ **BZ34**
Disassembly tool for SI239



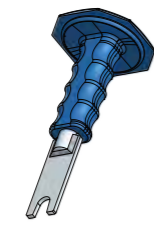
▪ **BZ39**
Wedge puller for shaft diameter 30-38



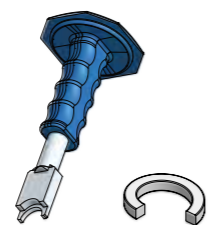
▪ **SRZ02**
Plier for SR83/1, SR61 and SR54



▪ **BZ33**
Assembly tool for SI36



▪ **BZ31**
Disassembly tool for SI36



▪ **BZ41**
Assembly tool for SI26



▪ **BZ32**
Disassembly tool for SI26



▪ **BZ12**
Bit puller for BKH-Series



▪ **BZ18**
Bit puller with copper disk for BKH-Series



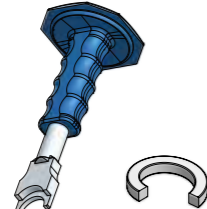
▪ **BZ16**
Bit extractor for Roll pin with diameter 10



▪ **BZ30**
Bit extractor for Roll pin with diameter 16



▪ **BZ22**
Bit puller for BTK-Series



▪ **BZ37**
Assembly tool for SI79/K



▪ **BZ36**
Disassembly tool for SI79/K



▪ **BZ05**
Bit puller for head diameter 60



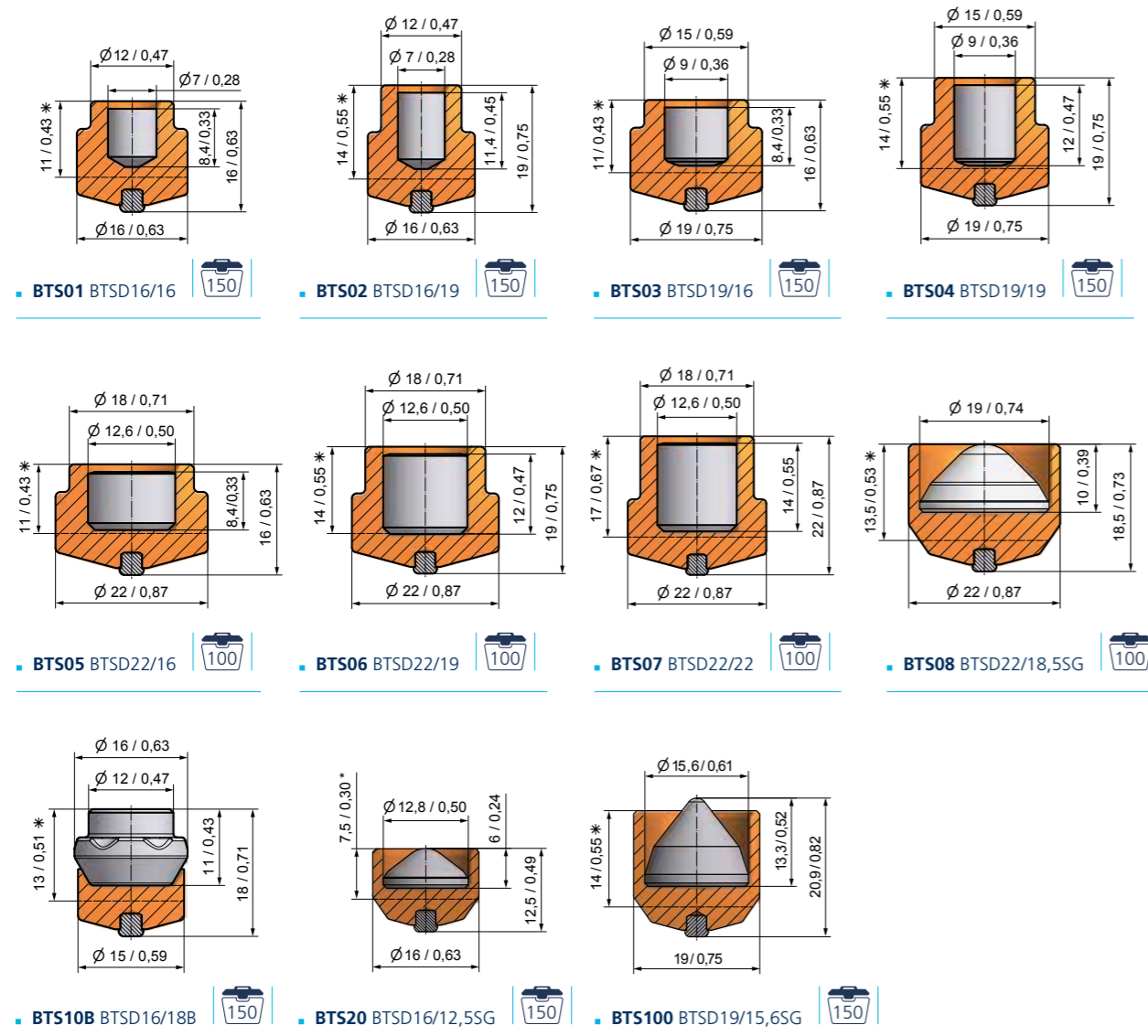
▪ **BZ40**
Wedge puller for stepshank 43/35

