

# Cutting tools

for rotary drum cutters



# Round attack picks, pick boxes and retaining clips for Epiroc rotary drum cutters and cutter wheels

Epiroc rotary drum cutters work under extremely hard conditions in trenching, demolition, rock excavation and tunnelling, in steel mills as in other unusual applications. This puts very high demands on the cutter drums and cutting tools.

The result of many years experience, with machines working in thousands of applications around the world, can be seen in the type of picks used and their cutting pattern on Epiroc equipment. This unique combination provides maximum productivity with minimum wear, ensuring the economical performance of Epiroc drum cutters even in the hardest conditions. Modern technology and continuous product development are the basics for ensuring the economic benefits of using our drum cutters and cutting tools.

In addition to alternative design cutter drums, we also offer a large variety of pick types even for unusual applications.

In our range of cutter picks, we have paid special attention to the optimum shape, high quality materials and sustainable quality of the production process. This helps you to keep your consumable costs to a minimum.

This catalogue should provide an overview of our standard range of cutter tools, pick boxes and retainer clips, suitable for a wide range of applications.

If you have an extremely unusual application or requirement, don't hesitate to contact us. Our specialists are pleased to provide advice and support in your search for the most suitable cutter tools.



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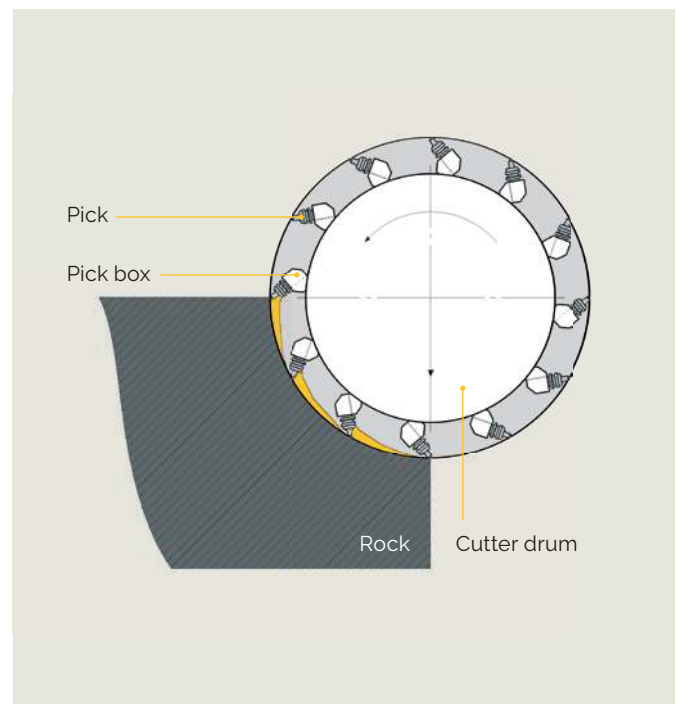
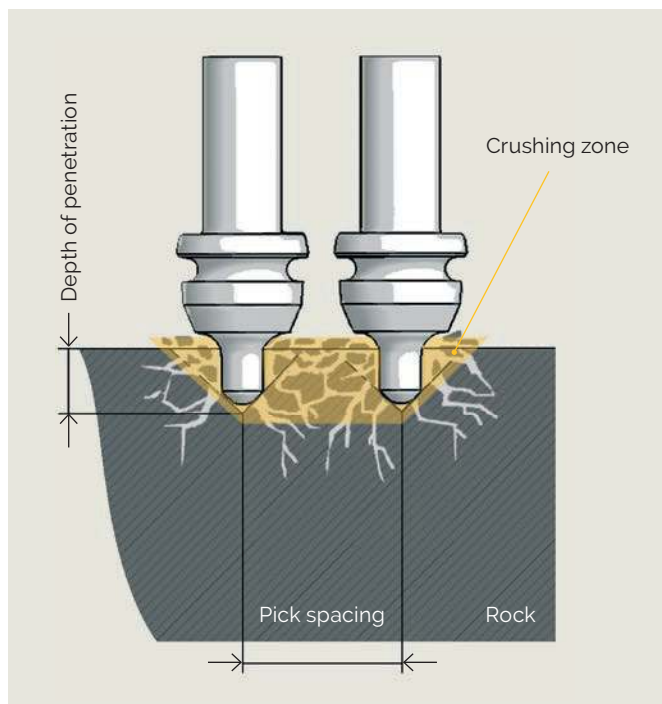
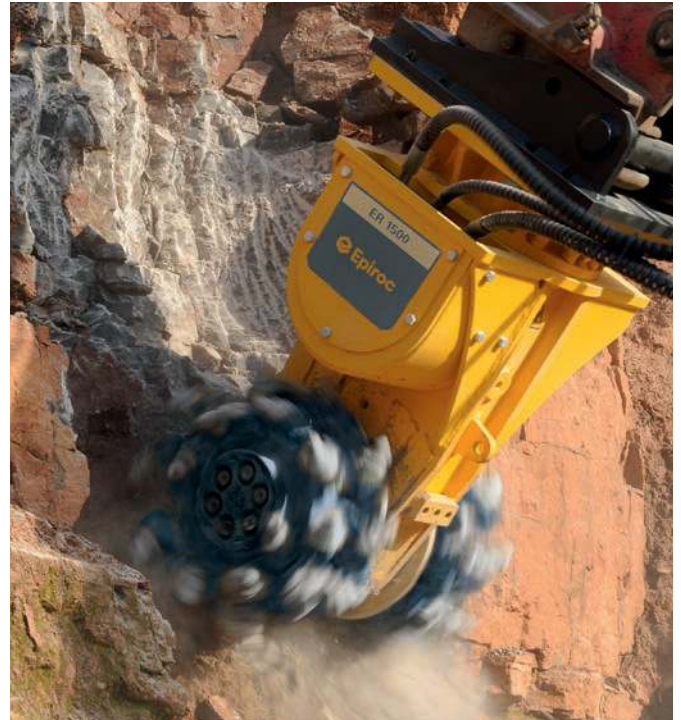


