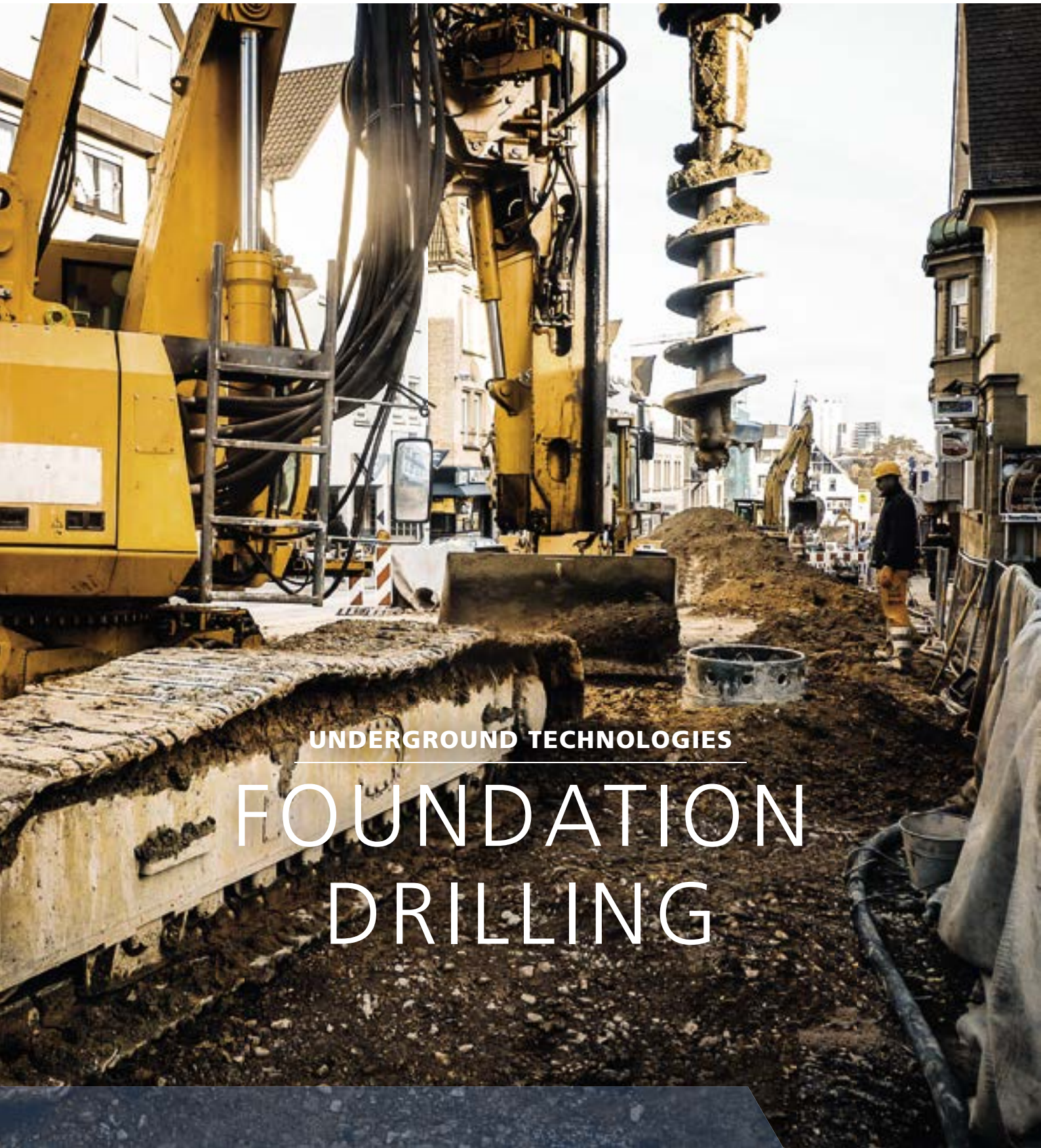




MADE IN GERMANY



UNDERGROUND TECHNOLOGIES

# FOUNDATION DRILLING





**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

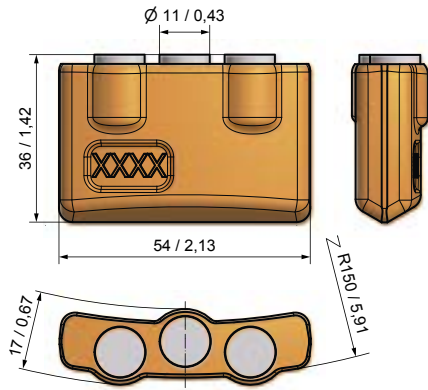
### LOGISTICS

Quick responses thanks to:

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

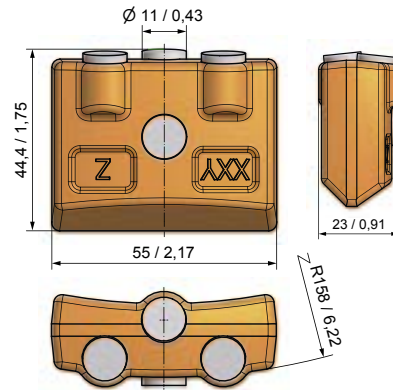
OUR KNOW-HOW COMBINED WITH STATE-OF-THE-ART PRODUCTION TECHNOLOGIES GUARANTEES THE FINEST QUALITY, MADE IN GERMANY

# WELDING BARS



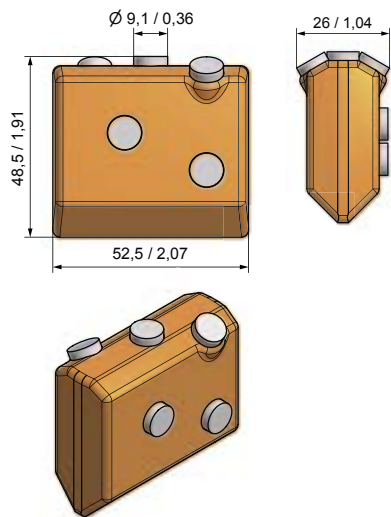
■ BA12

BA55-17/11/R



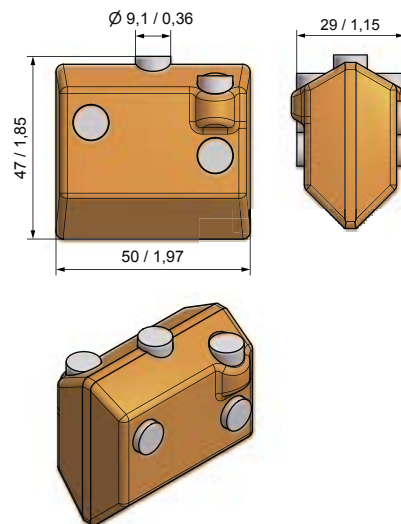
■ BA13

BA55-22



■ BA10

BA50-26.5

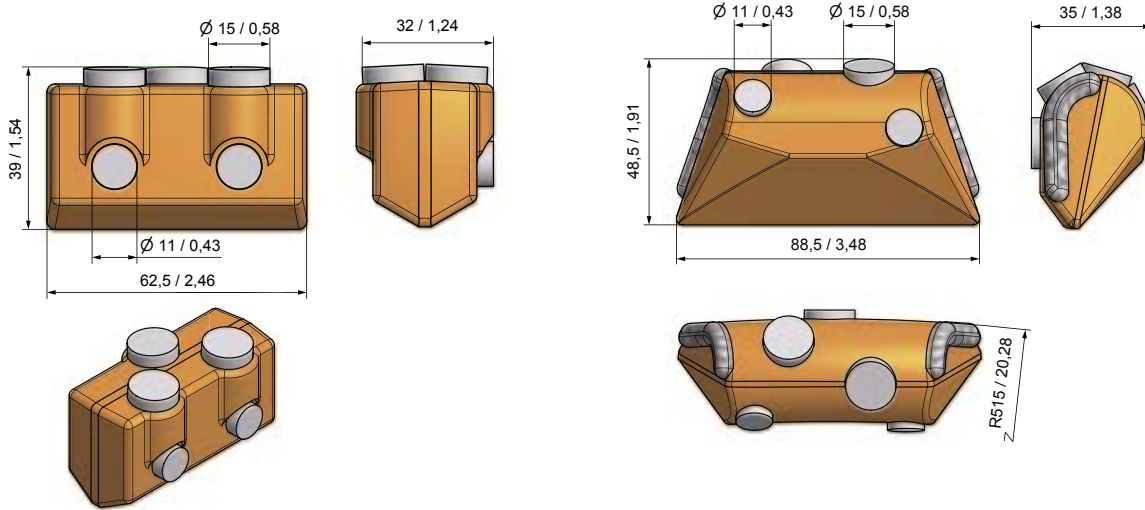



■ BA09


BA50-29



## FOUNDATION DRILLING

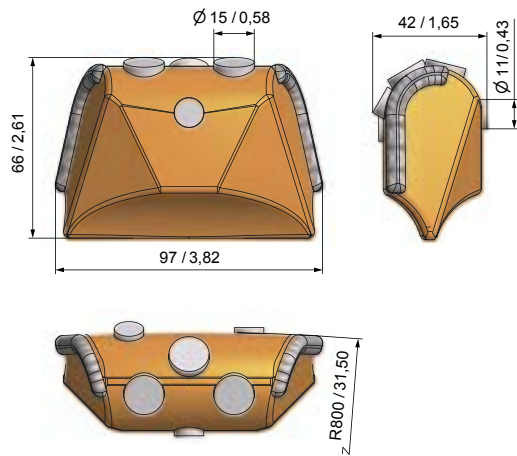


■ **BA32**  
BA60-32/2 

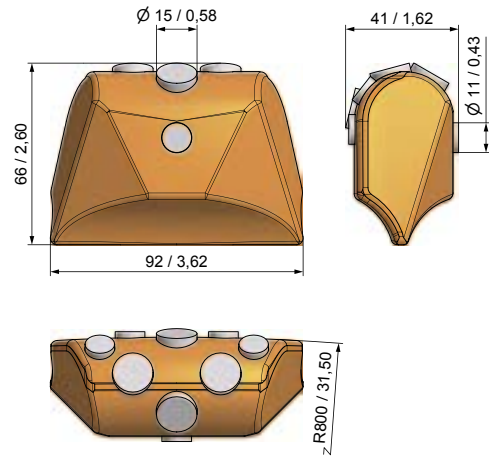
■ **BA01**  
BA90-35 



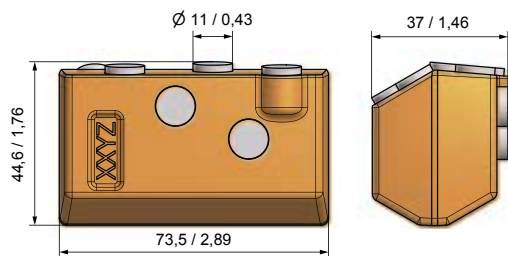
# WELDING BARS



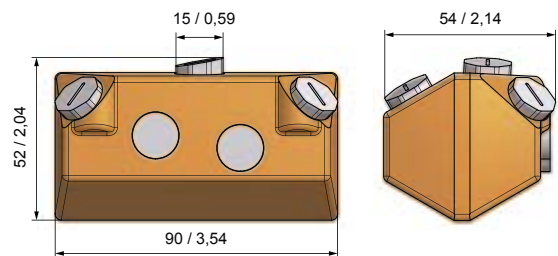
■ **BA24**  
BA90-42



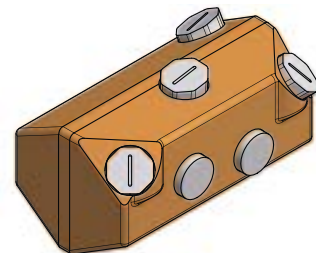
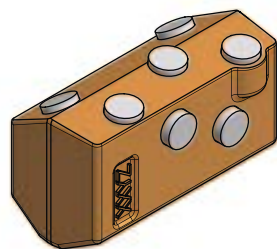
■ **BA62**  
BA92-41



■ **BA04**  
BA70-38

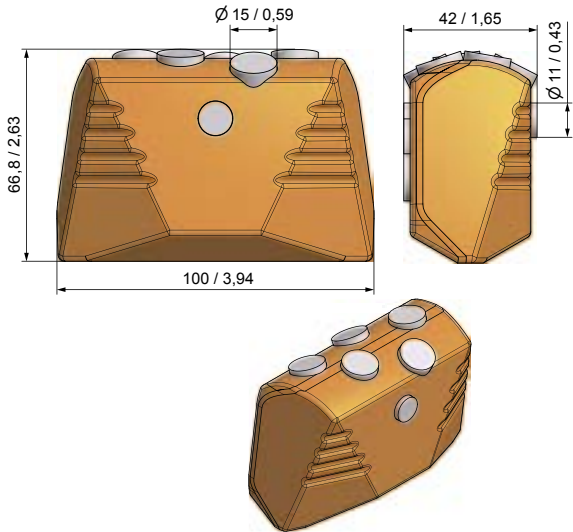


■ **BA19**  
BA90-54

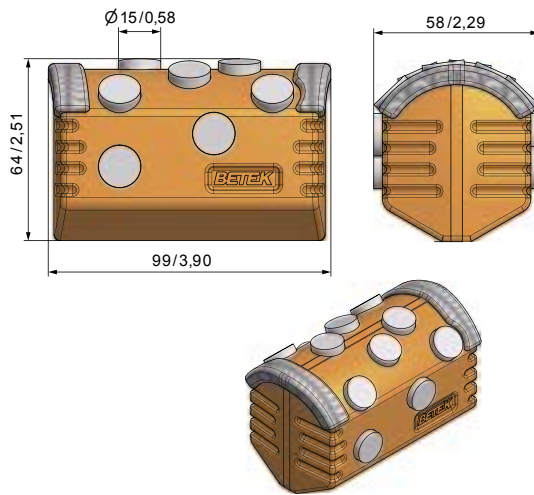




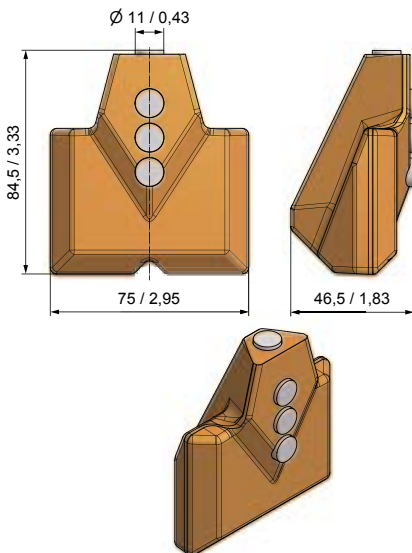
# FOUNDATION DRILLING



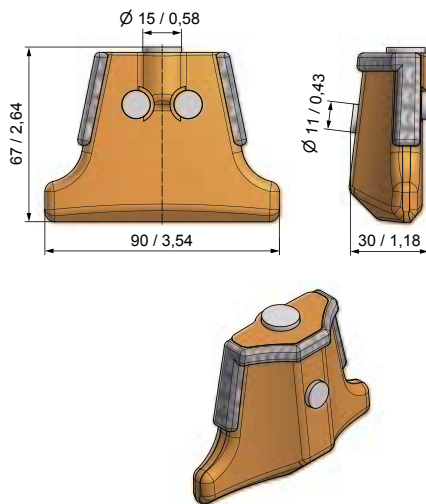
■ **BA55**  
BA100-42



■ **BA28**  
BA90-58 / 3

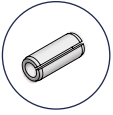


■ **BFZ26**  
BFZ83x75x45 / 1

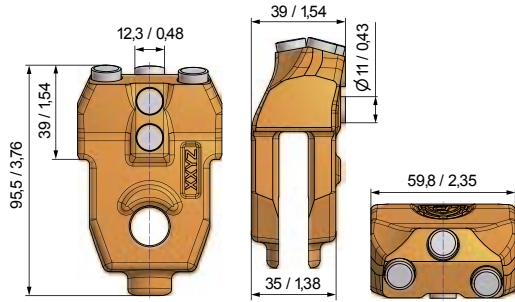


■ **BFZ72/B**  
BFZ65x90x30

# QUICK CHANGE BARS

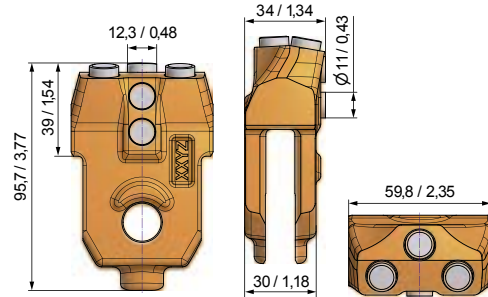


► CASING WALL THICKNESS – 30 MM/1,18"



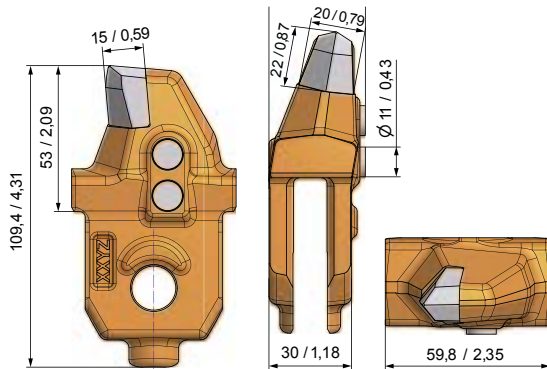
■ BA58

BA96x60x35



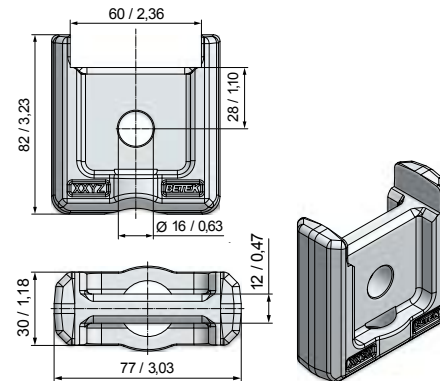
■ BA60

BA96x60x30



■ BA61

BA109x60x30

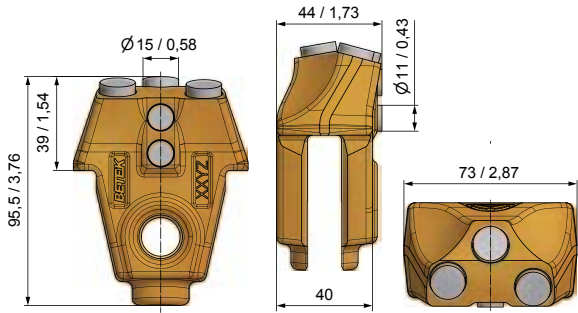
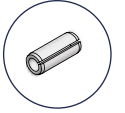