EXTENSIVE WEAR PROTECTION



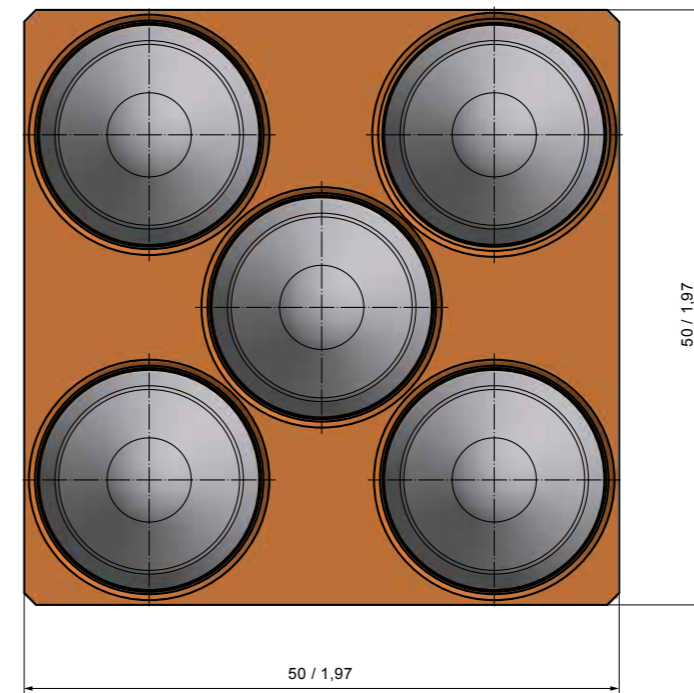
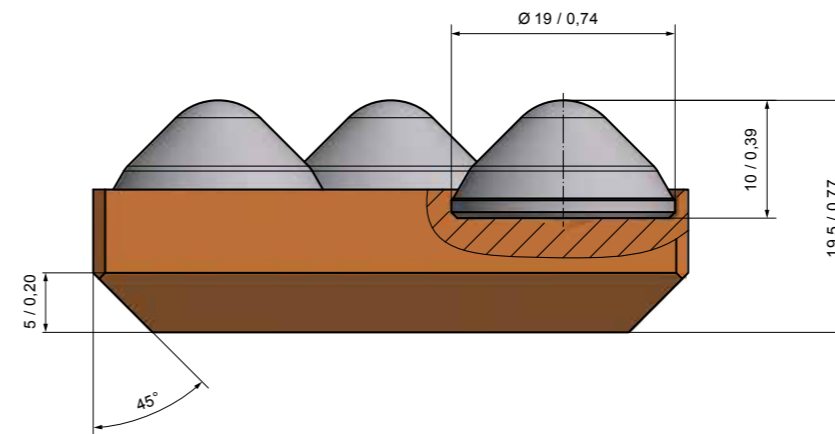
OVERVIEW