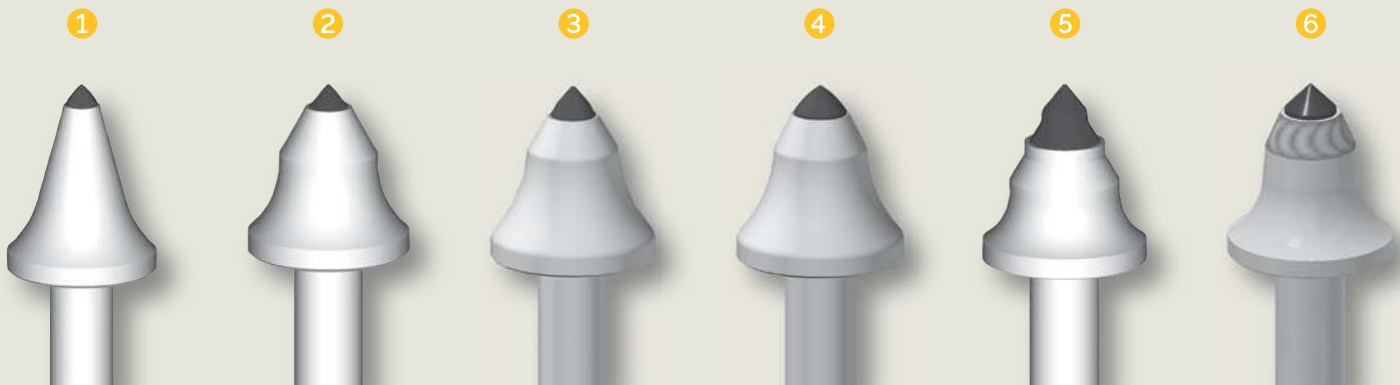
# Several picks – “piece by piece”

## The optimum shape

The type of round attack picks and their pattern on the cutter drum determines how effectively rock is cut which requires specialist knowledge and expertise in geology and cutting technology.

It is the pick that breaks portions of rock out during the cutting operation. Due to the range of rock types, their hardness and toughness, a variety of drum design are required to achieve optimum penetration in each type of rock.





**+** For each model of drum cutter, Epiroc offers a range of pick types allowing the best possible solution for each application.

For example:

**ER 15/90/70/30 ①**

Narrow pick head with small diameter insert, for use in soft rock

**ER 17/75/70/30 ②**

Standard pick head with medium diameter insert, for use in soft to medium hard rock

**ER 22/75/70/30 ③**

Standard pick head with medium diameter insert, for use in medium to hard rock

**ER 25/77/70/30 ④**

Standard pick head with large diameter insert, for use in very hard rock

**ER 30/77/70/30 ⑤**

Standard pick head with large insert cap, for use in soft to medium hard but abrasive rock

**ER 19/75/70/30 ⑥**

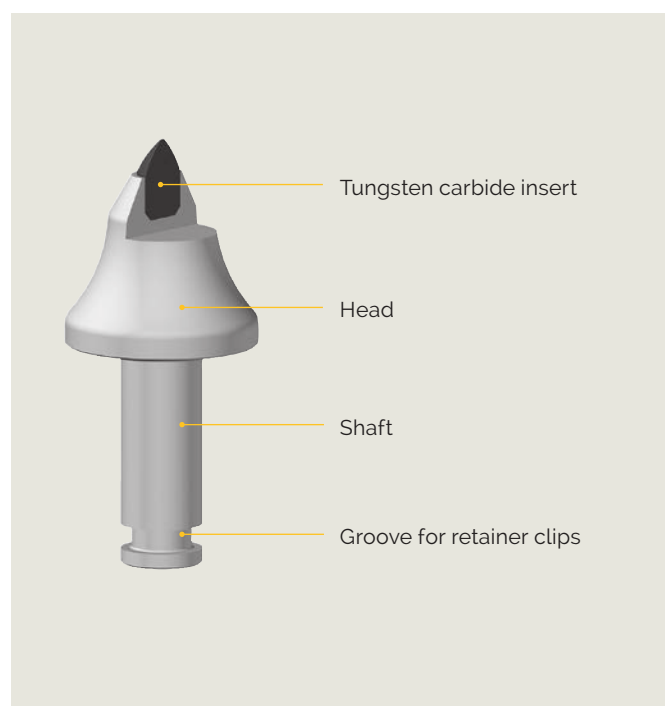
Standard pick head with medium diameter insert and additional hard facing, for use in medium to hard abrasive rock

## Round attack picks

The tungsten carbide insert braised into the body of the pick is at the heart of the cutting operation and is subject to extreme stresses due to it coming continuously into contact with the rock.

The pick body, (head and shaft) is made from heat-treated steel and serves as the support for the tungsten carbide insert and also as protection for the pick box. The tungsten carbide insert is extremely wear resistant and tough to withstand impact.

The insert is a sintered material made up of tungsten carbide with a cobalt binder. Depending on application, a variety of carbide grades and shapes are available.