■ BHA06

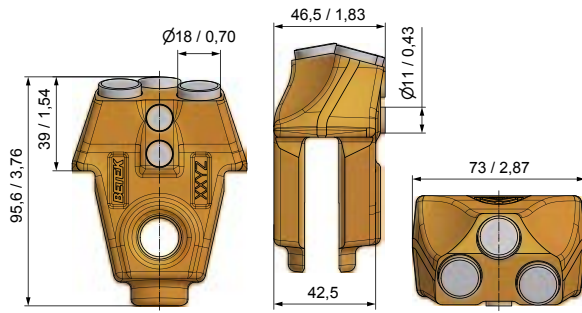
BHA77x82x30



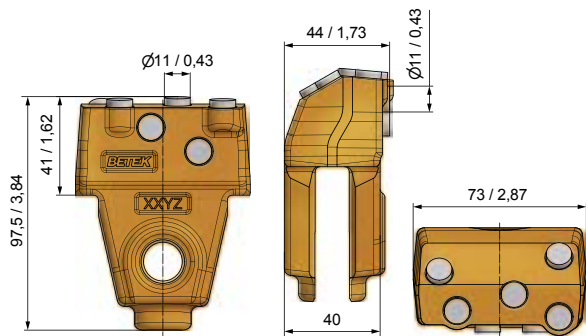
➤ CASING WALL THICKNESS – 40 MM/1,58"



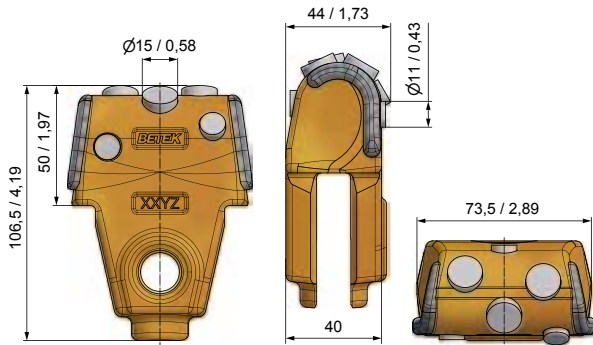
■ BA63  
BA96x73x40



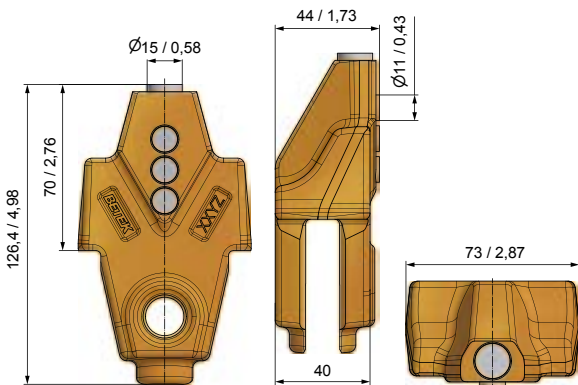
■ BA65  
BA96x73x42,5



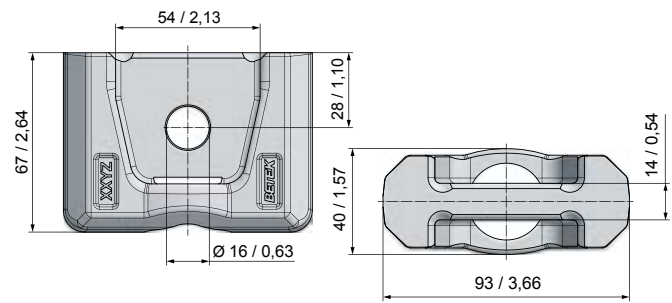
■ BA66  
BA98x73x40



■ BA67  
BA107x77x40



■ BA68  
BA126x73x40

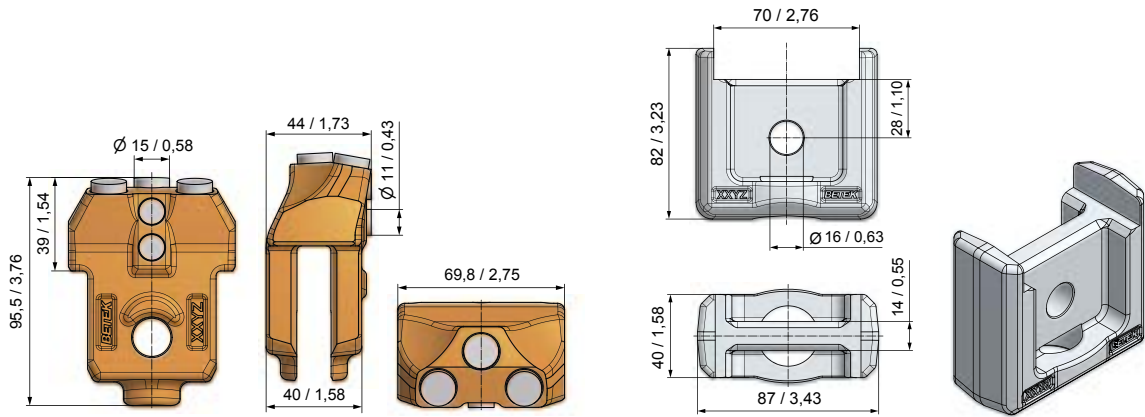


■ BHA07  
BHA93x67x35

# QUICK CHANGE BARS



## ► CASING WALL THICKNESS – 40 MM/1,58"

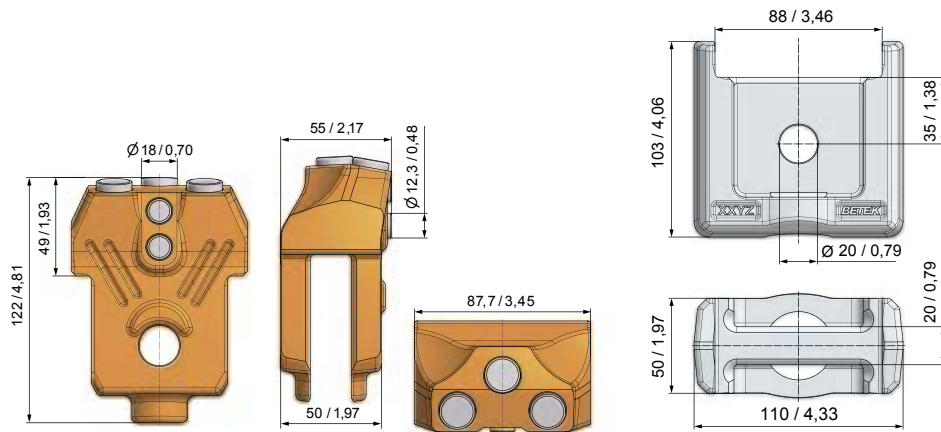


■ **BA47**  
BA96x70x40 

■ **BHA04**  
BHA87x82x40 



## ► CASING WALL THICKNESS – 50 MM/1,97"



■ **BA53**  
BA122x88x50 

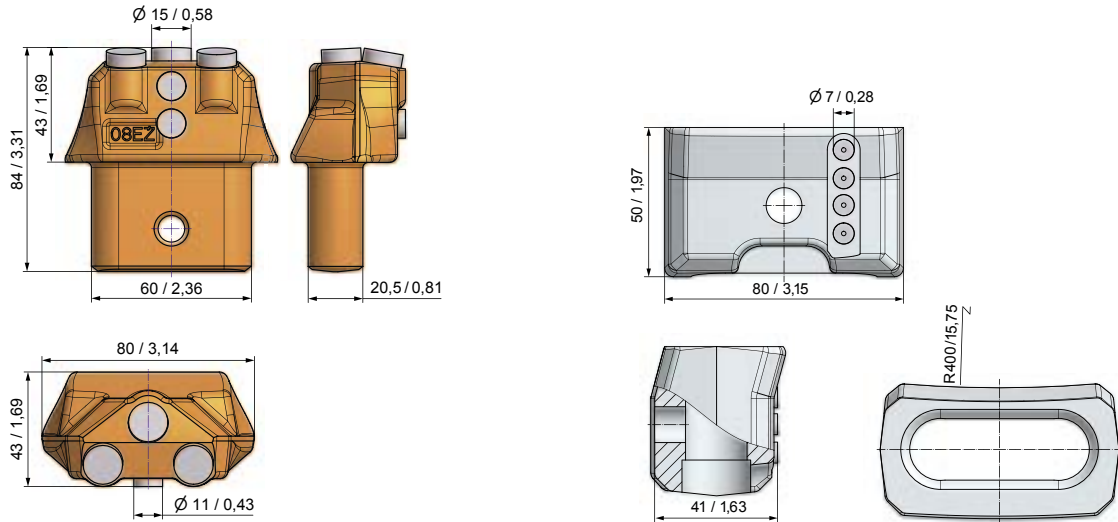
■ **BHA05**  
BHA110x103x50 



# QUICK CHANGE BARS



► CASING WALL THICKNESS – 40 MM/1,58"



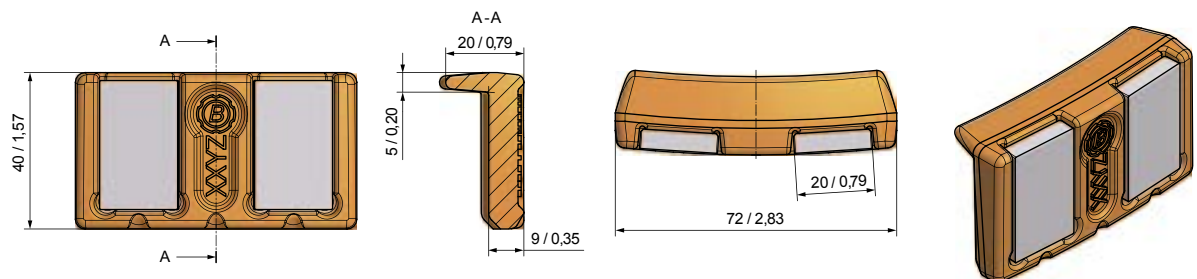
■ BA46  
BA80-31



■ BHA02  
BHA60 / 2



# BORE PROTECTION ON AUGERS

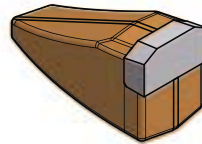
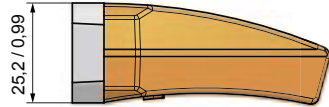
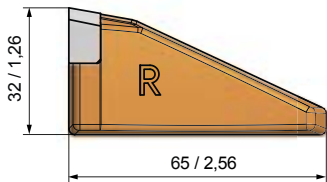


■ BA54

BA72x40x20

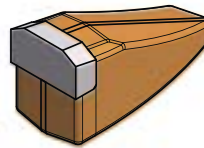
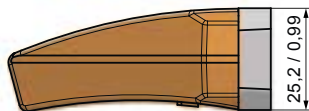
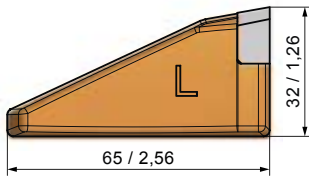


# WELD-ON TEETH



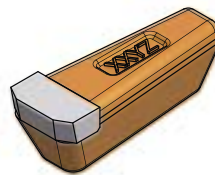
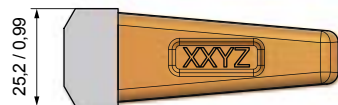
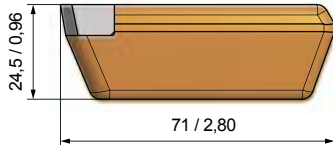
■ **BFZ25R**