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



*Height after welding

BTS-PLATES



DIMENSIONS

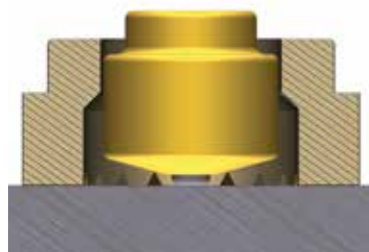
Width in mm	Length in mm
50	50
75	75
100	100
125	125
150	150

Other sizes on request

EXTENSIVE WEAR PROTECTION

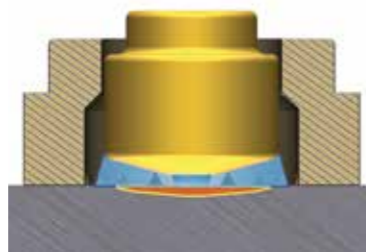
> WELDING PROCESS

1



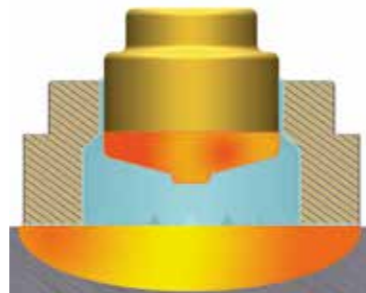
- The TungStud should be placed on the steel surface
- The ceramic ferrule protects the welding area around

2



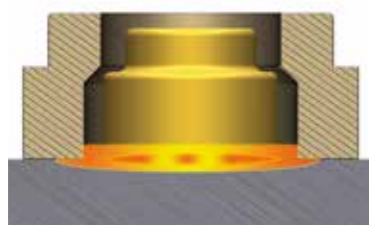
- Current flow is applied
- The TungStud raises up as soon as the arc ignites

3



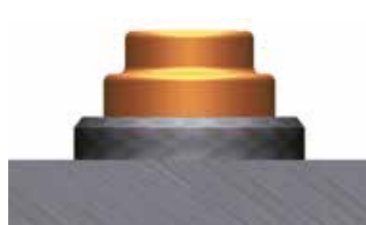
- The arc causes a specific melting of the TungStud and the steel surface

4



- The TungStud plunges into the melted steel surface

5



- The welding connection between TungStud and steel surface is completed

BENEFITS

- Wear resistant thanks to the carbide core
- Quick welding process
- Suitable for uneven surfaces
- Simply replaceable
- Less maintenance > Higher productivity
- Less downtime > Cost reduction

PERFORMANCE

> CUTTING WEAR PROTECTION

- Grid pattern is recommended
- Cutting wear protection due to the conical carbide shape