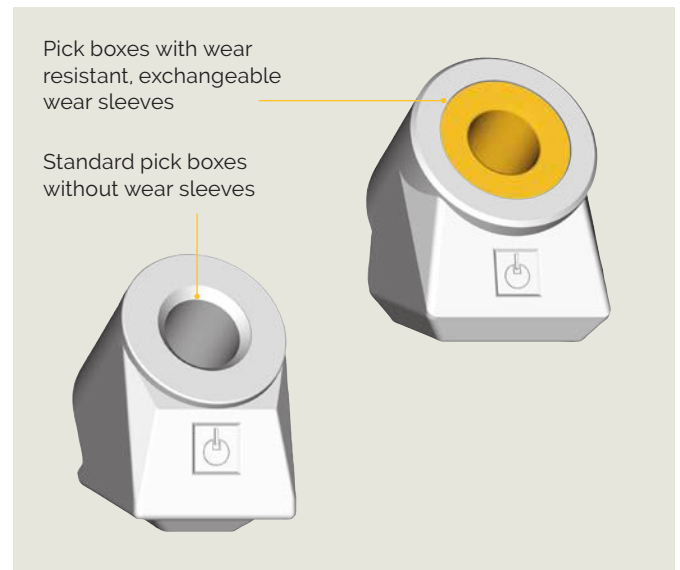


# Pick boxes and retaining clips

## Pick boxes

Pick boxes welded onto the cutter head determine where and how picks penetrate into the rock. The special attack angle ensures a continuous rotation of the pick creating a self sharpening action for the tungsten carbide insert during the cutting action.

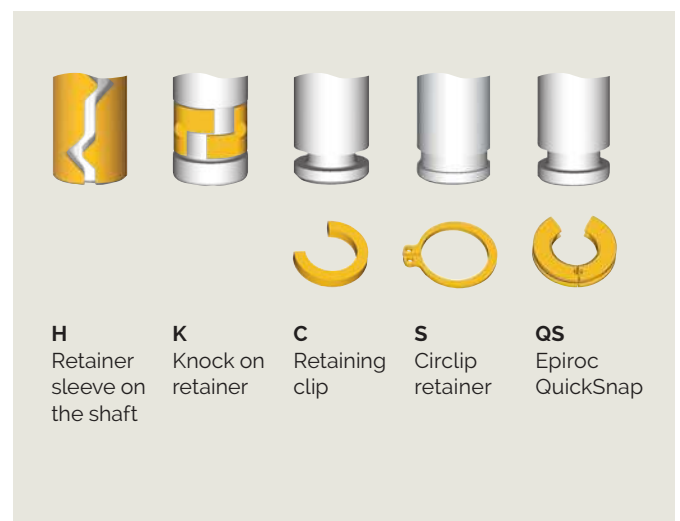
The correct angle ensures maximum productivity with minimum wear. Pick boxes are also made from specially heat treated steel and depending on applications, are available with exchangeable wear sleeves.



## Retaining clips

Retaining clips ensure that picks do not fly out of the pick boxes. Various types of retaining clip are available depending on pick type and application area e.g. retaining collars for soft rock or circlip type systems for hard rock applications.

For quick and easy changing of picks, Epiroc offers the **QuickSnap** retaining system, which allows picks to be changed in a matter of seconds. This represents a saving of over 50% in time compared with normal circlip or knock on retainer systems.

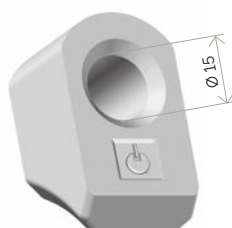


Easier and quicker pick changes with Epiroc QuickSnap

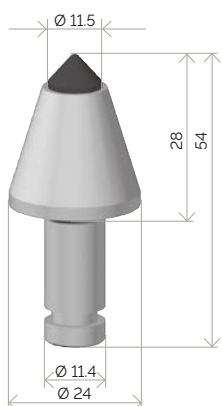




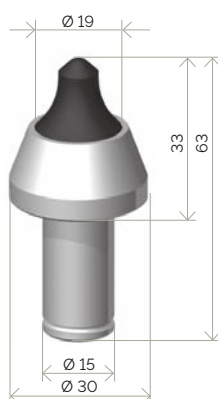
Pick box	PH 50	●
Part Number	3311000774	



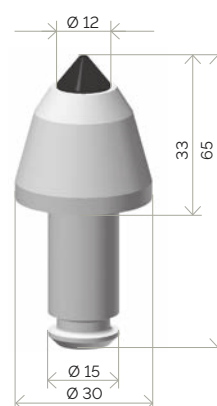
Pick box	PH 50 N	●
Part Number	3311003538	



Pick type	ER 11/28/24/12 C	●
Part Number	3311004555 (100) <sup>1</sup>	
Application	Concrete, soft to medium hard rock	



Pick type	ER 19/33/30/15 S	●
Part Number	3311004557 (100) <sup>1</sup>	
Application	Asphalt, soft to medium hard abrasive rock	



Pick type	ER 12/33/30/15 C	●
Part Number	3311004556 (100) <sup>1</sup>	
Application	Concrete, soft to medium hard rock	



Retainer	Retaining clip ES 50
Part Number	3311001264

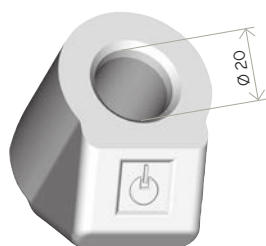


Retainer	Circlip retainer SG 100
Part Number	3311002950

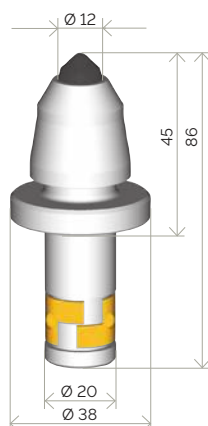


Retainer	Retaining clip ES 100
Part Number	3311002701

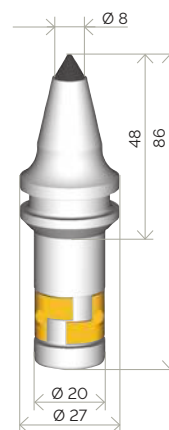
<sup>1</sup> Picks are delivered with retainers. Number in ( ) shows quantity.