BFZ25-R



■ **BFZ25L**

BFZ25-L

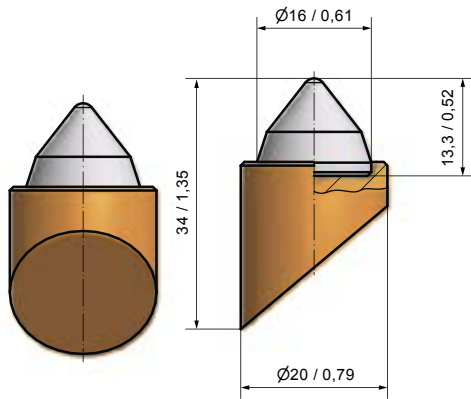


■ **BFZ96**

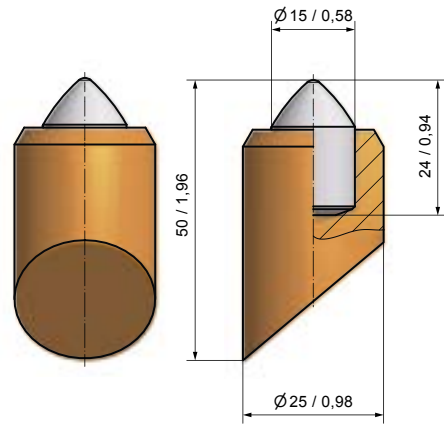
BFZ71x25



# WELD-ON TEETH



■ BFZ158  
BFZ3

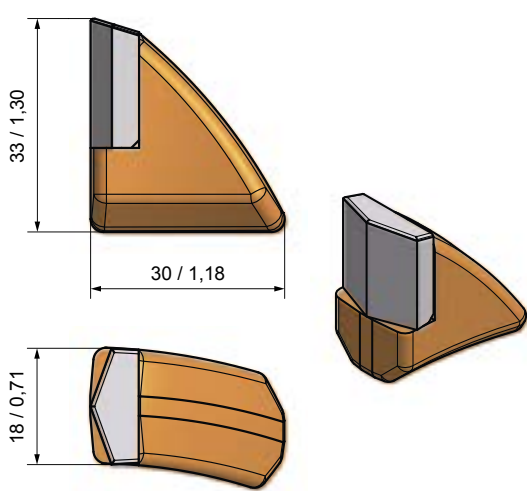


■ BFZ207  
BFZ1

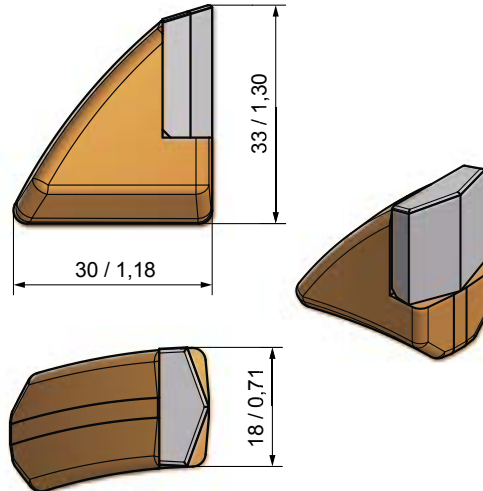




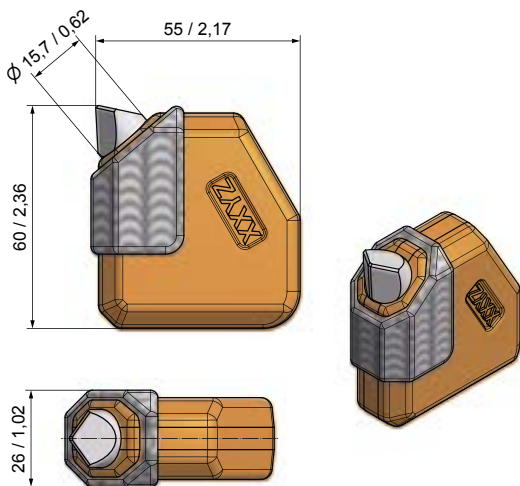
# FOUNDATION DRILLING



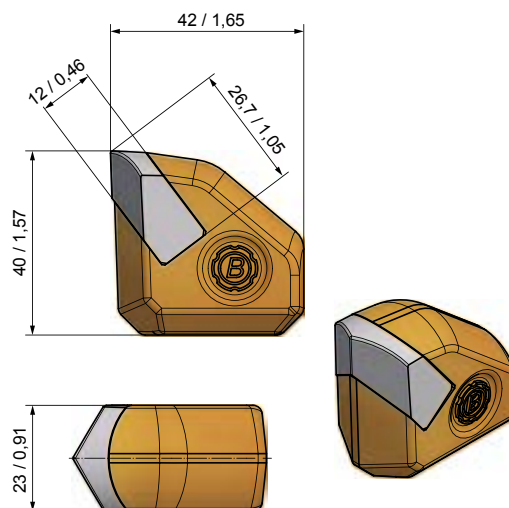
■ **BFZ107**  
BFZ18/R



■ **BFZ144**  
BFZ18/L



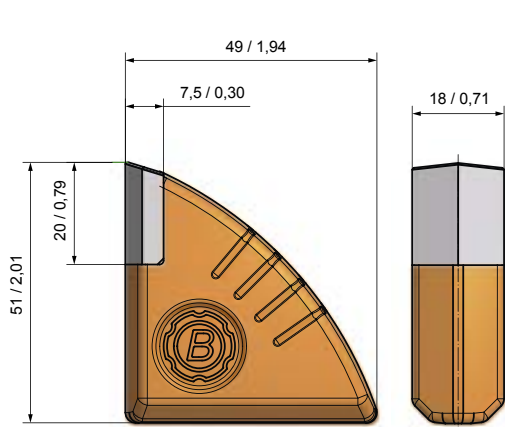
■ **BFZ257**  
BFZ60x55x22



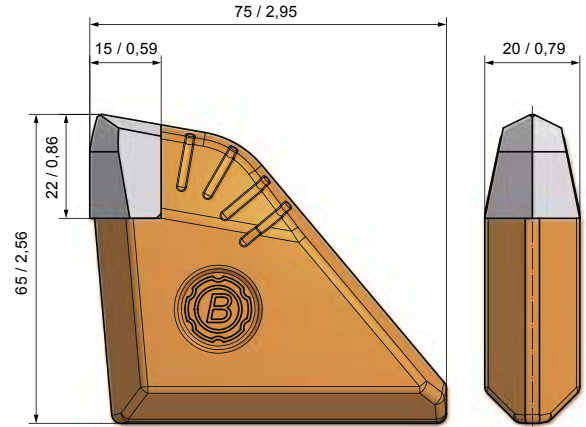
■ **BFZ327**  
BFZ42x40x23/1



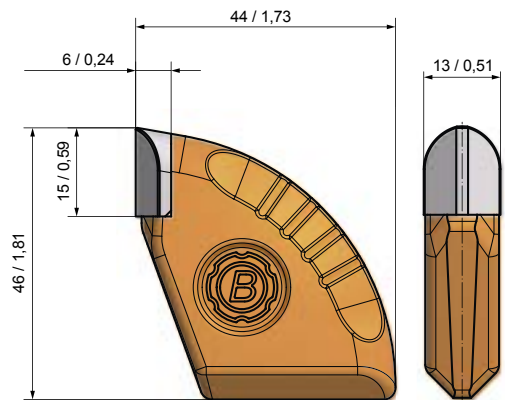
# WELD-ON TEETH



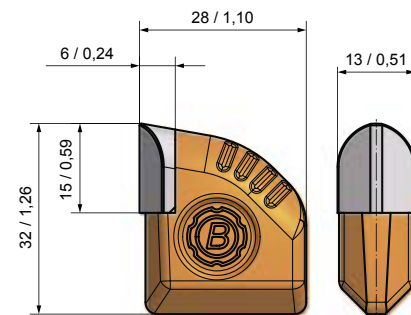
■ **BFZ87**  
BFZ18/2 



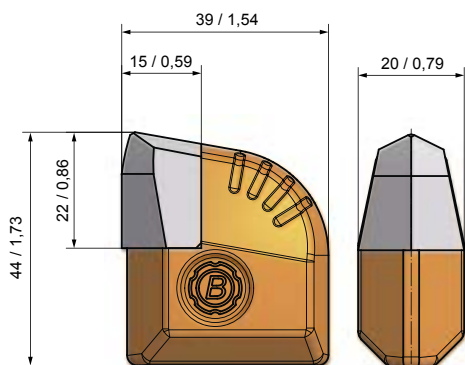
■ **BFZ319**  
BFZ75x65x20 



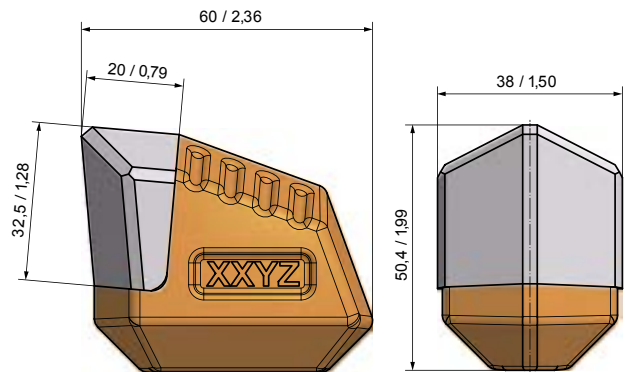
■ **BFZ318**  
BFZ46x44x13 




■ **BFZ321**  
BFZ32x28x13 

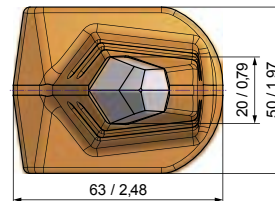
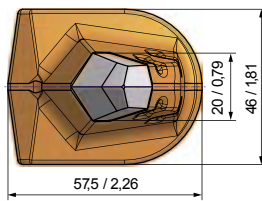
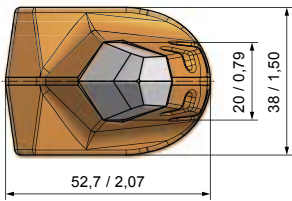
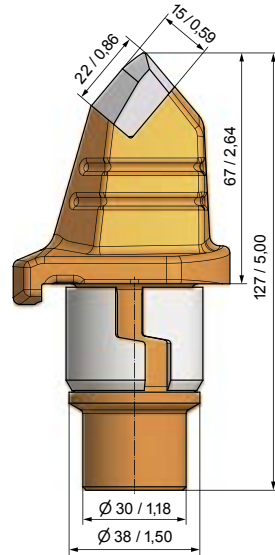
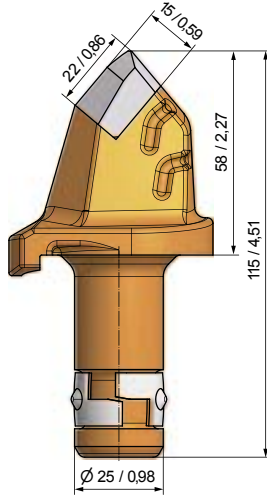
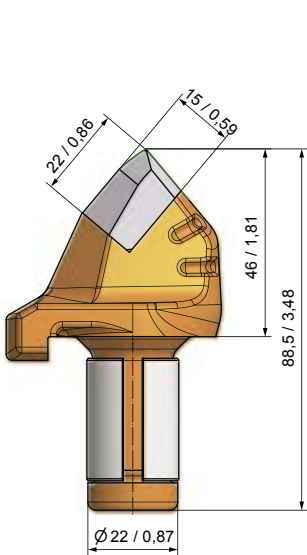
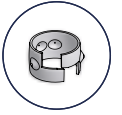



■ **BFZ320**  
BFZ44x39x20 



■ **BFZ326**  
BFZ38/M 

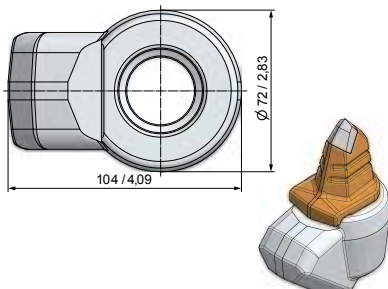
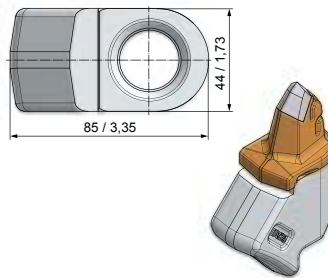
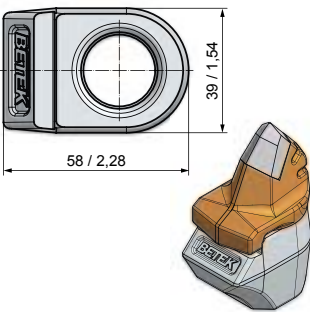
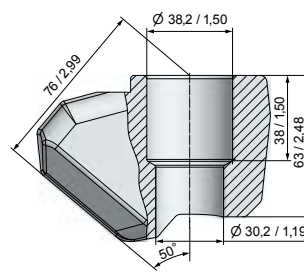
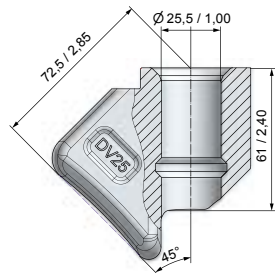
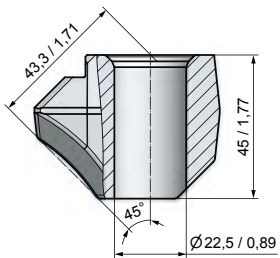
# DRAGON TOOTH