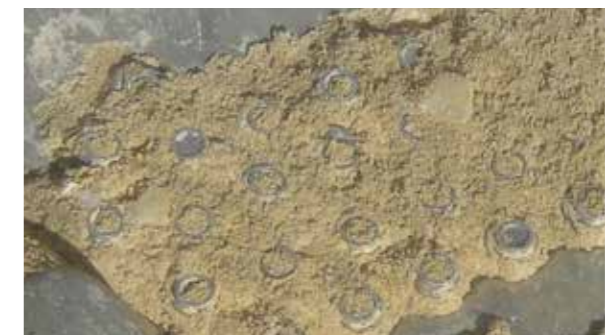
EXTENSIVE WEAR PROTECTION



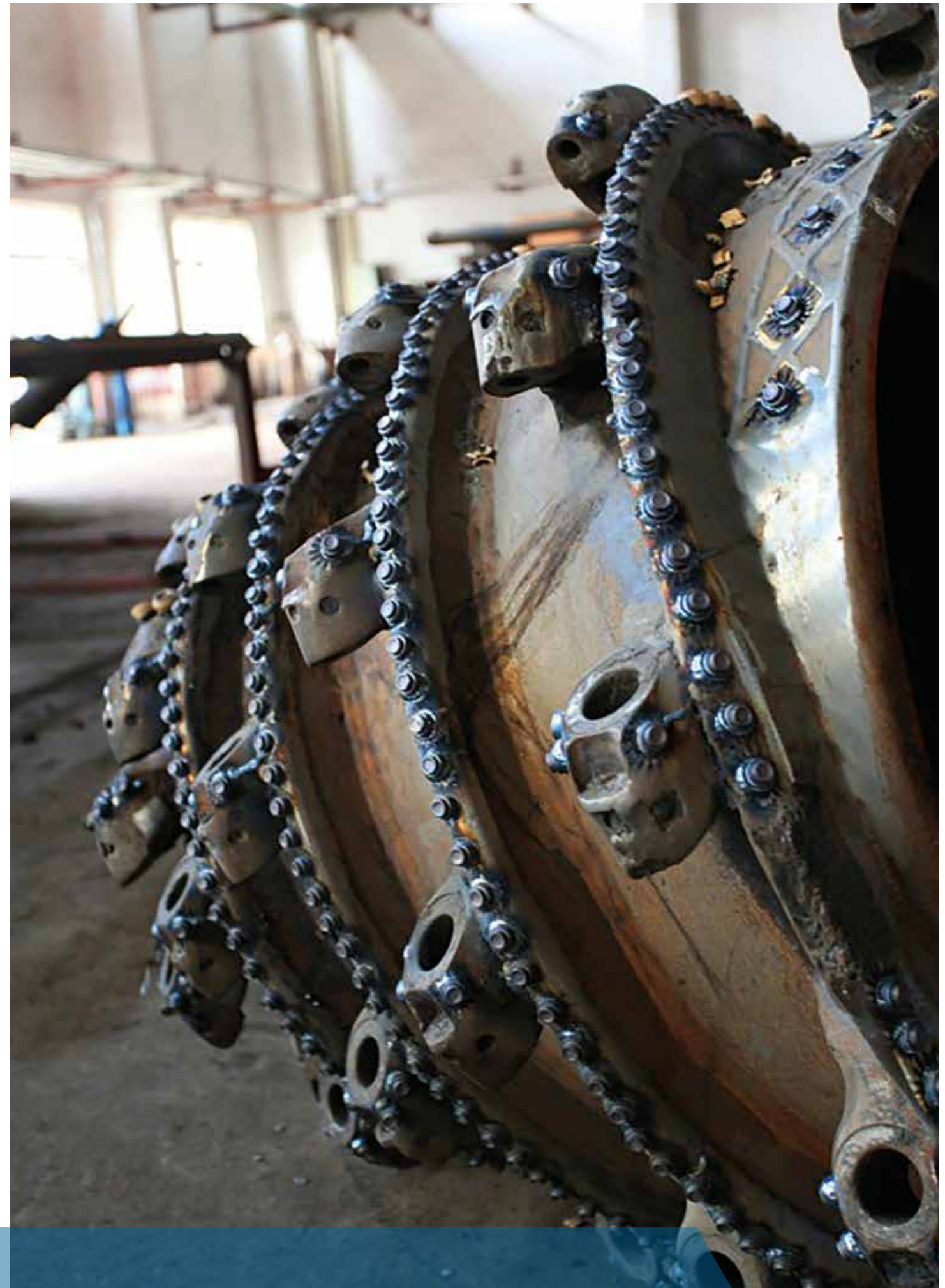
> ROCK BOX EFFECT

- Grid pattern is recommended
- Rock-Box-Effect due to the cylindrical carbide shape