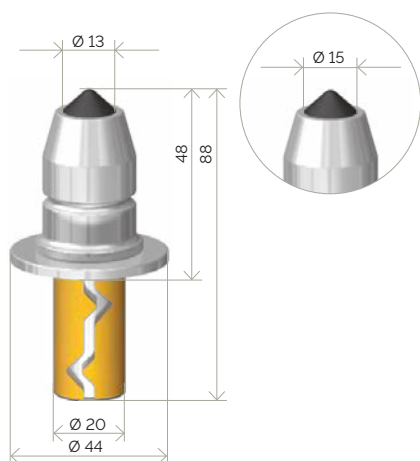
Pick box	PH 250	●
Part Number	3311000832	



Pick type	ER 12/45/38/20 K	●
Part Number	3311004558 (50) <sup>1</sup>	
Application	Concrete, soft to medium hard rock	

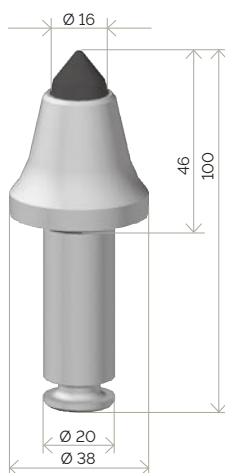


Pick type	ER 09/51/25/20 K	●
Part Number	3311004560 (50) <sup>1</sup>	
Application	Soft rock, salt, gypsum	



Pick type	ER 13/48/44/20 H	●
Part Number	3311004561 (50) <sup>1</sup>	

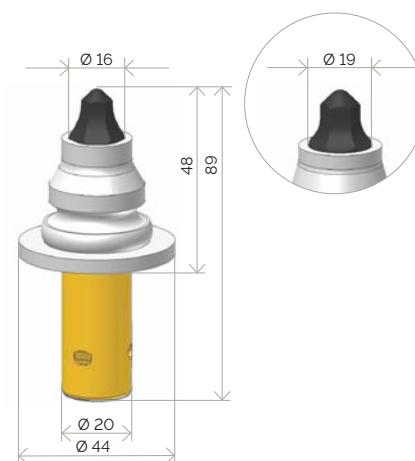
Pick type	ER 15/48/44/20 H	●
Part Number	3311004564 (50) <sup>1</sup>	
Application	Concrete, soft to medium hard rock	



Pick type	ER 16/46/38/20 C	●
Part Number	3311004559 (40) <sup>1</sup>	
Application	Concrete, soft to medium hard rock	



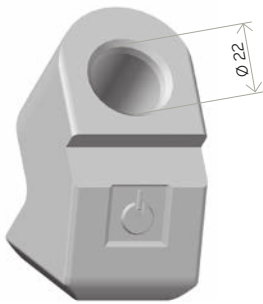
Retainer	Retaining clip ES 250	
Part Number	3311001648	



Pick type	ER 16/48/32/20 H	●
Part Number	3311004562 (50) <sup>1</sup>	

Pick type	ER 19/48/36/20 H	●
Part Number	3311004563 (50) <sup>1</sup>	
Application	Asphalt	

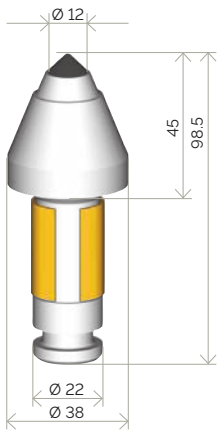
<sup>1</sup> Picks are delivered with retainers. Number in ( ) shows quantity.



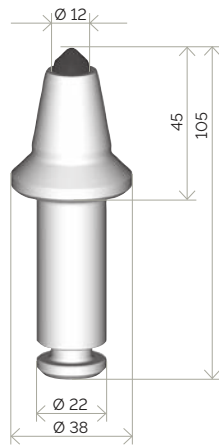
Pick box	PH 450 UA	●
Part Number	3311001804	
	replaces the previous type PH 450	



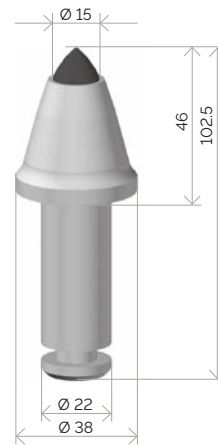
Pick type	ER 19/51/45/22 H	●
Part Number	3311004568 (40) <sup>1</sup>	
Application	Asphalt, soft and abrasive rock	



Pick type	ER 12/45/38/22 HC	●
Part Number	3311004565 (40) <sup>1</sup>	
Application	Concrete, medium hard and abrasive rock	



Pick type	ER 12/45/38/22 C	●
Part Number	3311004566 (40) <sup>1</sup>	
Application	Concrete, medium hard rock	



Pick type	ER 15/46/38/22 C	●
Part Number	3311004567 (40) <sup>1</sup>	
Application	Concrete, medium hard rock	