■ **BFR07**  
BFR46-22 

■ **BFR08**  
BFR58-25 

■ **BFR10**  
BFR67-38/30 

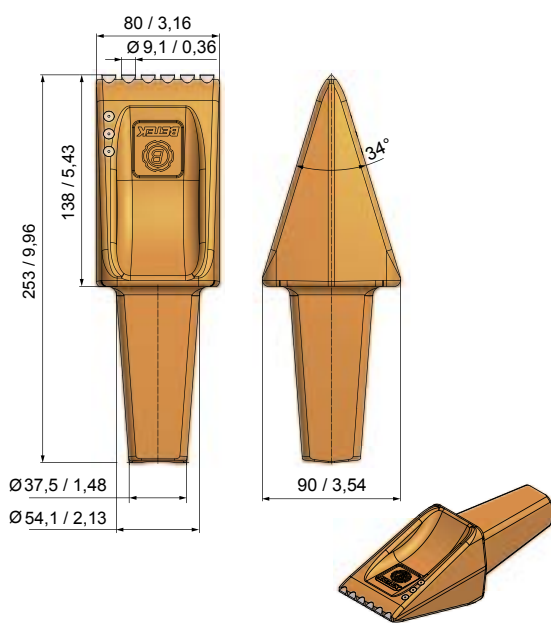


■ **BHR133**  
B10/22-F 

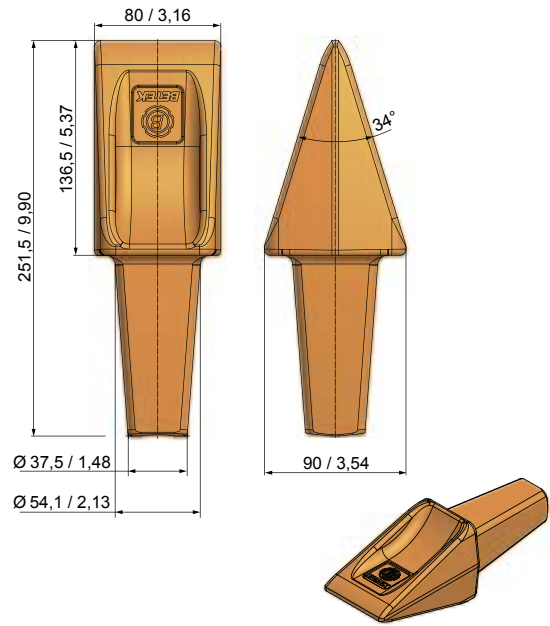
■ **BHR184**  
DV25-F 

■ **BHR244**  
B43K-F 

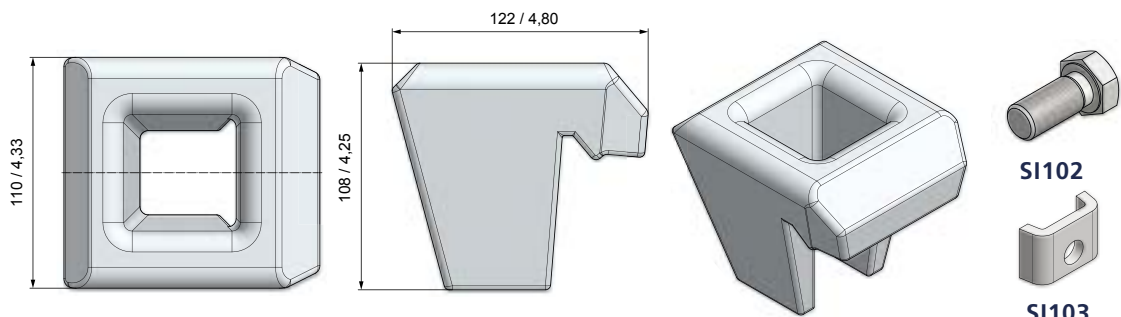
# FLAT TEETH



■ **BFZ317**  
BFZ80-B 

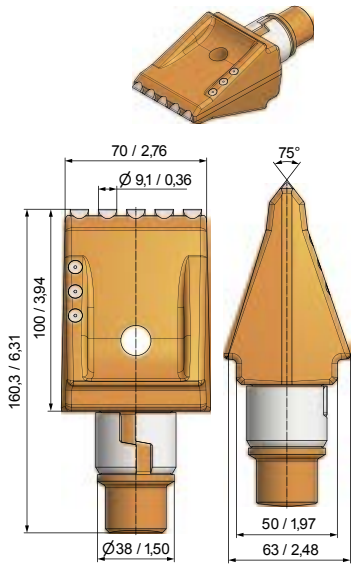


■ **BFZ79**  
BFZ80OHM 

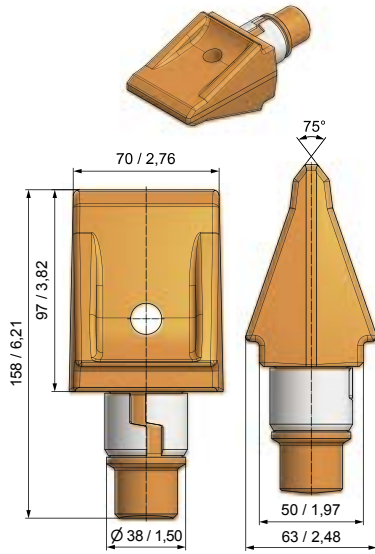


■ **BHR73**  
BHZ80/2 

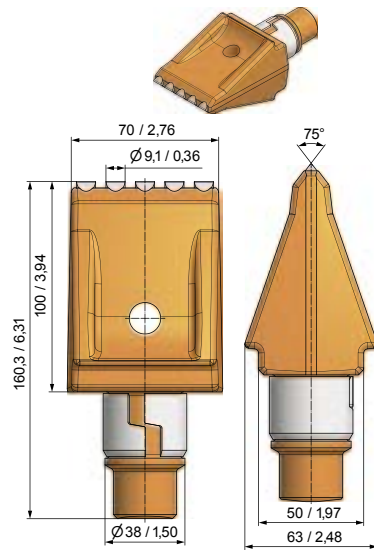
# FOUNDATION DRILLING



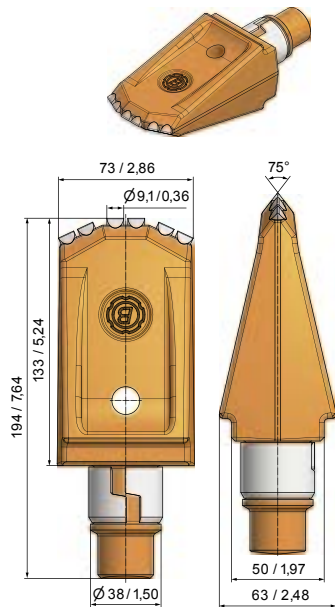
■ **BFZ162**  
BFZ100x70/2



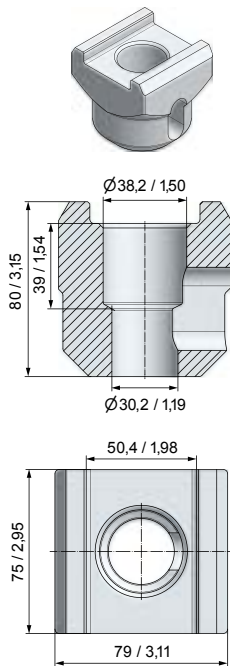
■ **BFZ69**  
BFZ100x70



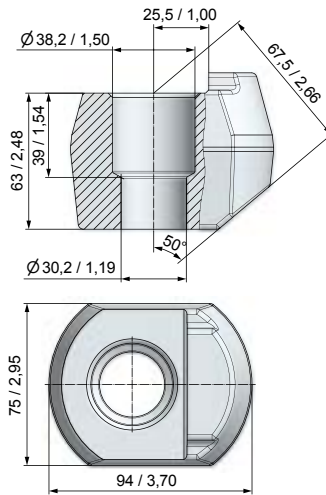
■ **BFZ339**  
BFZ100x70/4



■ **BFZ322**  
BFZ133x73

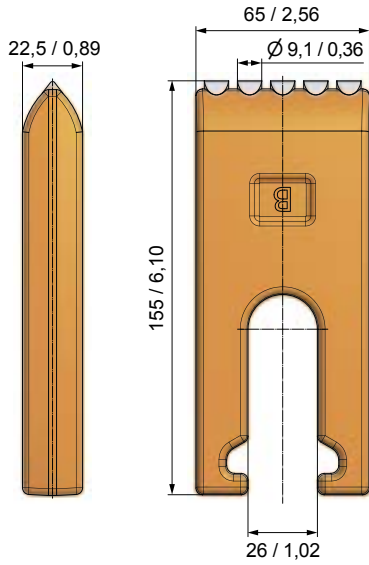


■ **BHR112**  
B75

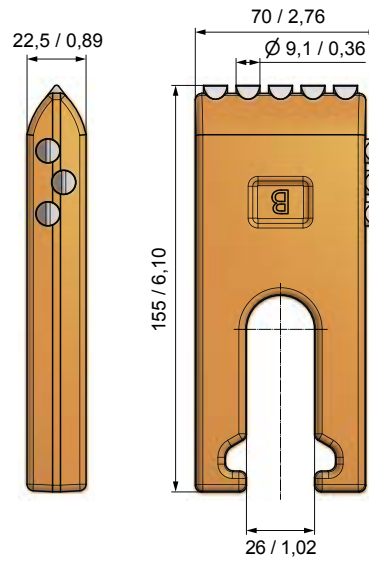


■ **BHR39**  
B48

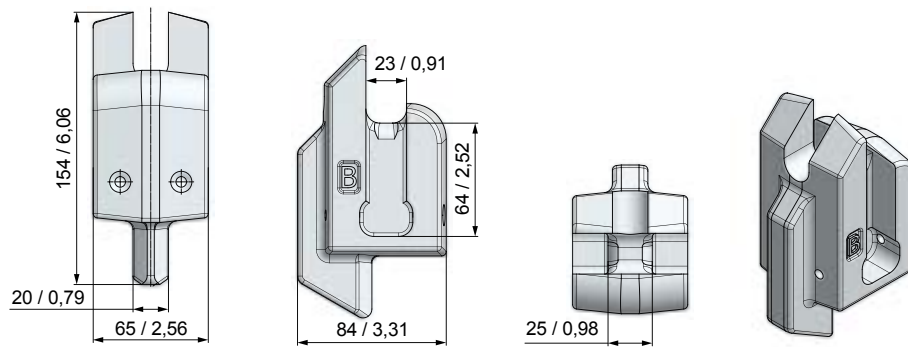
# FLAT TEETH



■ **BFZ65HM**  
BFZ65/2



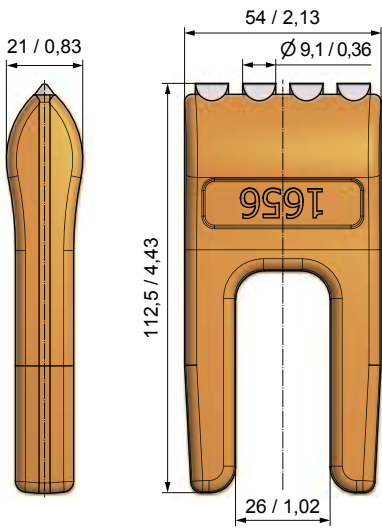
■ **BFZ02**  
BFZ65/3



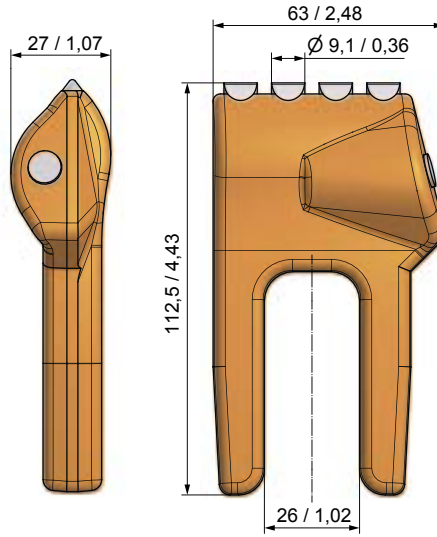
■ **BHF02**  
B65-22



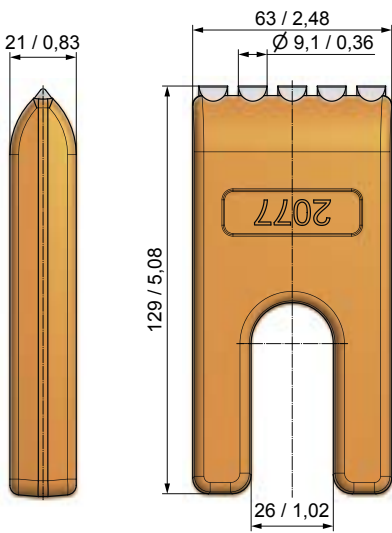
# FOUNDATION DRILLING



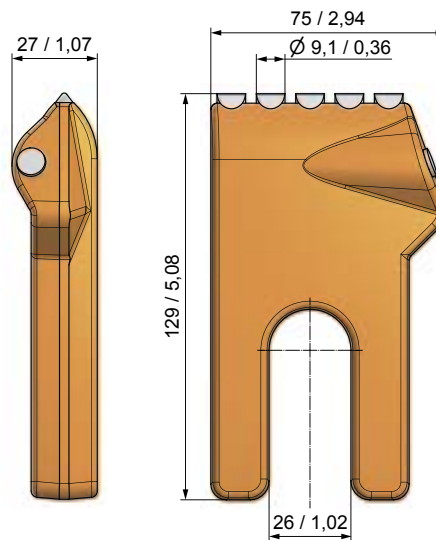
■ **BFZ05N**  
BFZ1656N



■ **BFZ198N**  
BFZ1658N

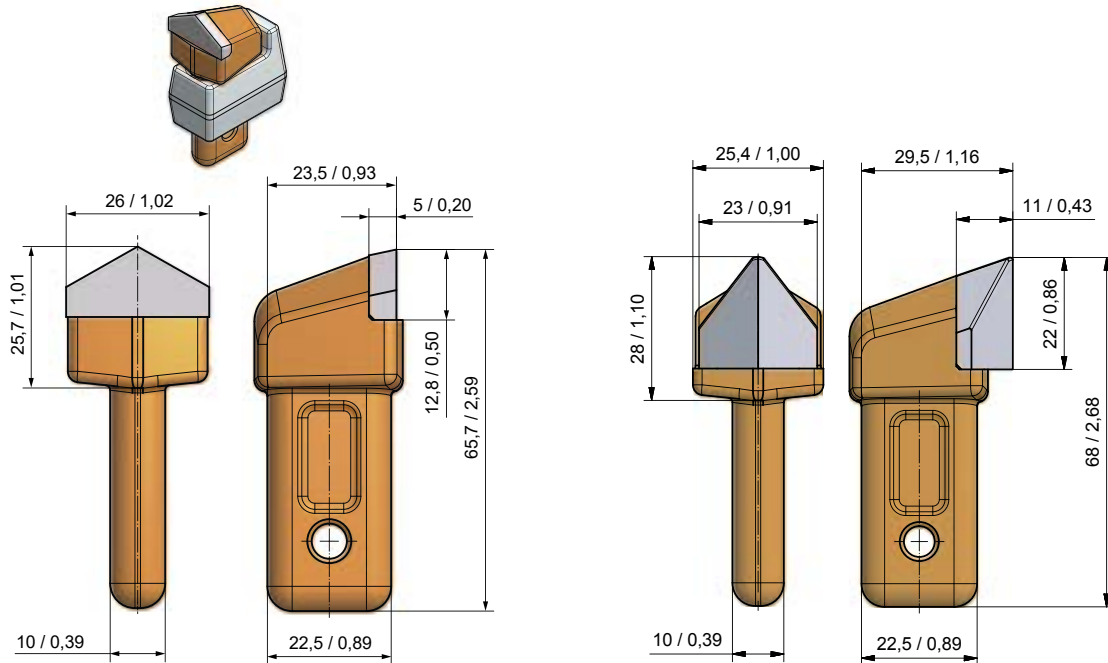


■ **BFZ200N**  
BFZ2077N



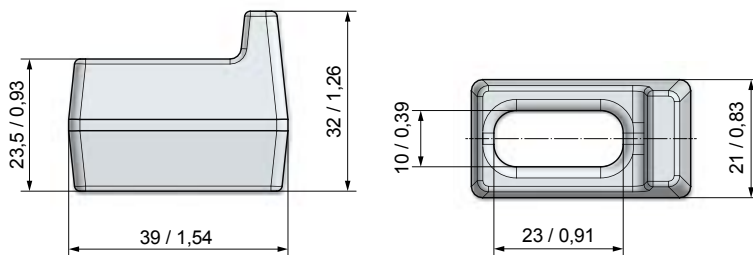
■ **BFZ218**  
BFZ2078

# FLAT TEETH



■ **BFZ272**  
BFZ67x30x26 

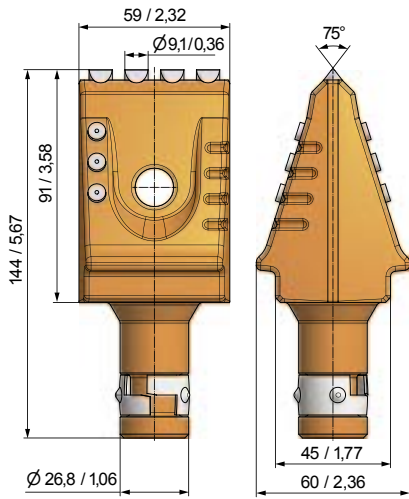
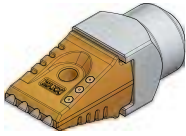
■ **BFZ347**  
BFZ68x32x25 



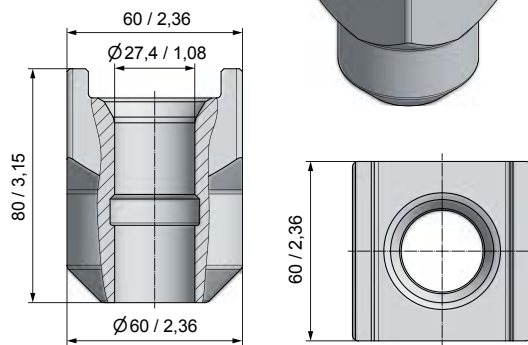
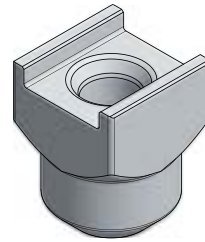
■ **BHZ24**  
BHZ39x32x21 



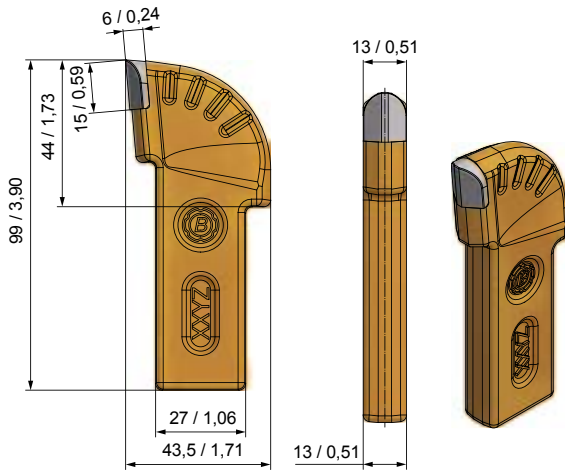
# FOUNDATION DRILLING



■ **BFZ324**  
BFZ91x59 



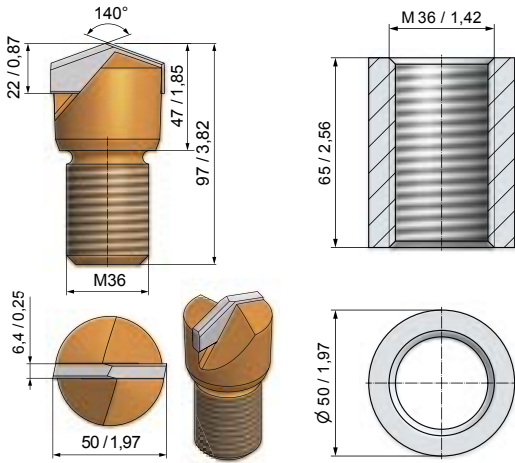
■ **BHR254**  
B60/27 



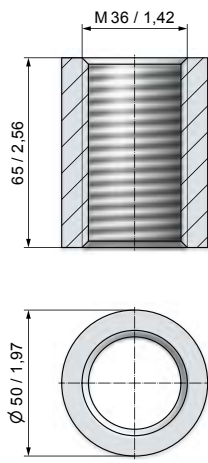
■ **BF64**  
BF99x27x13 



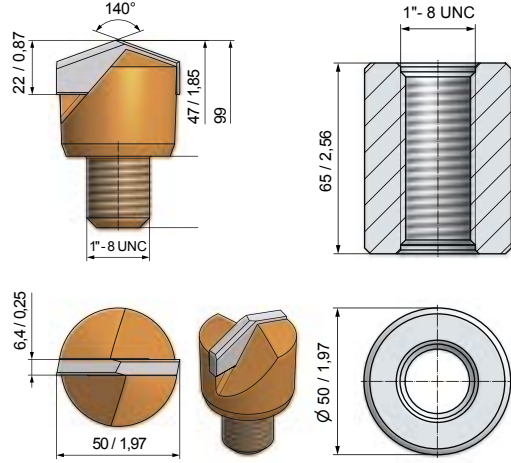
# PILOTS



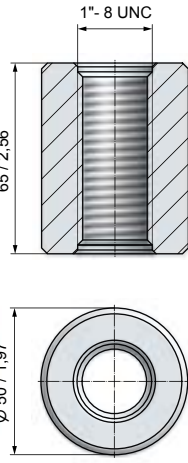
■ **BP04**  
BP51/M36-HD3 



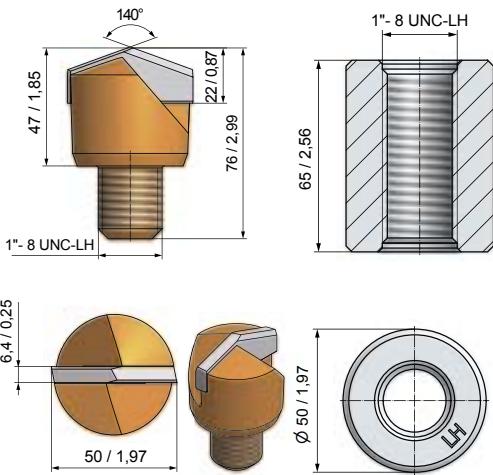
■ **BPH01**  
GH-M36 



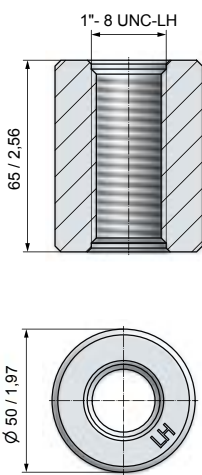
■ **BP01**  
BP51/1"-HD3 



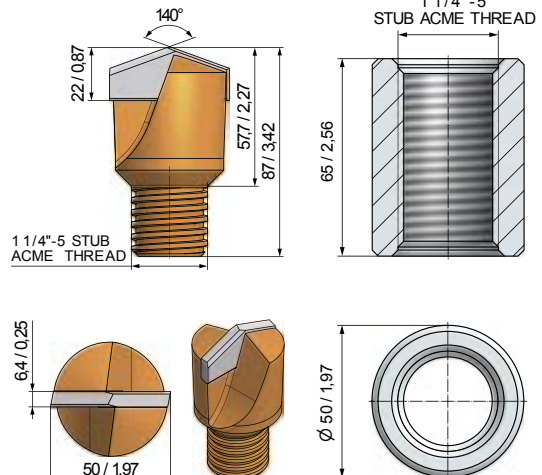
■ **BPH02**  
GH-1" 



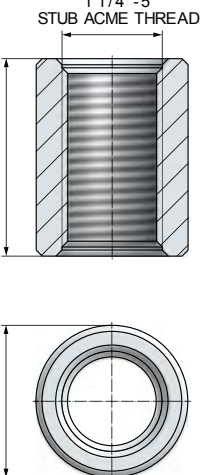
■ **BP10**  
BP51/1"-HD3/LH 




■ **BPH03**  
GH-1" LH 



■ **BP51**  
BP51x87 

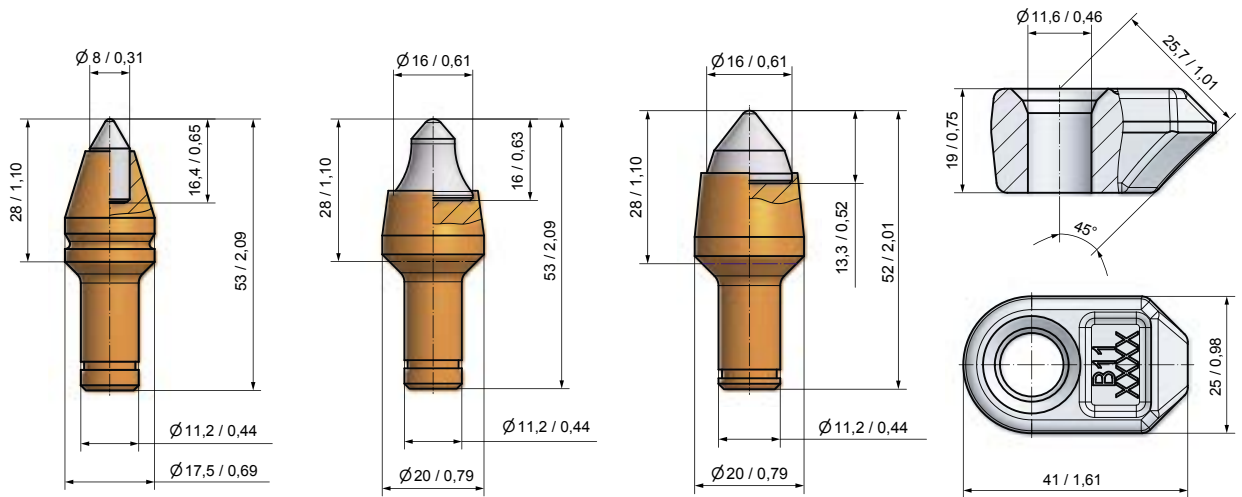


■ **BPH04**  
GH-1 1/4"-5 

# ROUND SHANK CUTTER BITS



## ▶ SHANK SYSTEM – Ø 11 MM/0,43"



■ **BM11**  
BM8-11.3



■ **BM10**  
BG11W-61.2028



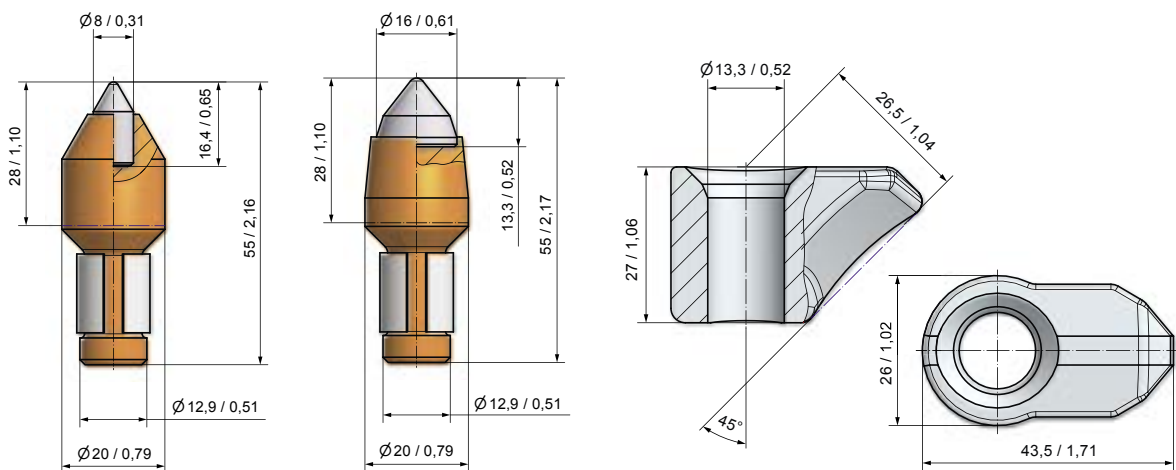
■ **BM46**  
BM3-11.3



■ **BHR03**  
B11



## ▶ SHANK SYSTEM – Ø 13 MM/0,51"



■ **BM34**  
BM8-13/H



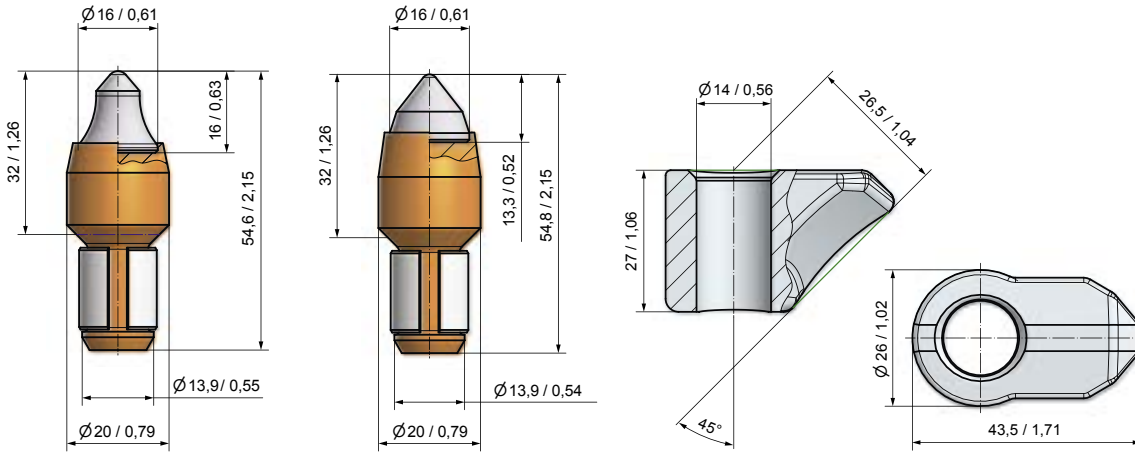
■ **BM62**  
BM3-13/H



■ **BHR47**  
B13



► SHANK SYSTEM – Ø 14 MM/0,55"

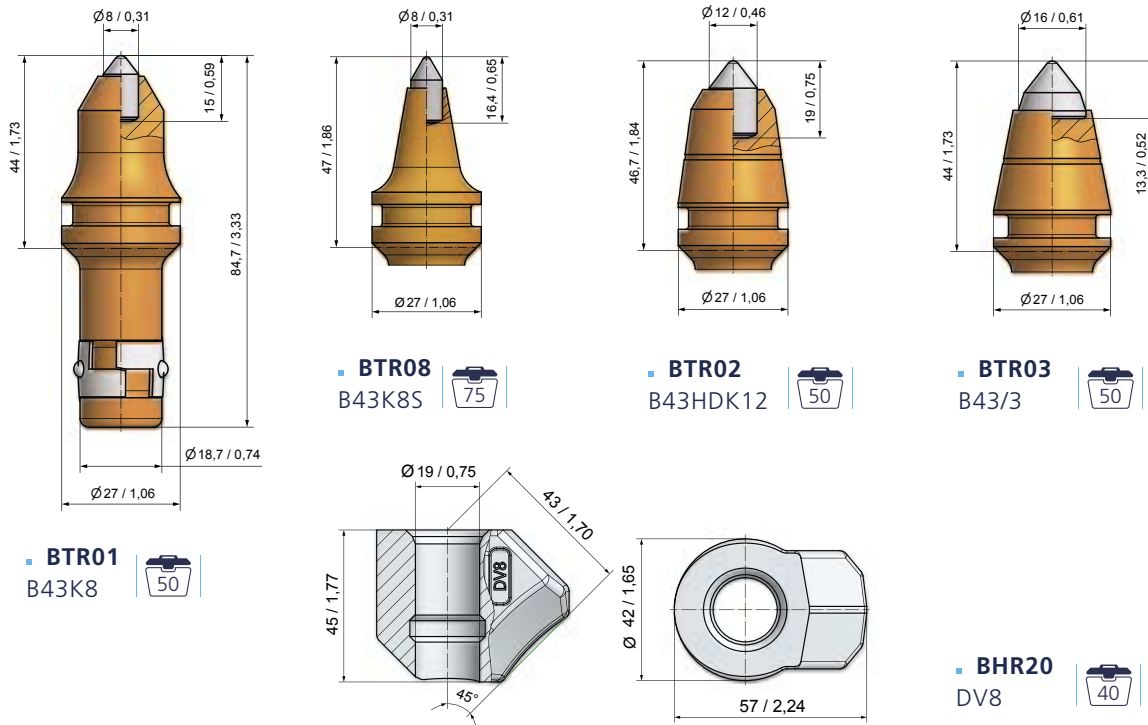
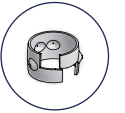