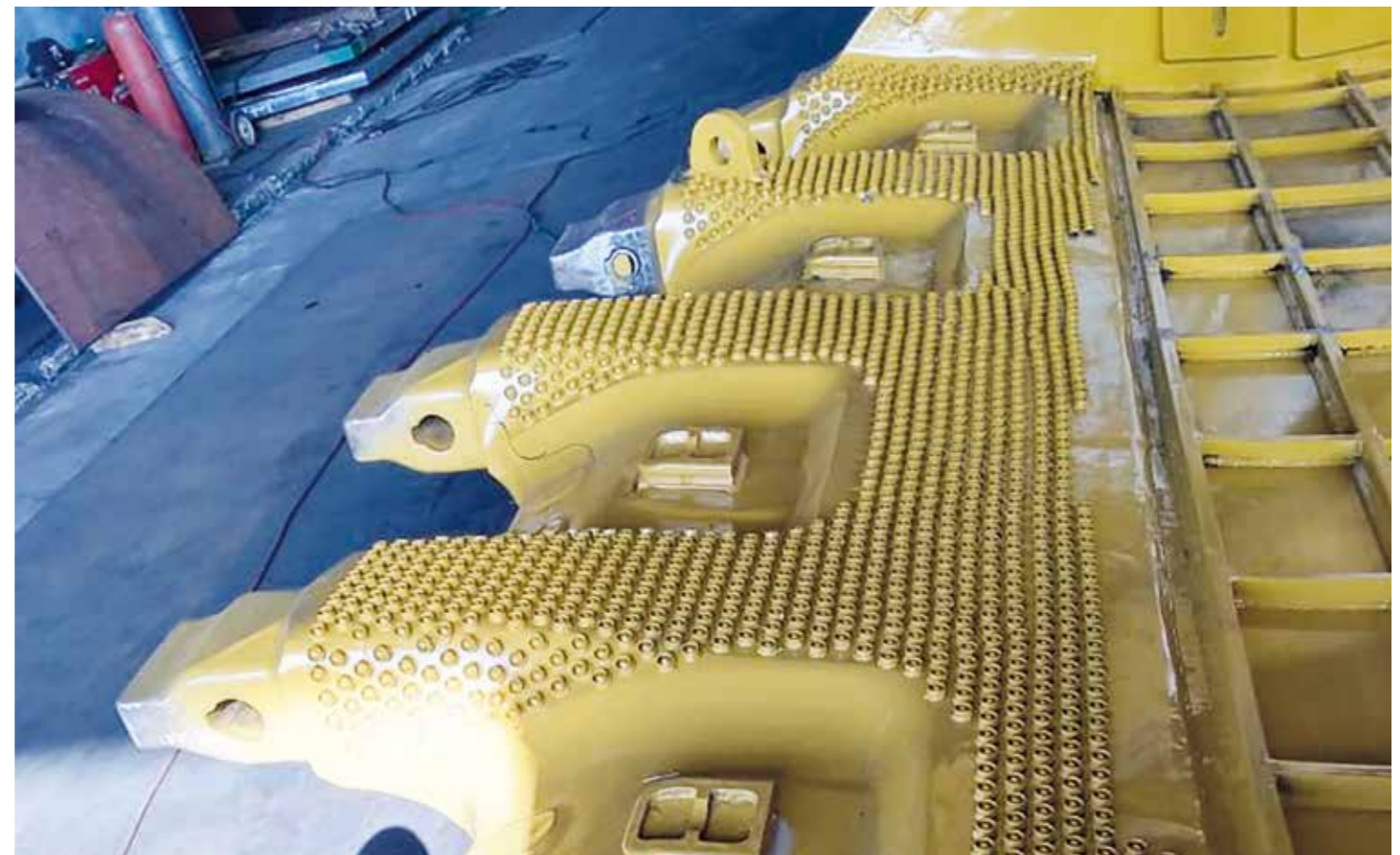
EXTENSIVE WEAR PROTECTION

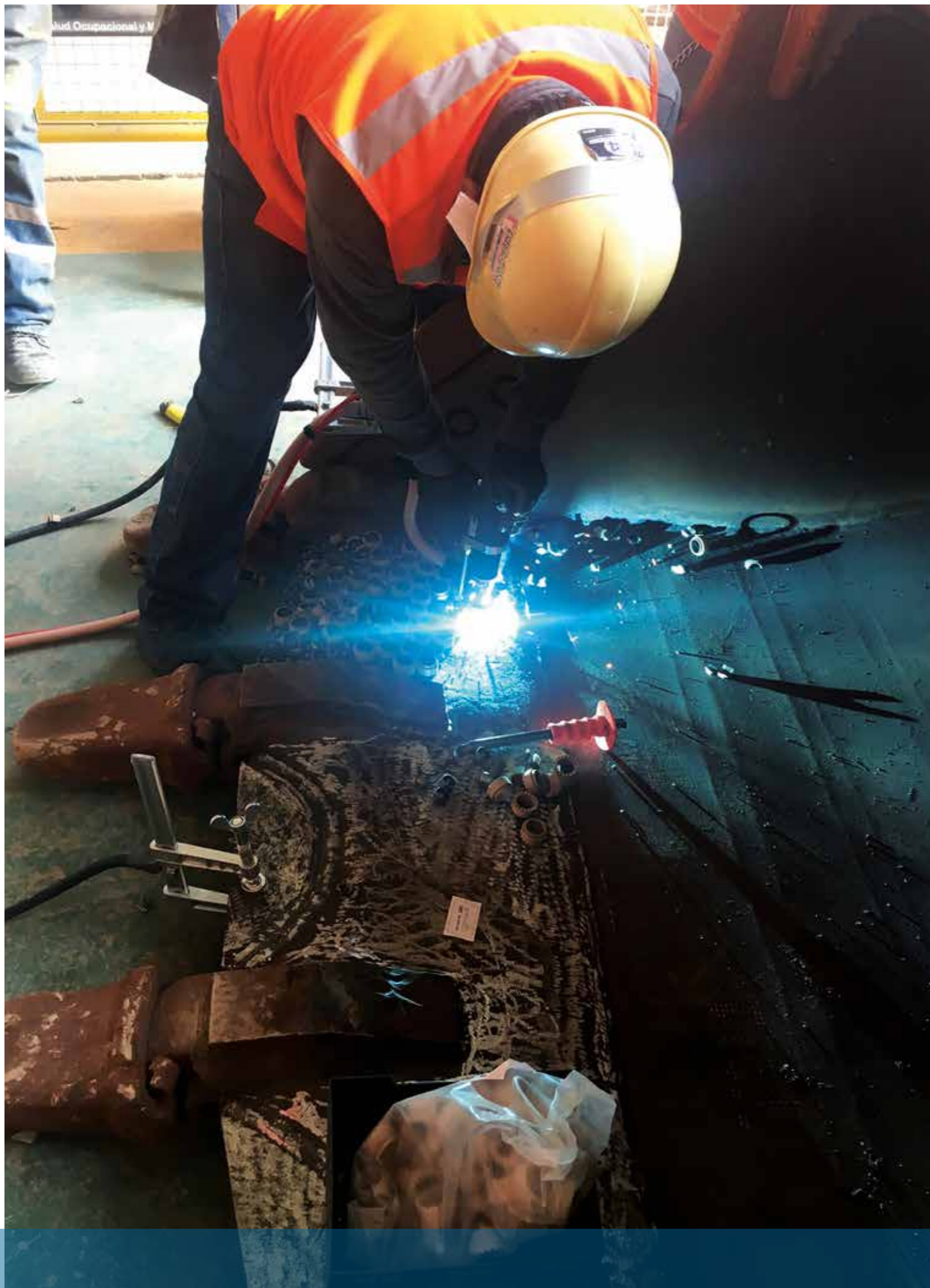


APPLICATION









➤ BETEK



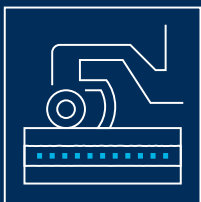
SURFACE TECHNOLOGIES

- ROAD MILLING
- SURFACE MINING
- STABILISING
- RAIL TRACK CONSTRUCTION
- CRUSHING & MIXING



UNDERGROUND TECHNOLOGIES

- FOUNDATION DRILLING
- MINING
- TRENCHLESS
- TRENCHING
- TUNGSTUDS
- DRUM CUTTERS



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