Retainer	Retaining clip ES 450
Part Number	3311000990

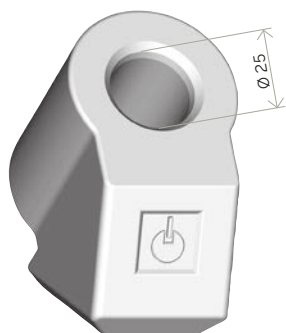


Retainer	Retaining clip ES 450
Part Number	3311000990

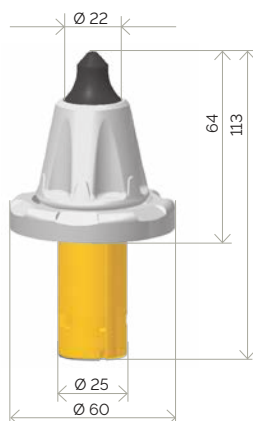


Retainer	Retaining clip ES 450
Part Number	3311000990

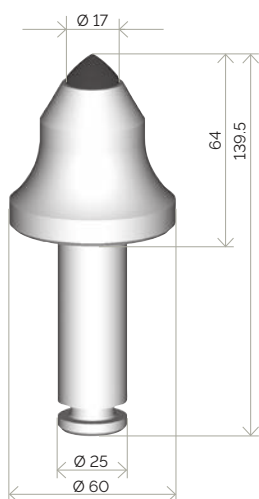
<sup>1</sup> Picks are delivered with retainers. Number in ( ) shows quantity.



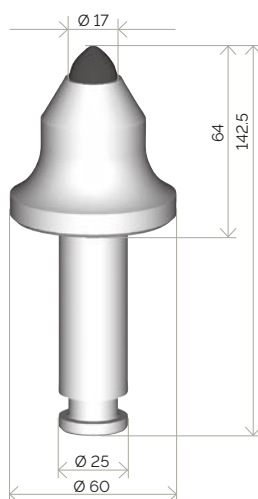
Pick box	PH 600	●
Part Number	3311003040	



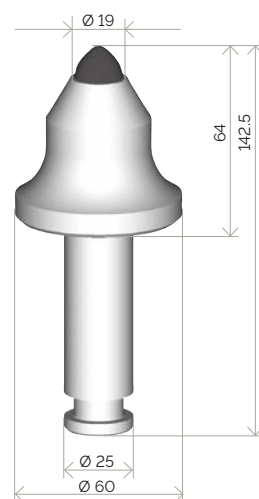
Pick type	ER 22/64/60/25 H	●
Part Number	3311004572 (15) <sup>1</sup>	
Application	Asphalt, soft and abrasive rock	



Pick type	ER 17/64/60/25 C	●
Part Number	3311004571 (15) <sup>1</sup>	
Application	Concrete, medium hard to hard rock	



Pick type	ER 17/64/60/25 Q	●
Part Number	3311004569 (15) <sup>1</sup>	
Application	Concrete, medium hard to hard rock	



Pick type	ER 19/64/60/25 Q	●
Part Number	3311004570 (15) <sup>1</sup>	
Application	Concrete, medium hard to hard rock	



Retainer	Retaining clip ES 600
Part Number	3311000988

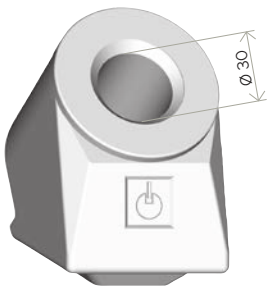


Retainer	QuickSnap QS 600
Part Number	3311000977

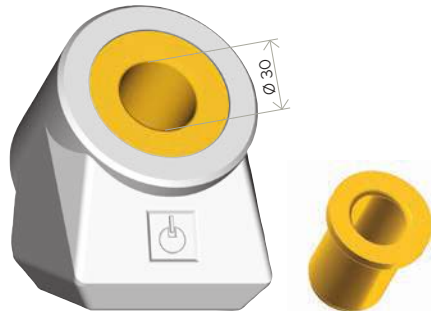


Retainer	QuickSnap QS 600
Part Number	3311000977

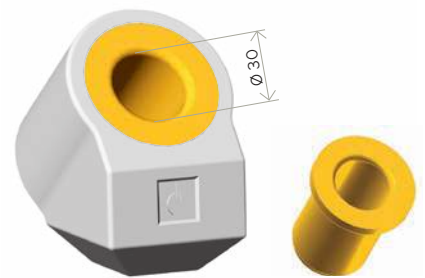
<sup>1</sup> Picks are delivered with retainers. Number in ( ) shows quantity.



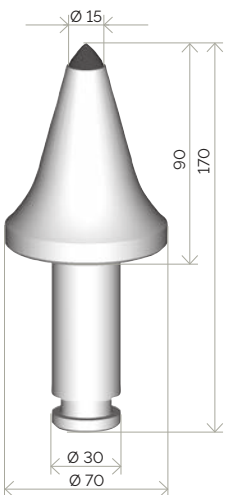
Pick box	PH 1200	●
Part Number	3311000797	
For drum cutter model	ER 1200	



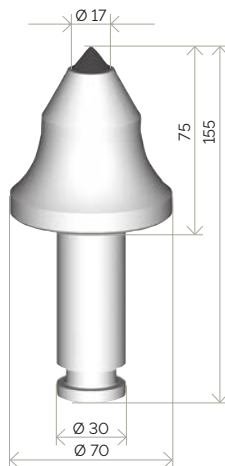
Pick box	PH 1500	●
Part Number	3311000792	
	Replacement wear sleeve	
Part Number	3311000801	



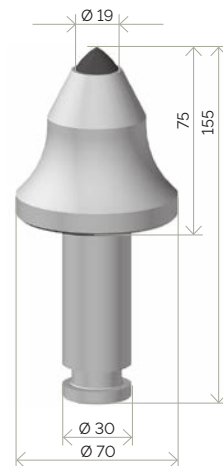
Pick box	PH 1100	●
Part Number	3311004253	
For drum cutter model	ER 650 from 09-2018	
	Replacement wear sleeve	
Part Number	3311000801	