■ **BM55**  
BM4-14/2 

■ **BM60**  
BM3-14/H 

■ **BHR109**  
B14 

► SHANK SYSTEM – Ø 18,7 MM/0,74"



■ **BTR01**  
B43K8 

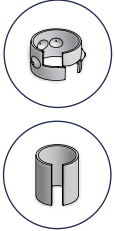
■ **BTR08**  
B43K8S 

■ **BTR02**  
B43HDK12 

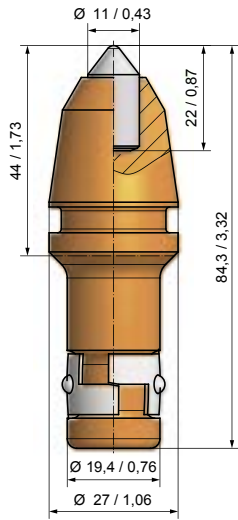
■ **BTR03**  
B43/3 

■ **BHR20**  
DV8 

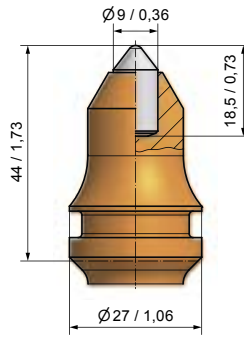
# ROUND SHANK CUTTER BITS



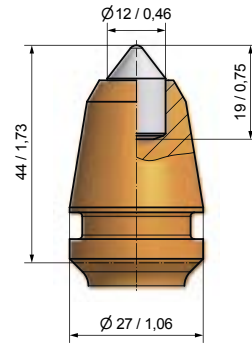
## ▶ SHANK SYSTEM – Ø 19,4 MM – 0,76"



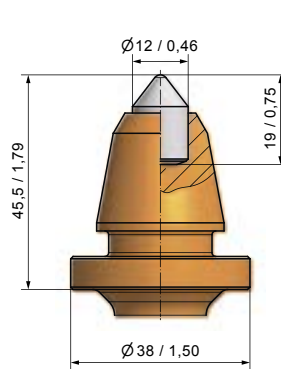
■ **BSK16**  
B1HDK11-K



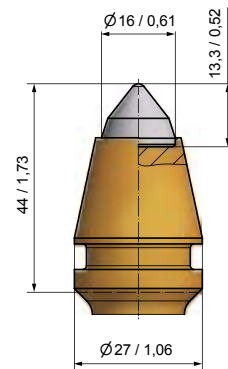
■ **BSK15**  
B1K9-K



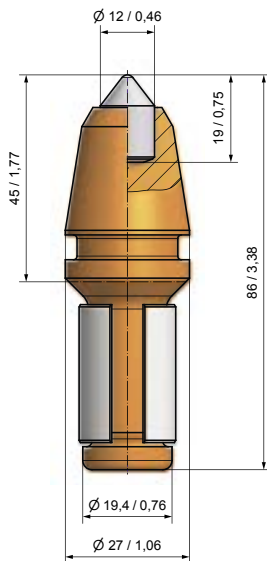
■ **BSK17**  
B1HDK12-K



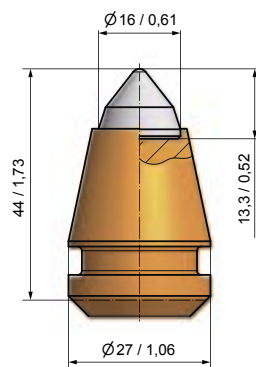
■ **BSK21**  
B1-12/38-K



■ **BSK23**  
B3-K/2

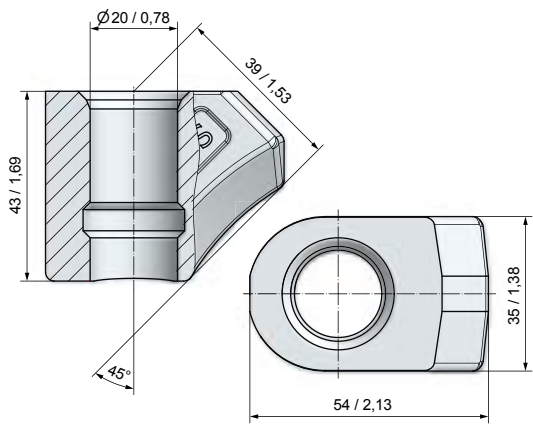


■ **BSH05**  
B1HDK12

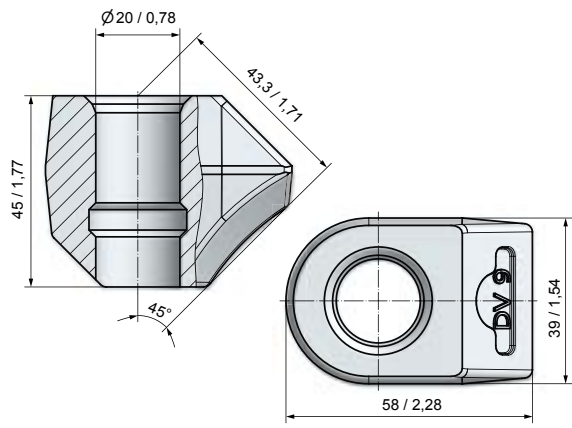


■ **BSH09**  
B3

► SHANK SYSTEM – Ø 19,4 MM/0,76"



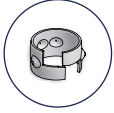
■ BHR164  
DV9-S



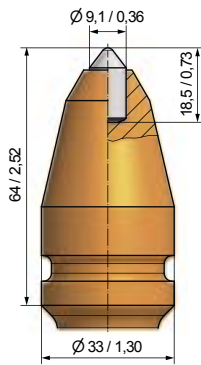
■ BHR07  
DV9



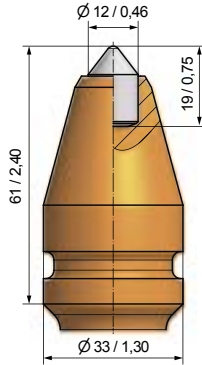
# ROUND SHANK CUTTER BITS



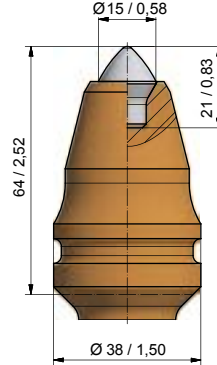
## ▶ SHANK SYSTEM – Ø 25 MM/1"



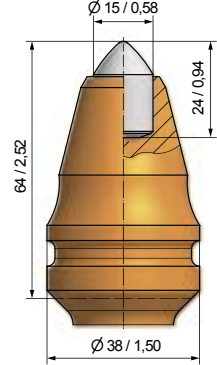
■ **BTK01**  
BG25K-09.3364



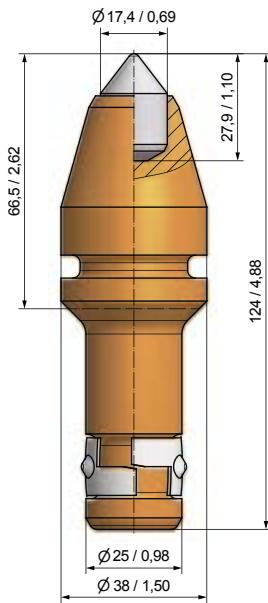
■ **BTK03**  
BG25K-12.3361



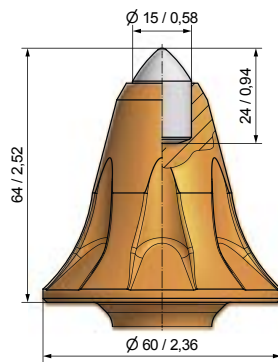
■ **BTK164**  
BG25K-76.3864



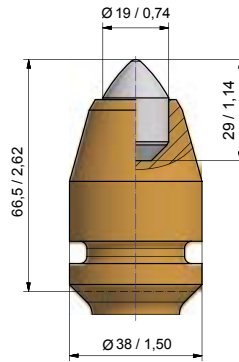
■ **BTK10**  
BG25K-15.3864



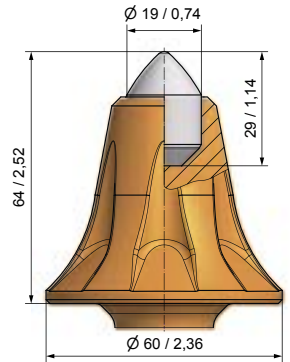
■ **BTK70**  
BG25K-17.3867



■ **BTK81**  
B40HDS/60



■ **BTK162**  
BG25-19.3867

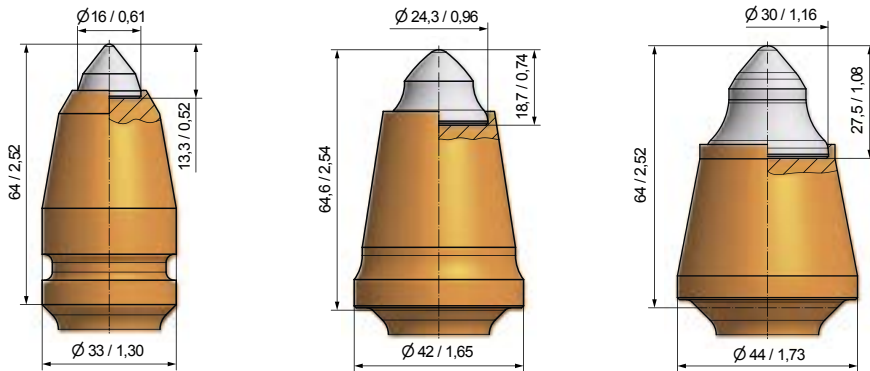
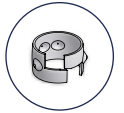


■ **BTK89**  
BG25K-19.6064





► SHANK SYSTEM – Ø 25 MM/1"

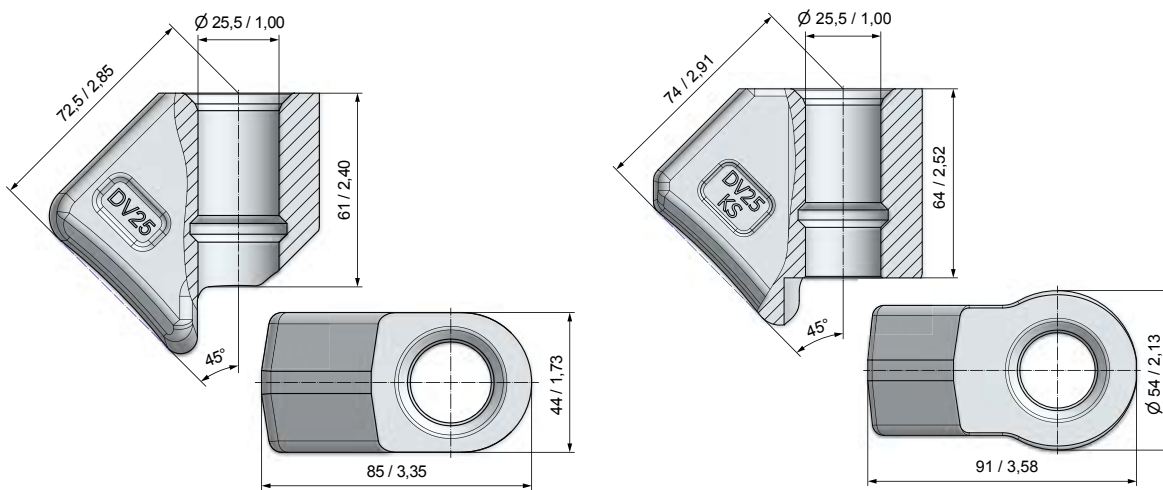


■ BTK16  
BG25K-60.3364 

■ BTK87  
BG25K-68.4264 

■ BTK26  
BG25K-69.4464 

► SHANK SYSTEM – Ø 25,5 MM/1"



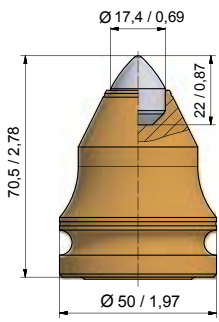
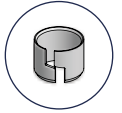
■ BHR31  
DV25 


■ BHR121  
DV25KS 

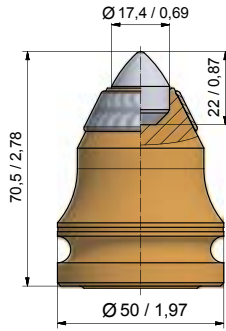



# ROUND SHANK CUTTER BITS

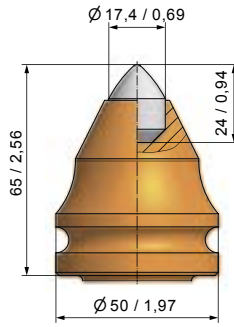
## ▶ SHANK SYSTEM – Ø 38/30 MM – 1,5/1,18"




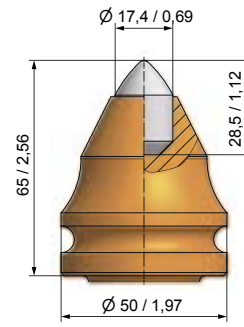
■ **BKH110**  
BS38H-17.5070A 



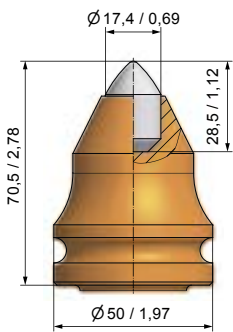
■ **BKH110P**  
BS38H-17.5070AP 



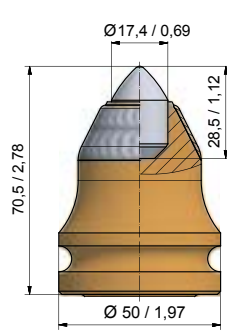
■ **BKH140**  
B47K17.5-H/2 



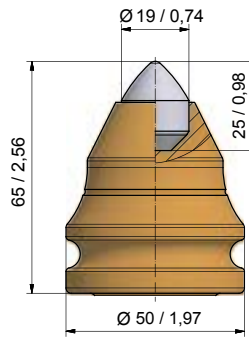
■ **BKH28**  
BS38H-17.5065 



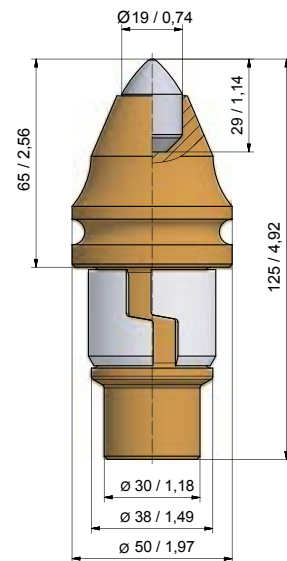
■ **BKH80**  
B47K17.5LK70-H 



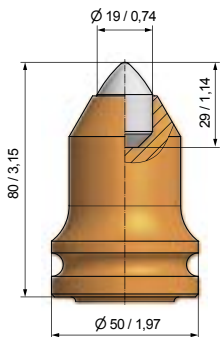
■ **BKH80P**  
B47K17.5LK70-HP 



■ **BKH83**  
BS38H-19.5065 



■ **BKH40**  
BS38H-19.5065 

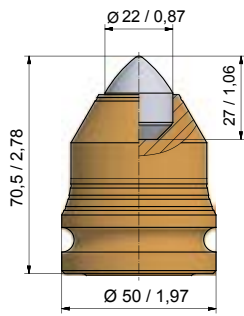


■ **BKH41**  
B47K19LK80-H 

# ROUND SHANK CUTTER BITS

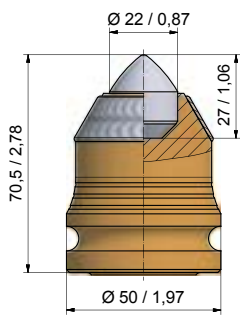


## ▶ SHANK SYSTEM – Ø 38/30 MM – 1,5/1,18"



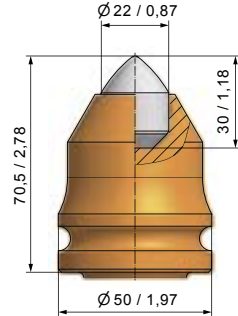
▪ **BKH105**

BS38H-22.5070B



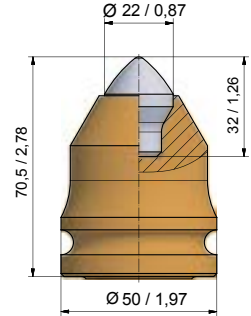
▪ **BKH105P**

BS38H-22.5070P



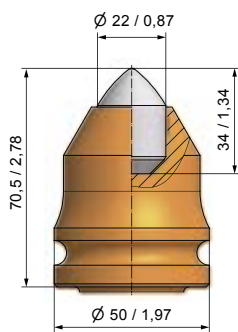
▪ **BKH85**

B47K22-H/2



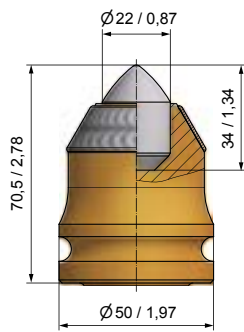
▪ **BKH130**

BS38H-70.5070



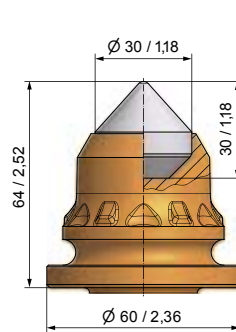
▪ **BKH47**

B47K22-H



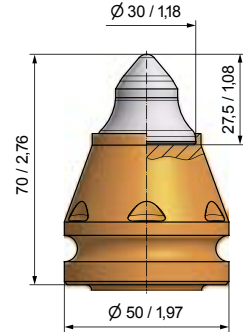
▪ **BKH47P**

B47K22-HP



▪ **BKH92**

BS38H-30.6064

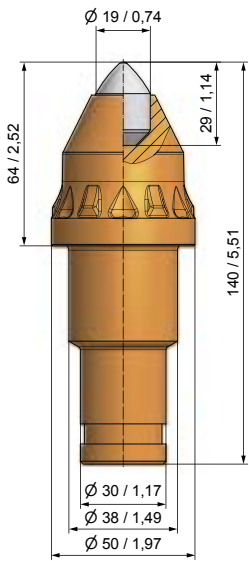


▪ **BKH101**

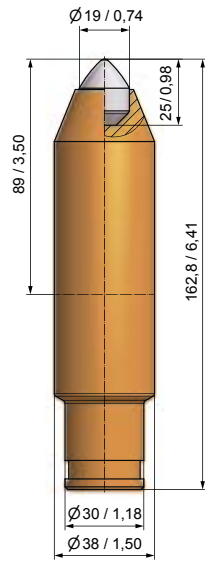
BS38H-69.5070



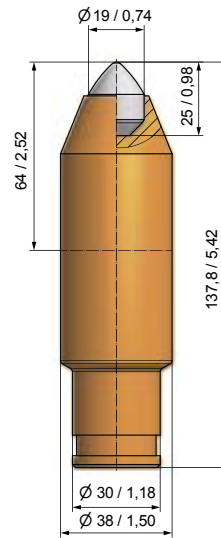
► SHANK SYSTEM – Ø 38/30 MM – 1,5/1,18"



■ **BKS154**  
BS38W-19.5064

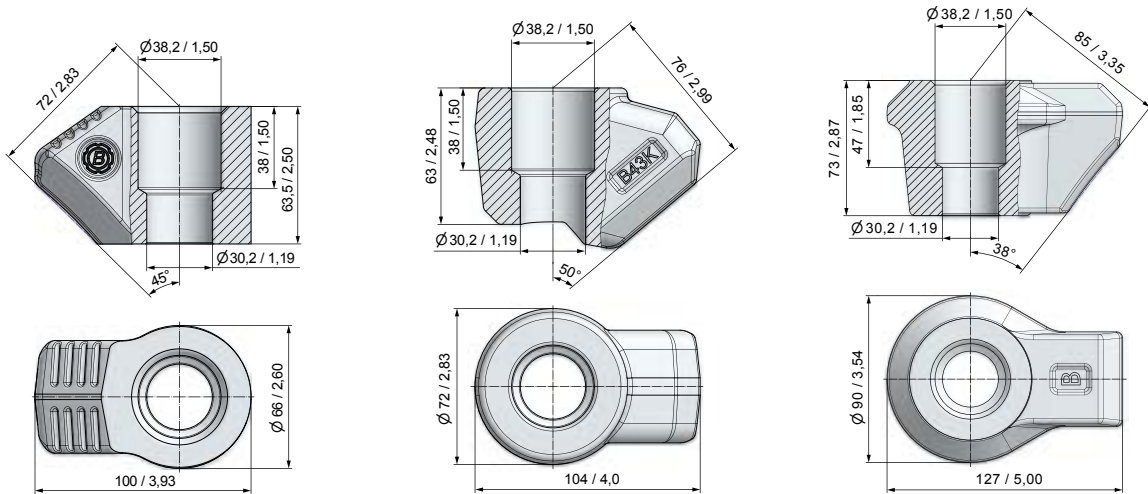


■ **BKS186**  
BS38W-19.3889



■ **BKS187**  
BS38W-19.3864

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



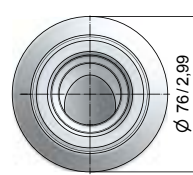
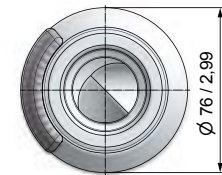
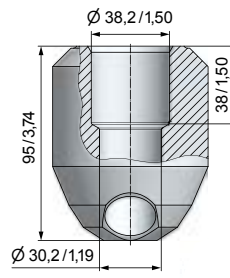
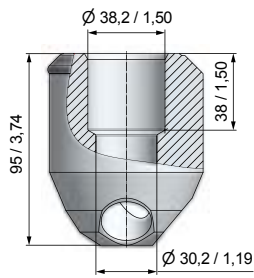
■ BHR38  
B43H



■ BHR113  
B43K



■ BHR77  
B320



■ BHR163  
B76/P

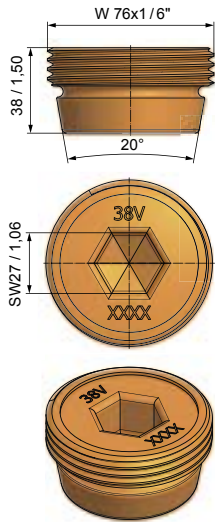


■ BHR216  
B76

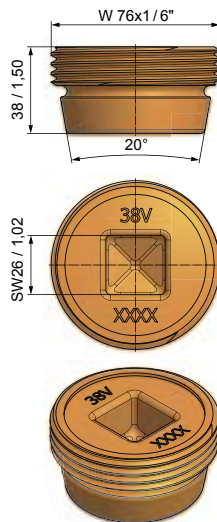




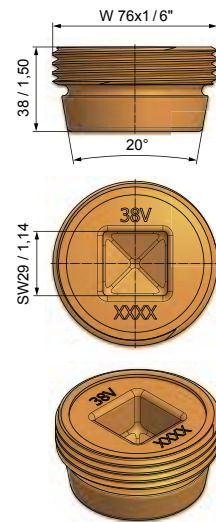
# SCREW CONNECTIONS



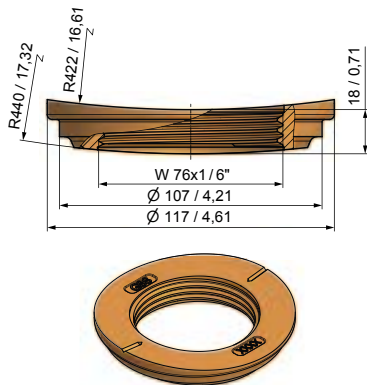
■ **BRV08**  
BRV75/38LV



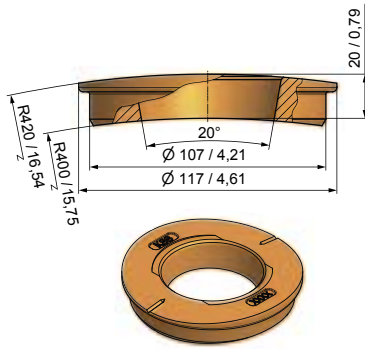
■ **BRV10**  
BRV75/38LV/4



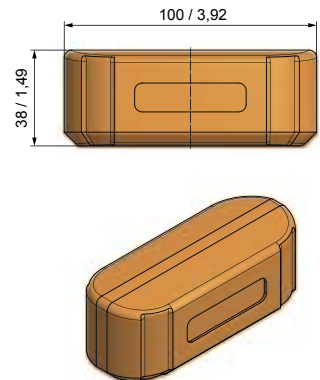
■ **BRV23**  
BRV75/38LV/4/29



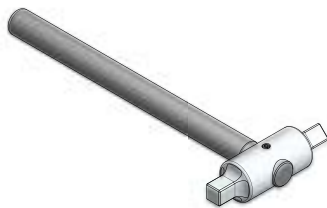
■ **BRV02**  
BRV-G88/L



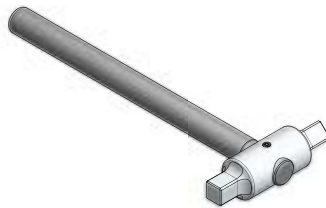
■ **BRV03**  
BRV-K88/L



■ **BRV32**  
BRV-AK



■ **BRV34**  
BRVSW26

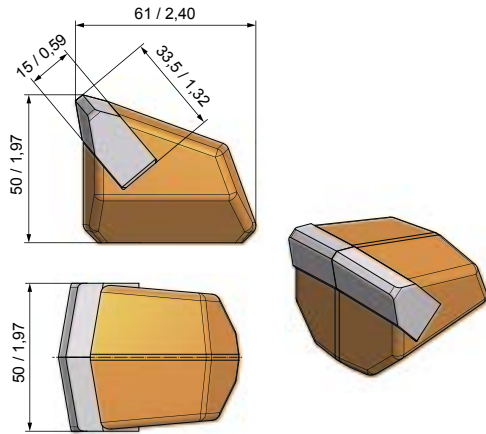


■ **BRV35**  
BRVSW29

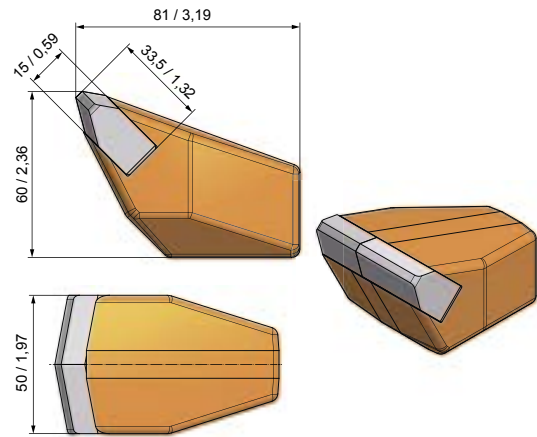


| DESCRIPTION   | APPLICATION/INFO | ART-NO |
|---|------------------|--------|
| <b>Casing screw connections for walls 30 mm thick</b> |                  |        |
| BRV-G46-14  | d=460            | BRV19  |
| BRV-K46-14  | d=460            | BRV18  |
| BRV60/29/4  | –                | BRV20  |
| <b>Casing screw connections for walls 40 mm thick</b> |                  |        |
| BRV-G64/B   | d=620 – 640      | BRV04  |
| BRV-K64/B   | d=620 – 640      | BRV05  |
| BRV-G64/L   | d=620 – 640      | BRV14  |
| BRV-K64/L   | d=620 – 640      | BRV15  |
| BRV-G88/L   | d=880            | BRV02  |
| BRV-K88/L   | d=880            | BRV03  |
| BRV-G118/L  | d=1180           | BRV06  |
| BRV-K118/L  | d=1180           | BRV07  |
| BRV-G150/L  | d=1500 – 1800    | BRV12  |
| BRV-K150/L  | d=1500 – 1800    | BRV11  |
| BRV-G80-100-B   | d=800 – 1000     | BRV30  |
| BRV-K80-100-B   | d=800 – 1000     | BRV31  |
| BRV75/38LV  | (6kt.SW27)       | BRV08  |
| BRV75/38LV/4  | (4kt.SW26)       | BRV10  |
| BRV75/37/12°/BV                                       | –                | BRV16  |
| BRV75/38LV/4  | (4kt.SW29)       | BRV23  |
| O-Ring 5x60   | –                | SI116  |
| <b>Casing screw connections for walls 50 mm thick</b> |                  |        |
| BRV75/48/4  | –                | BRV17  |
| BRV-G140-23   | d=1400 – 1500    | BRV21  |
| BRV-K140-24,5   | d=1400 – 1500    | BRV22  |
| <b>Other</b>  |                  |        |
| BRV-AK  | Stop wedges      | BRV32  |

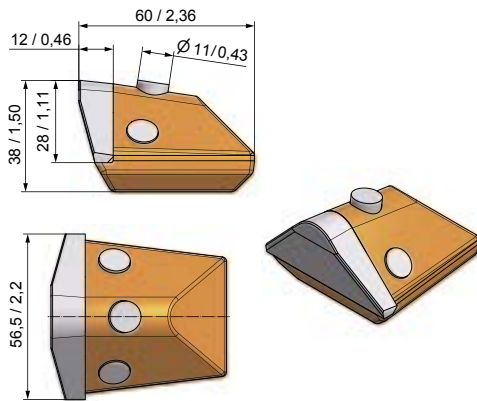
# SCRAPER BLADES




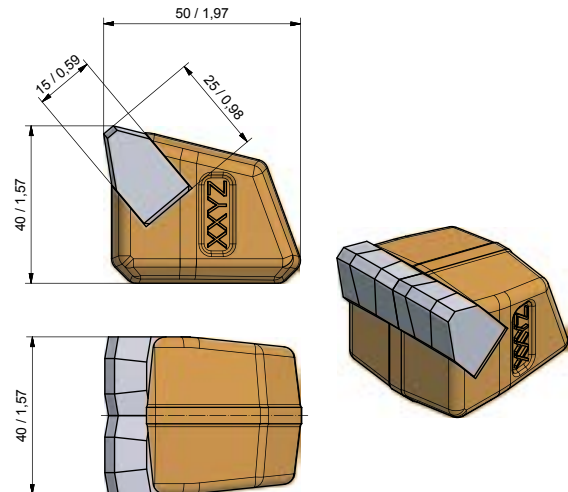
■ **BFZ51**  
BFZ51 



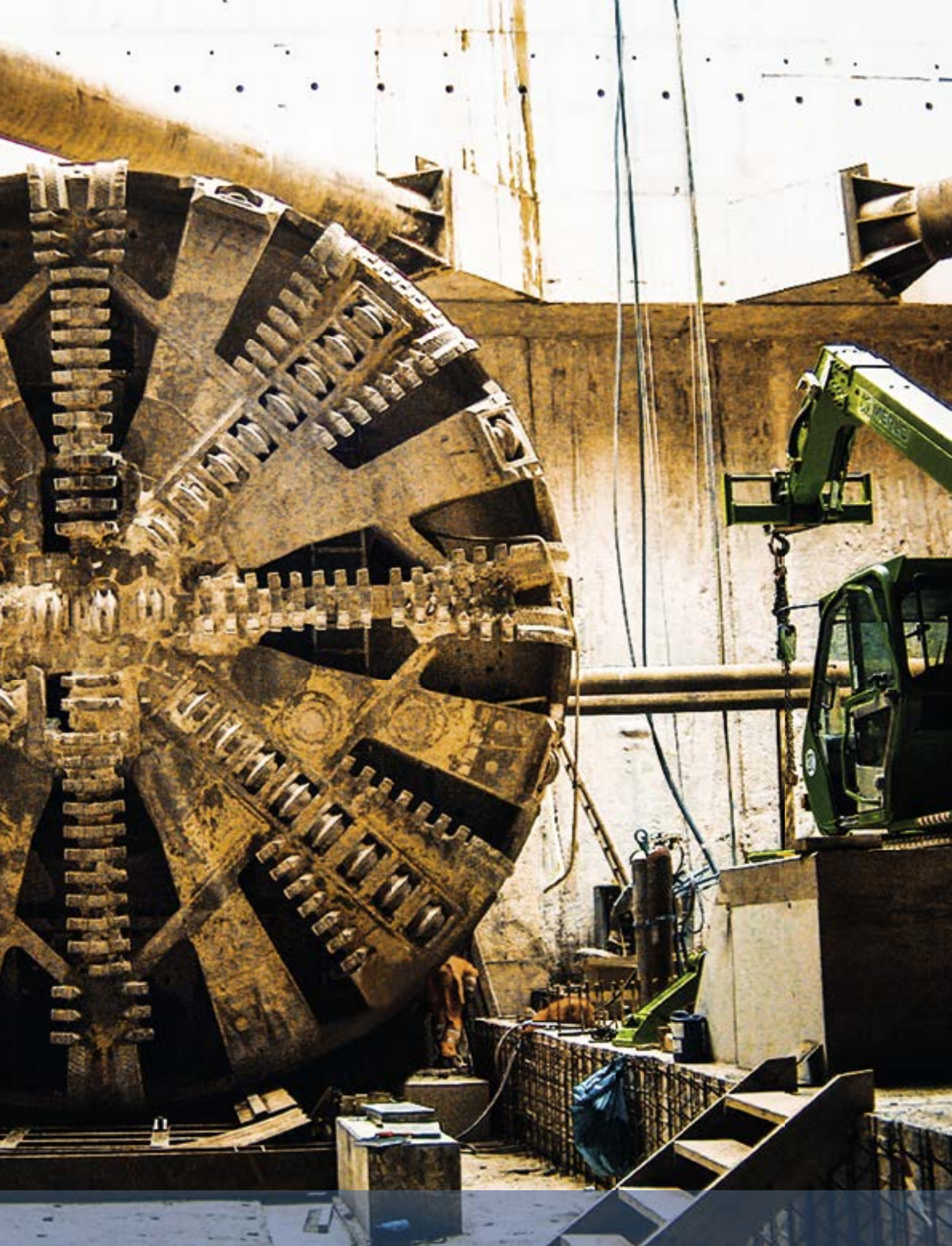
■ **BFM08**  
BFM112x50/S 



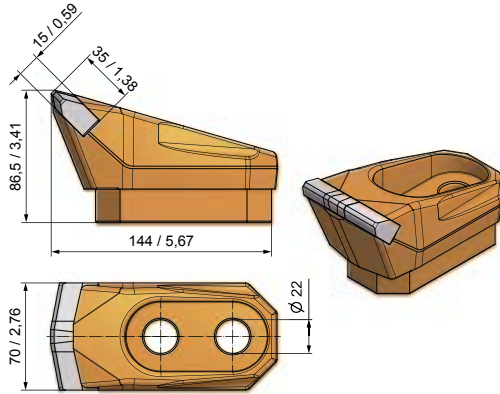
■ **BFZ163**  
BFZ56 



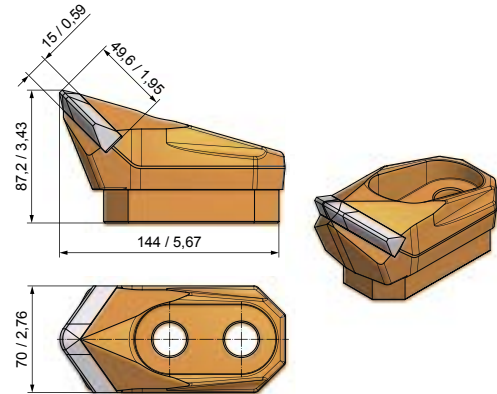
■ **BFZ362**  
BFZ50x40x40 



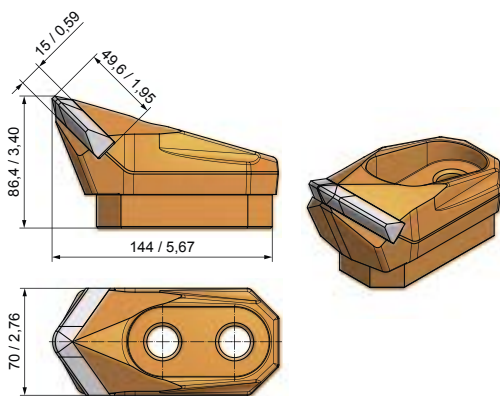
# SCRAPER BLADES



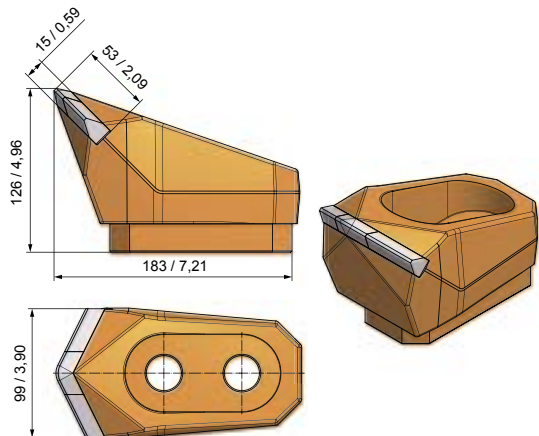
■ **BFM07**  
BFM144x70



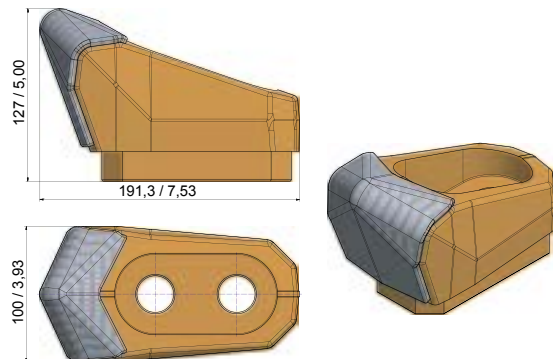
■ **BFM16**  
BFM144x86x70



■ **BFM70**  
BFM144x86x70/1

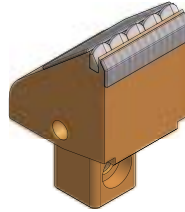
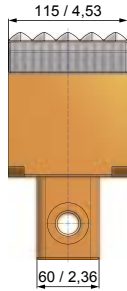
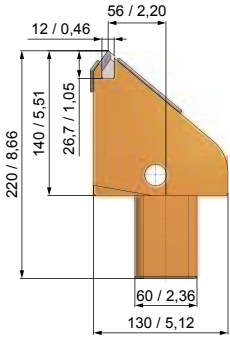