Pick type	ER 15/90/70/30 Q	●
Part Number	3311004580 (10) <sup>1</sup> with QS 3311004614 (10) <sup>1</sup> with ES	
Application	Salt, gypsum, medium hard, fractured rock	



Pick type	ER 17/75/70/30 Q	●
Part Number	3311004575 (10) <sup>1</sup> with QS 3311004606 (10) <sup>1</sup> with ES	
Application	Concrete, medium hard rock	



Pick type	ER 19/75/70/30 Q	●
Part Number	3311004576 (10) <sup>1</sup> with QS 3311004607 (10) <sup>1</sup> with ES	
Application	Concrete, medium hard rock	



Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869

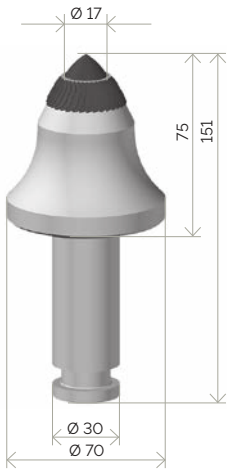


Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869



Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869

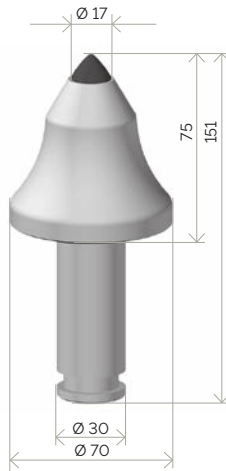
<sup>1</sup> Picks are delivered with retainers. Number in ( ) shows quantity.



Pick type	ER 19/75/70/30 Q ●
Part Number	3311004582 (10) <sup>1</sup> with QS 3311004617 (10) <sup>1</sup> with ES
Application	Abrasive medium hard rock and concrete



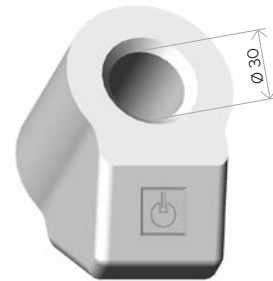
Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869



Pick type	ER 17/75/70/30 C ●
Part Number	3311004585 (10) <sup>1</sup>
Application	Medium hard rock



Retainer	Retaining clip ES 1500
Part Number	3311000992



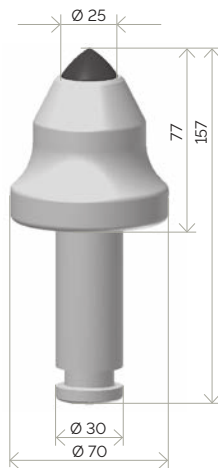
Pick box	PH 1000 ●
Part Number	3311002688



Pick type	ER 22/75/70/30 Q ●
Part Number	3311004577 (10) <sup>1</sup> with QS 3311004608 (10) <sup>1</sup> with ES
Application	Concrete, medium hard to hard rock



Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869



Pick type	ER 25/77/70/30 Q ●
Part Number	3311004578 (8) <sup>1</sup> with QS 3311004609 (8) <sup>1</sup> with ES
Application	Steel, concrete, hard to very hard rock



Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869



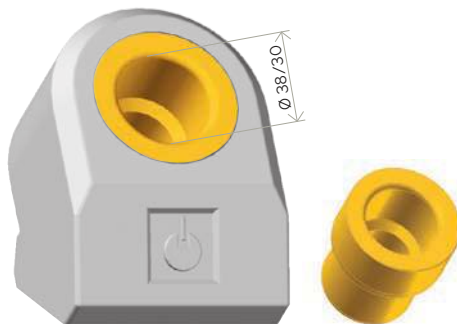
Pick type	ER 30/77/70/29 Q ●
Part Number	3311004579 (10) <sup>1</sup> with QS 3311004613 (10) <sup>1</sup> with ES
Application	Soft to medium hard, abrasive rock



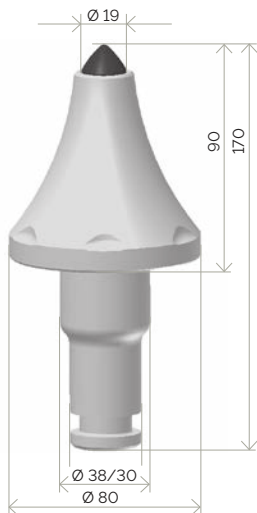
Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869

<sup>1</sup> Picks are delivered with retainers. Number in ( ) shows quantity.

Dimension in mm | Associated installation and removal tools on page 19 | ● Delivery ex stock | ● Delivery upon request

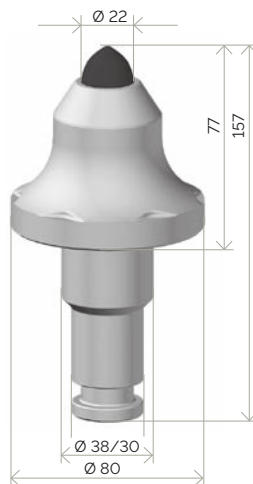


Pick box	PH 5300	●
Part Number	3311002261	
	Replacement wear sleeve	
Part Number	3311002263	



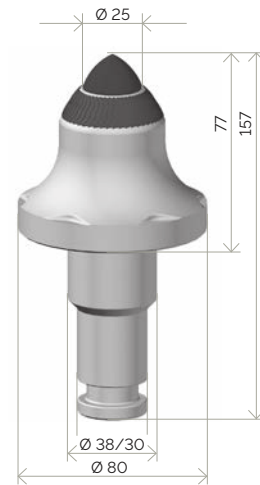
Pick type	ER 19/90/80/38-30 Q	●
Part Number	3311004588 (6) <sup>1</sup> with QS 3311004621 (6) <sup>2</sup> with ES	
Application	Soft rock	

Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869



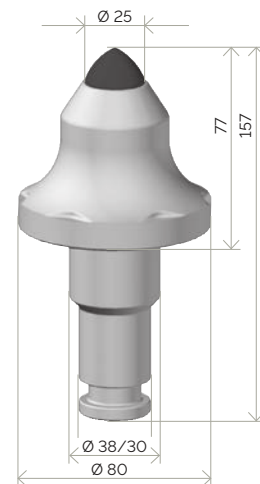
Pick type	ER 22/77/80/38-30 Q	●
Part Number	3311004587 (8) <sup>1</sup> with QS 3311004620 (8) <sup>2</sup> with ES	
Application	Concrete, medium hard to hard rock	

Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869



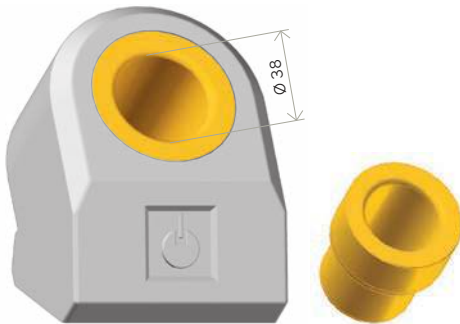
Pick type	ER 25/77/80/38-30 PQ	●
Part Number	33110038532	
Application	medium hard to very hard abrasive rock	

Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869

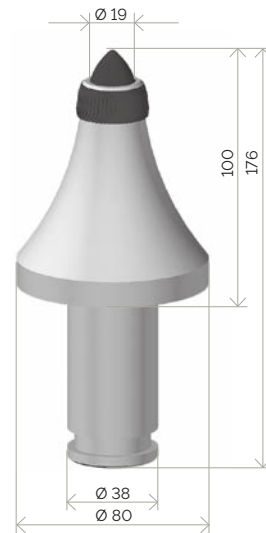


Pick type	ER 25/77/80/38-30 Q	●
Part Number	3311004586 (8) <sup>1</sup> with QS 3311004619 (8) <sup>2</sup> with ES	
Application	Concrete, medium hard to very hard rock	

Retainer	QuickSnap QS 5000	Retaining clip ES 5000
Part Number	3311000978	3311002869



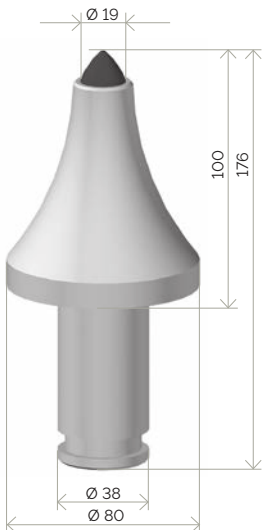
Pick box	PH 5500	●
Part Number	3311002262	
	Replacement wear sleeve	
Part Number	3311002264	



Pick type	ER 19/100/80/38 PS	●
Part Number	3311004593 (6) <sup>1</sup>	
Application	Soft abrasive rock	



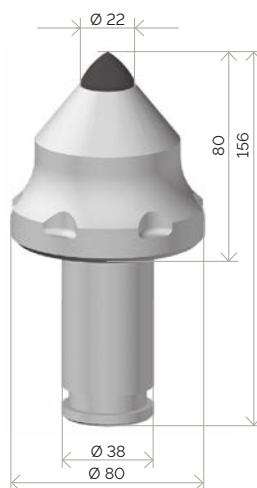
Retainer	Circlip retainer SG 5500	
Part Number	3311000979	



Pick type	ER 19/100/80/38 S	●
Part Number	3311004592 (6) <sup>1</sup>	
Application	Soft rock	



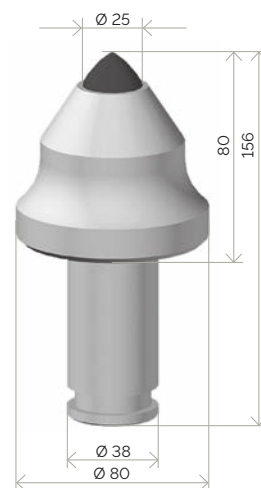
Retainer	Circlip retainer SG 5500	
Part Number	3311000979	



Pick type	ER 22/80/80/38 PS	●
Part Number	3311004591 (8) <sup>1</sup>	
Application	Concrete, medium hard to hard rock	



Retainer	Circlip retainer SG 5500	
Part Number	3311000979	



Pick type	ER 25/80/80/38 S	●
Part Number	3311004590 (6) <sup>1</sup>	
Application	Concrete, medium hard to very hard rock	



Retainer	Circlip retainer SG 5500	
Part Number	3311000979	

<sup>1</sup> Picks are delivered with retainers. Number in ( ) shows quantity.