■ **BFM71**  
BFM183x126x100

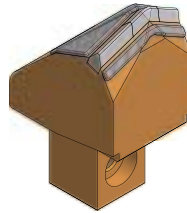
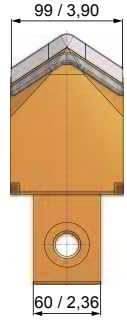
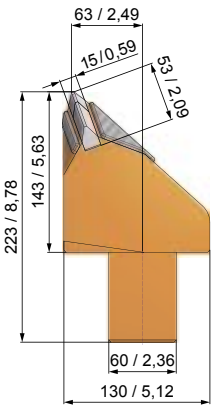


■ **BFM102**  
BFZ191x127x100

# SCRAPER BLADES FOR TBM



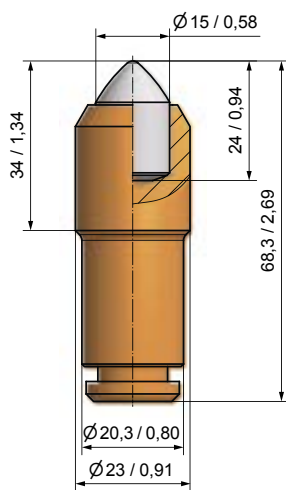
■ **BFZ280**  
BFZ220x115



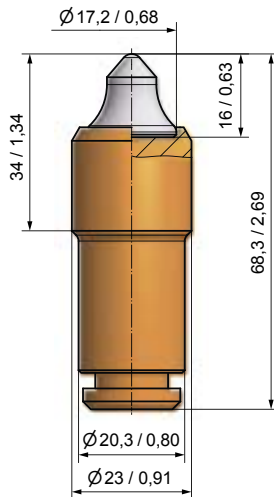
■ **BFZ275**  
BFZ222,5x100




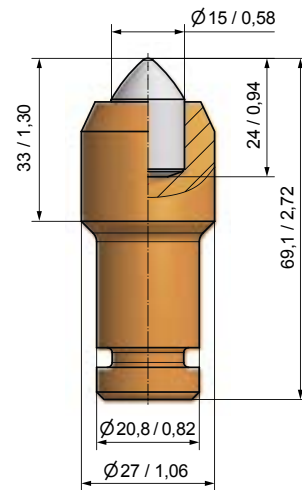
# HDD TOOLS



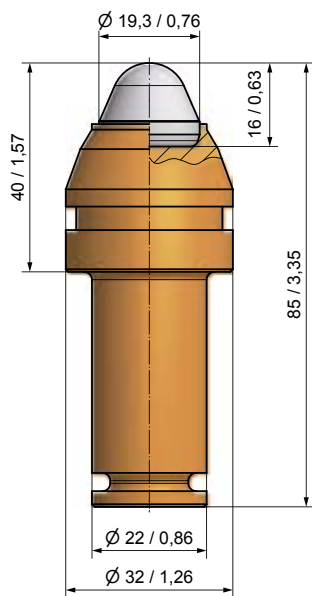
■ **BSR187**  
BG20X-15.2334 



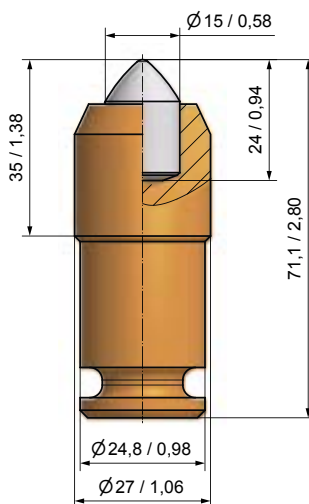
■ **BSR186**  
BG20X-62.2334 



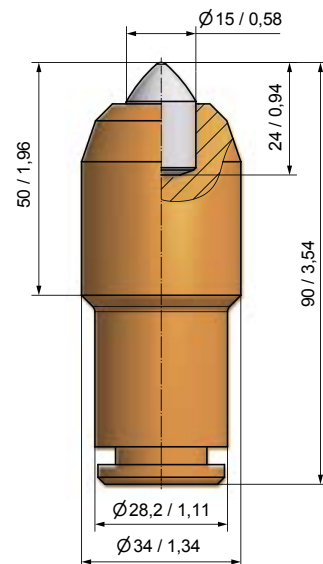
■ **BSR93**  
BG21X-15.2733 



■ **BC80**  
BG22X-19.3240 



■ **BSR115**  
BG25F-15.2735 



■ **BSR110**  
BG28F-15.3450 



# ACCESSORIES



■ **BZ44**  
Bit extractor for Mini bit



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



■ **BZ43**  
Bit extractor BSH and BC-Series



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



■ **BZ33**  
Assembly tool for SI36



■ **BZ31**  
Disassembly tool for SI36



■ **BZ41**  
Assembly tool for SI26



■ **BZ32**  
Disassembly tool for SI26



■ **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





■ **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



■ **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



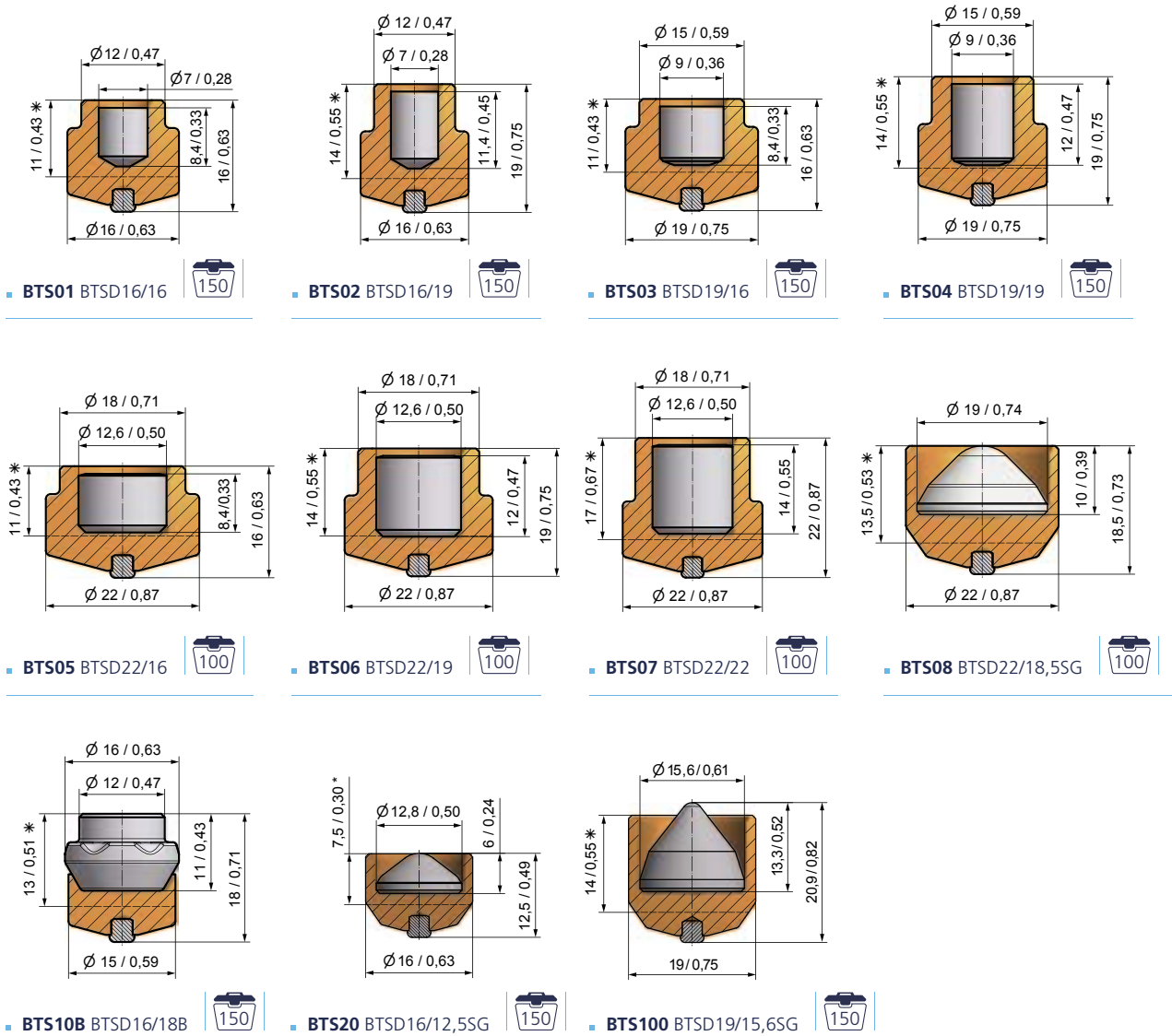
■ **BZ40**  
Wedge puller for stepshank 43/35

# EXTENSIVE WEAR PROTECTION



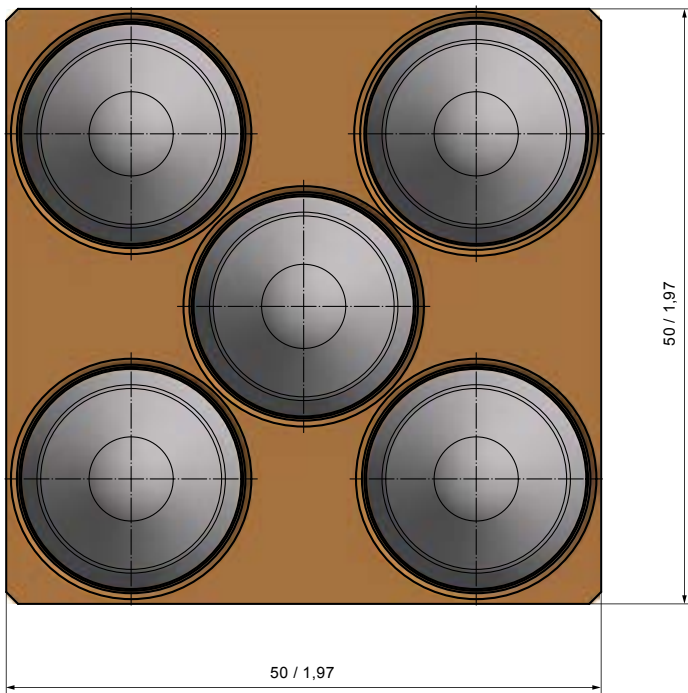
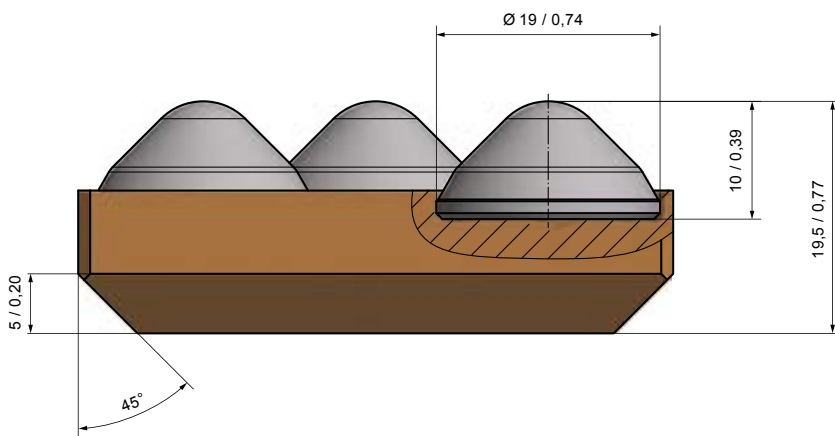
## OVERVIEW

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



\*Height after welding

➤ **BTS-PLATES**



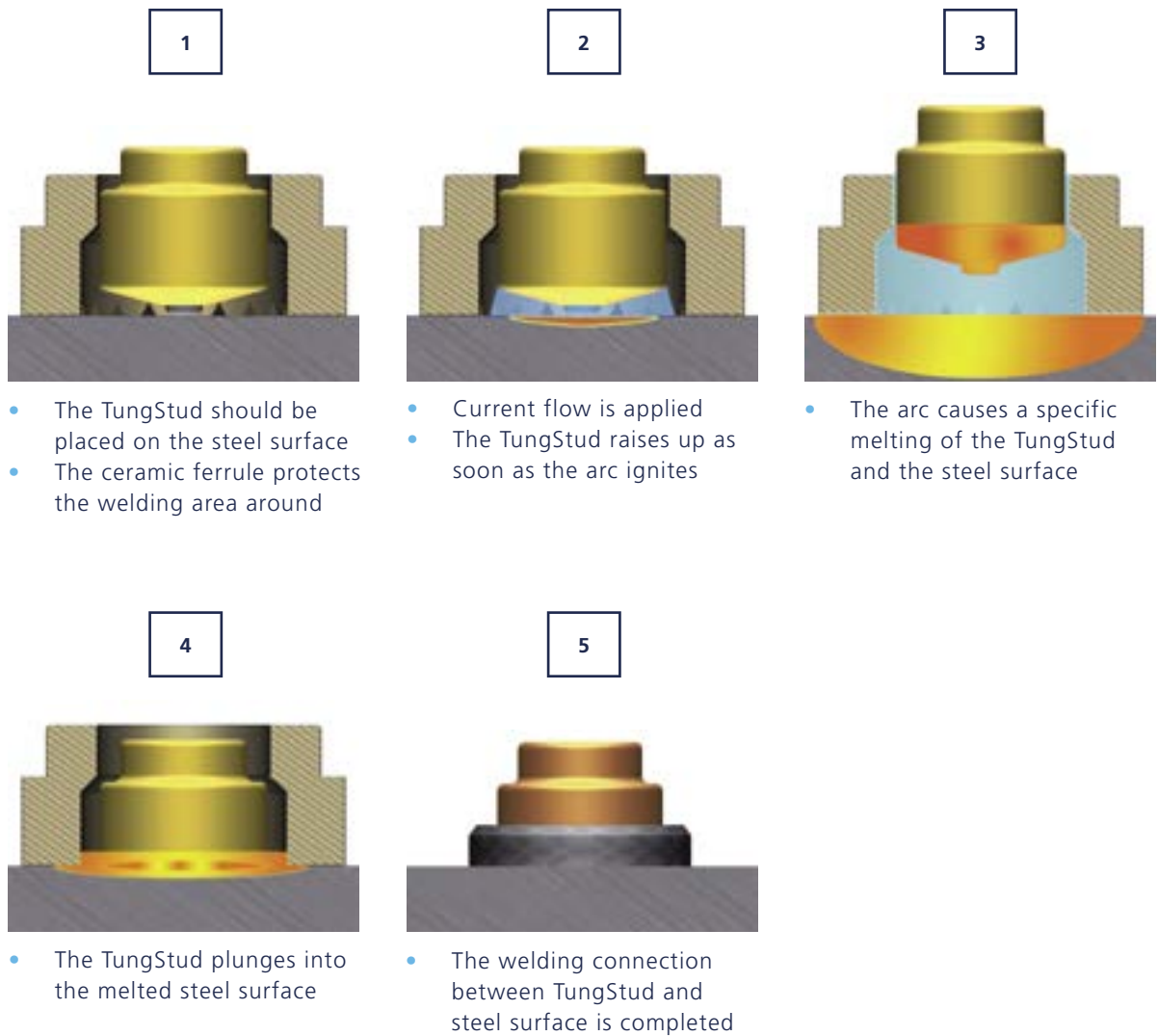
**DIMENSIONS**

| 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



### 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

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

### EXTENSIVE WEAR PROTECTION



## › ROCK BOX EFFECT

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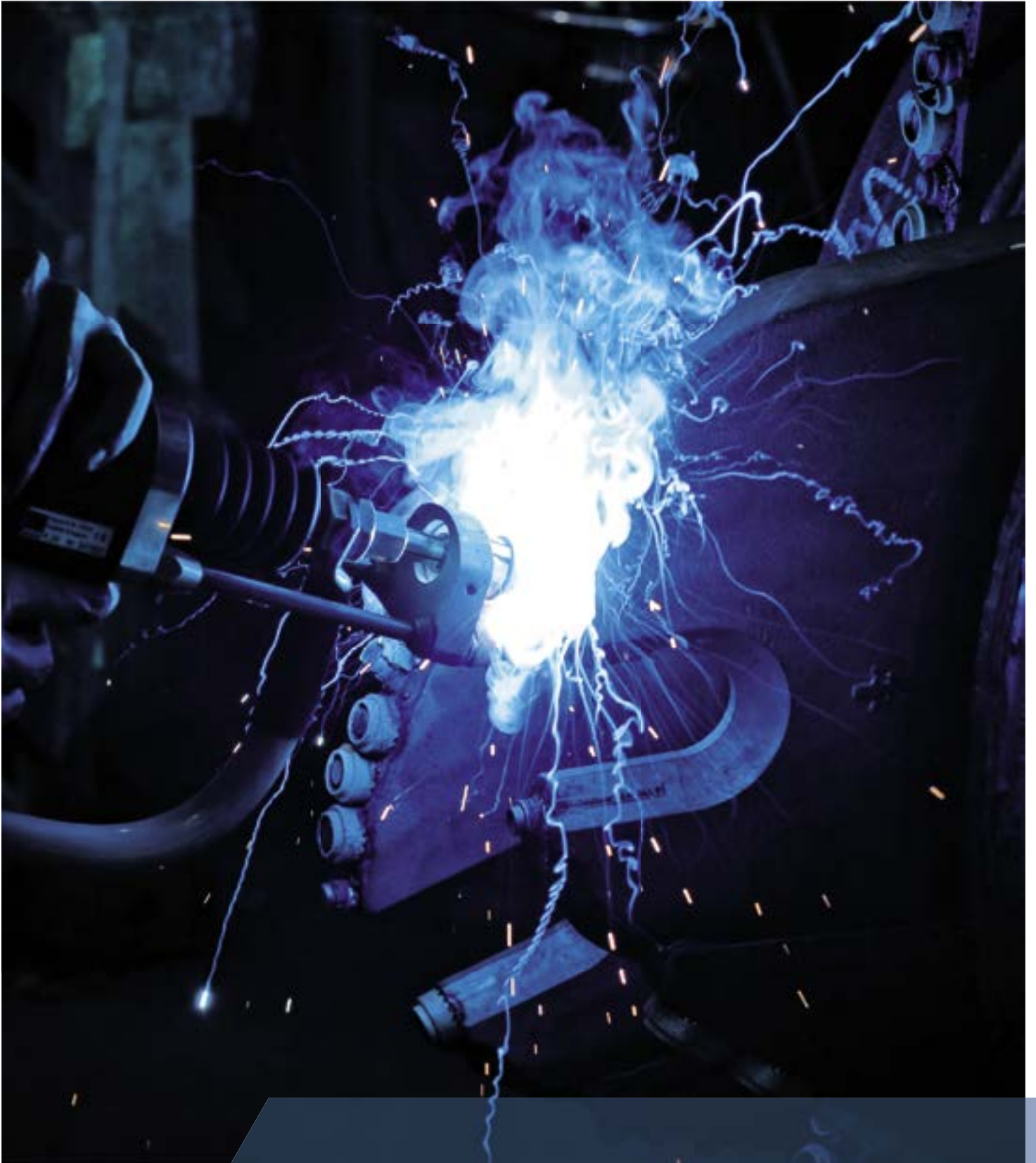
- Grid pattern is recommended
- Rock-Box-Effect due to the cylindrical carbide shape

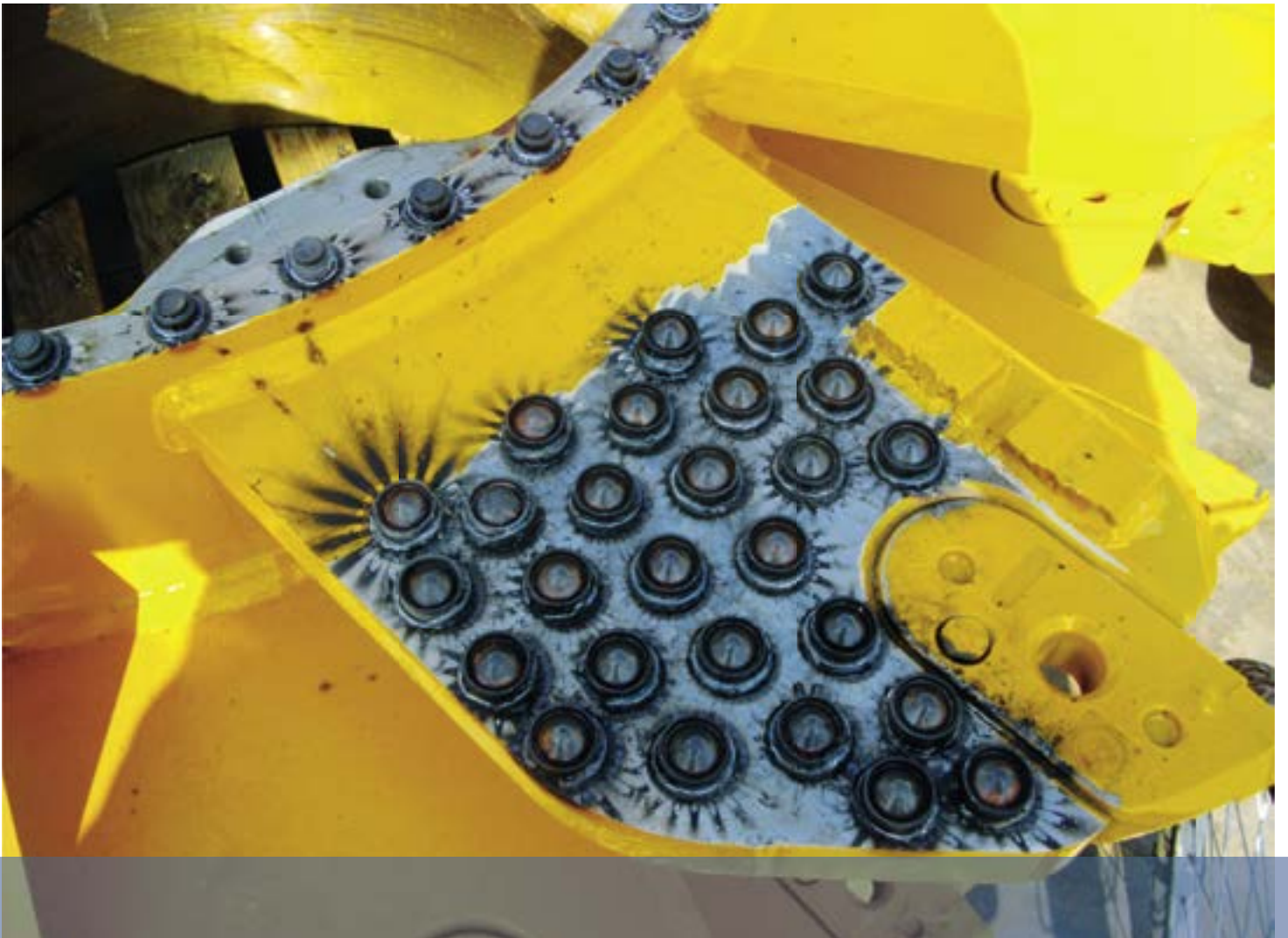
### EXTENSIVE WEAR PROTECTION

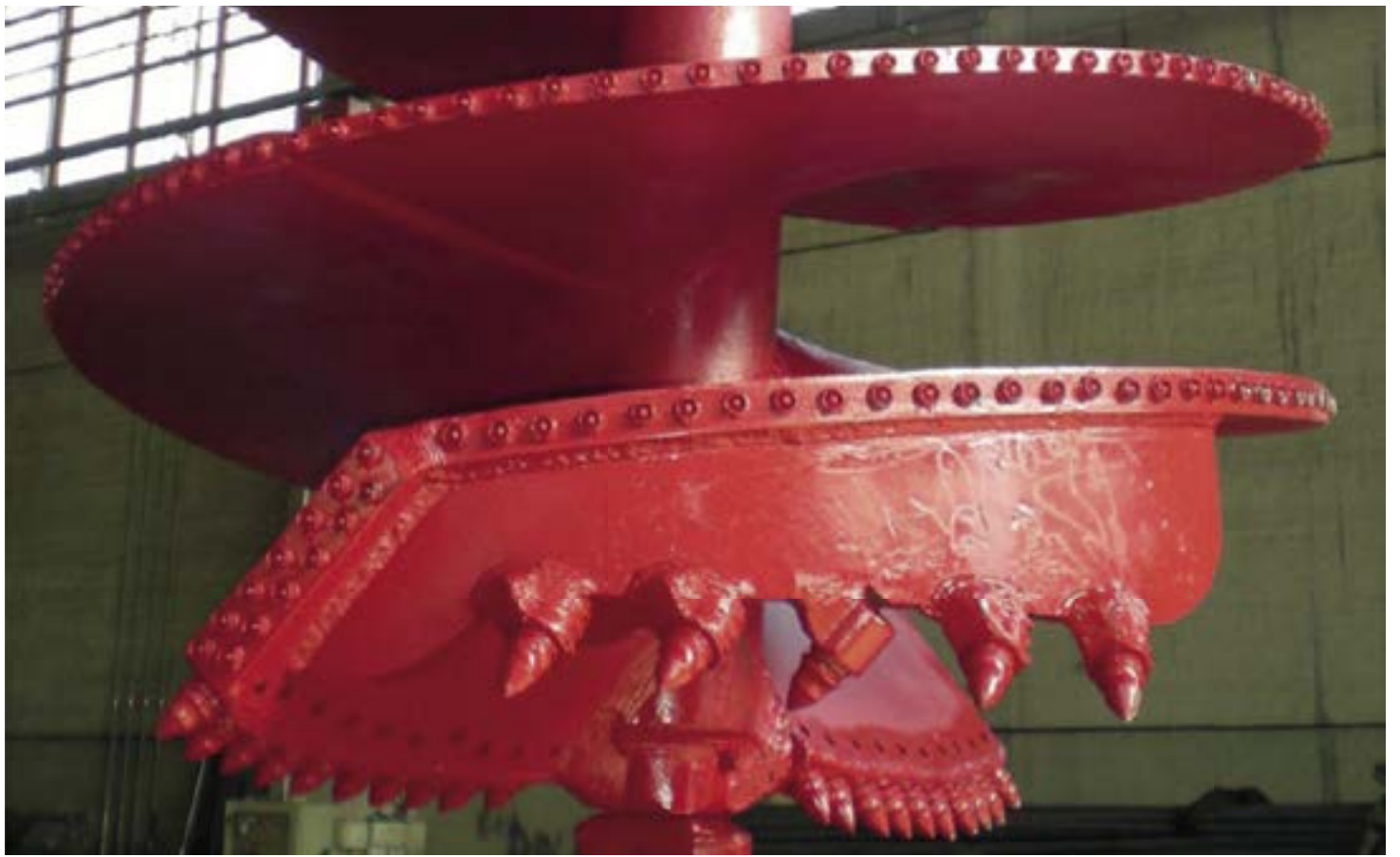


# APPLICATION

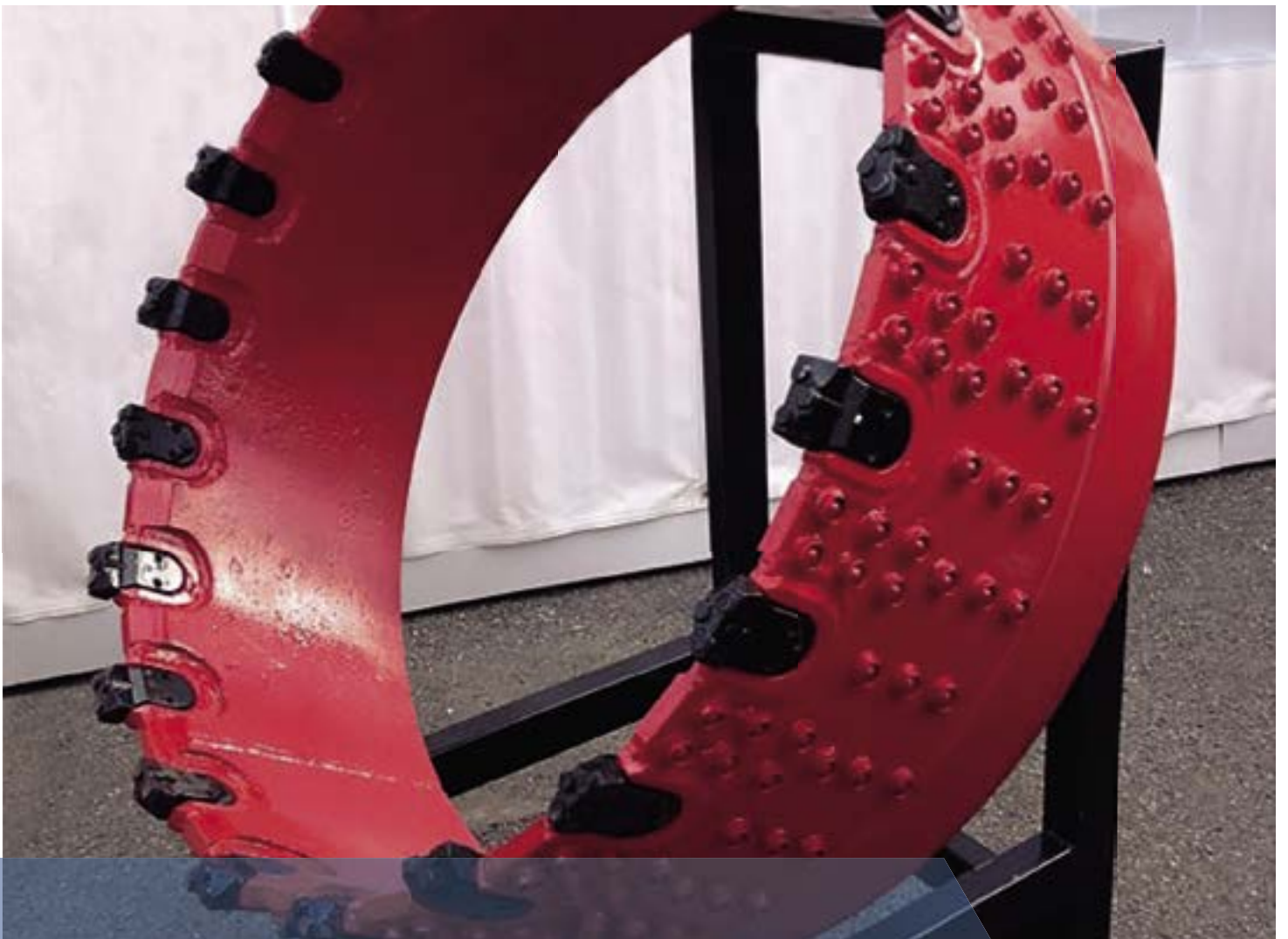
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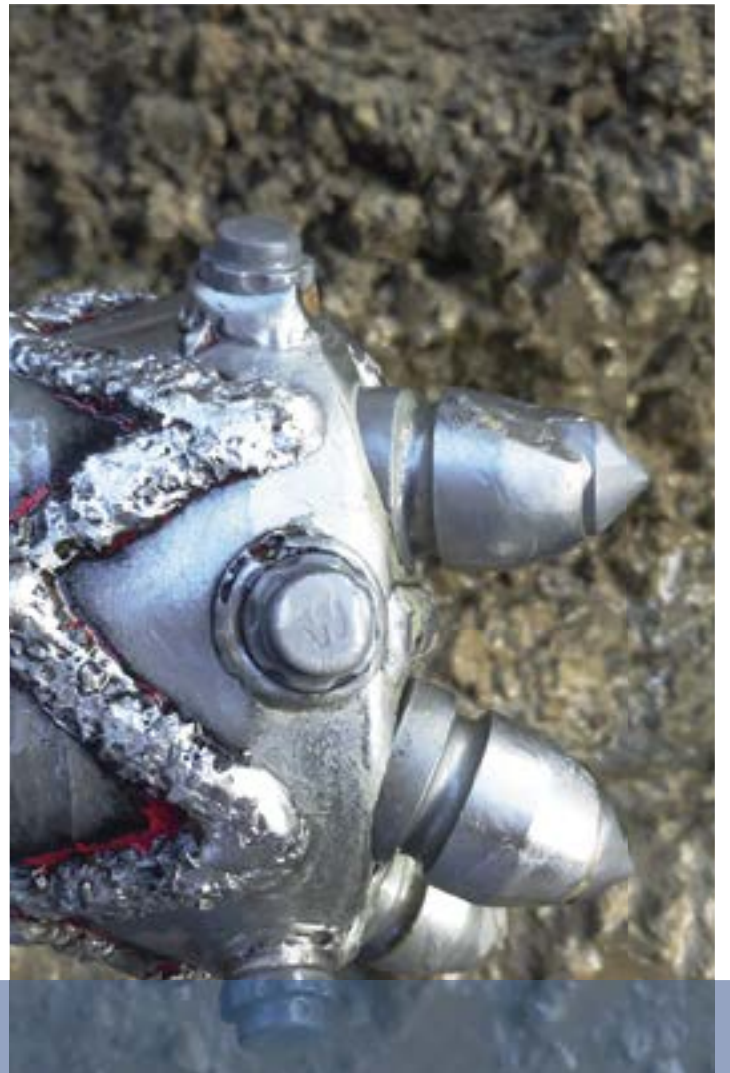
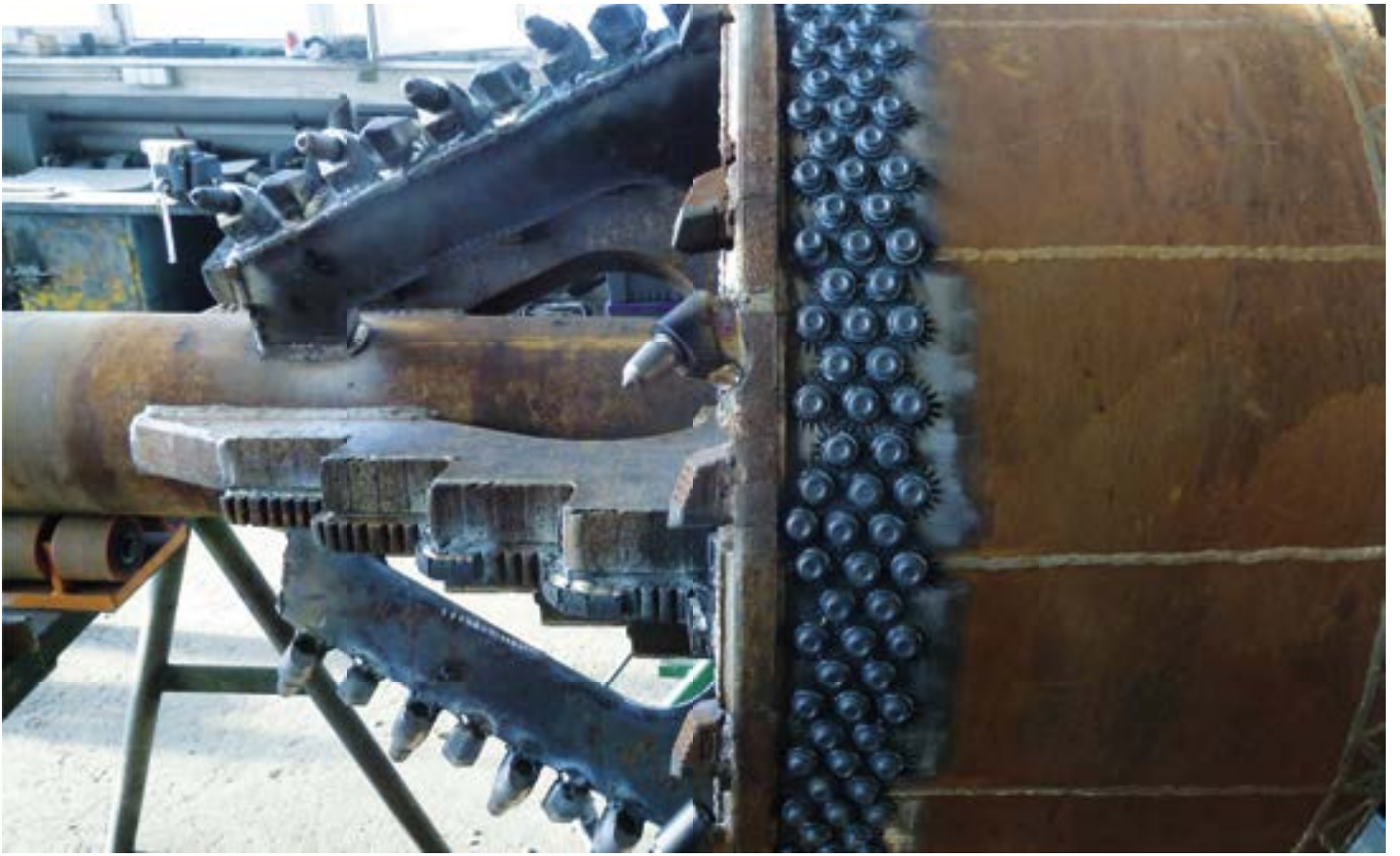




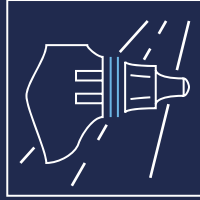








# ➤ BETEK



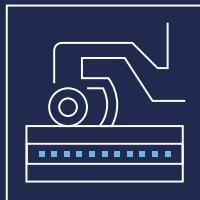
## SURFACE TECHNOLOGIES

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



## UNDERGROUND TECHNOLOGIES

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



## ENVIRONMENTAL TECHNOLOGIES

- AGRICULTURE
- GRADER TOOLS
- TUNGSTEN CARBIDE
- FORESTRY & RECYCLING

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

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