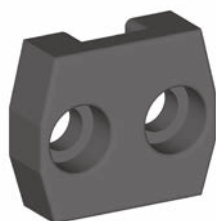
## Special and non-standard picks

### ER 600-W | 650-W

#### Wood cutting picks for wood grinding drum



Pick box	for threaded side	●
Part Number Typ till 12/2014 from 01/2015	72 63 25 44 3311003206	



Pick box	for nut side	●
Part Number Typ till 12/2014 from 01/2015	72 63 25 43 3311003207	



Pick box	20 cutters right	●
Part Number Typ till 12/2014 from 01/2015	70 65 57 14 R 3311003204	
Application	Wood, tree stump	

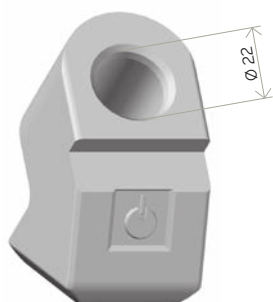


Pick box	20 cutters left	●
Part Number Typ till 12/2014 from 01/2015	70 65 57 14 L 3311003203	
Application	Wood, tree stump	



Pick box	40 cutters straight	●
Part Number Typ till 12/2014 from 01/2015	70 65 58 14 3311003205	
Application	Wood, tree stump	

## ER 250 | 600 | 650 | 1500 | 2000 Dragon-Tooth-Picks



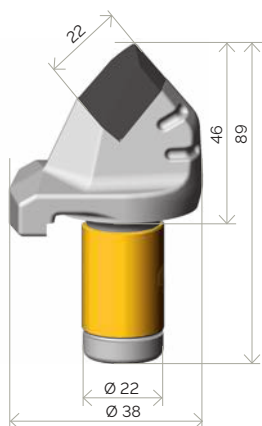
Pick box	PH 450 UA	●
Part Number	3311001804	
For drum cutter model	ER 250	



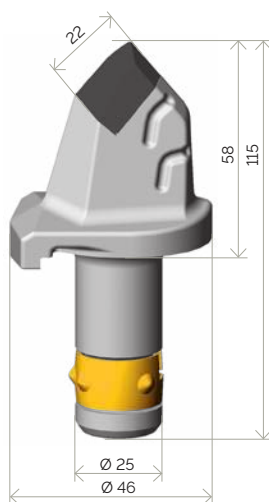
Pick box	PH 600 UA	●
Part Number	3311003040	
For drum cutter model	ER 600 ER 650	



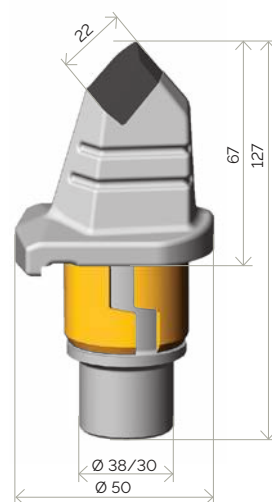
Pick box	PH 5300 DT	●
Part Number	3311003346	
For drum cutter model	ER 1500 ER 2000	



Pick box	DT 22/46/38/22 H	●
Part Number	3311002287	
Application	Soft to medium hard, abrasive ground and rock	



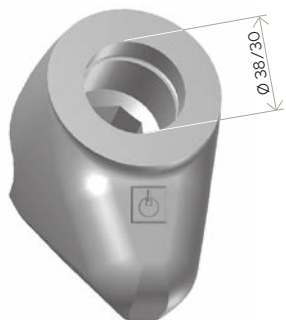
Pick box	DT 22/58/46/25 H	●
Part Number	3311002699	
Application	Soft to medium hard, abrasive ground and rock	



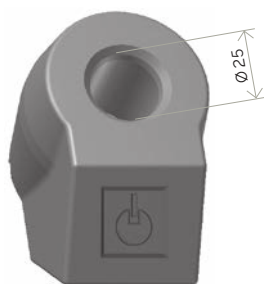
Pick box	DT 22/67/50/38-30 H	●
Part Number	3311003344	
Application	Soft to medium hard, abrasive ground and rock	

## Special and non-standard picks

### ER 650 | 1200 | 1500 Picks for mixing applications



Pick box	PH 3000 MIX	●
Part Number	3311001499	

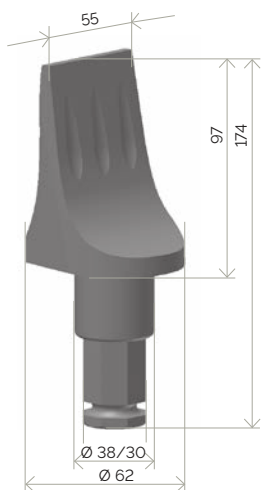


Pick box	PH 600 MIX	●
Part Number	3311000886	

### ER Range Steel brush for brush drum



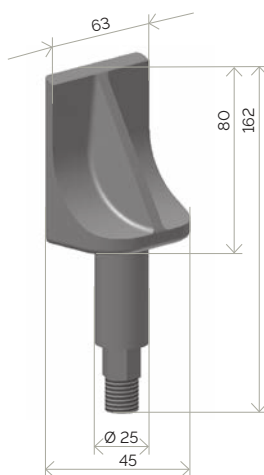
Steel brush type	BR 14/100/M16	●
Part Number	3311004260	



Pick type	EF 55/97/62/38-30 S	●
Part Number	3311002121	
Application	homogeneous, soft and sticky ground	



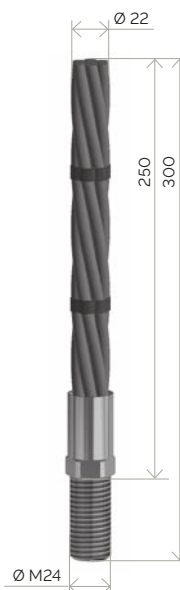
Retainer	ES 3000 MIX	
Part Number	3311002186	



Pick type	EF 63/80/45/25 W	●
Part Number	3311000887	
Application	homogeneous, soft and sticky ground	



Retainer	Fastening disk and lock nut	
Part Number	Disk 3311002988 Nut 3311000661	



Steel brush type	BR 22/200/M24	●
Part Number	3311003531	

# Tools for installation and removal



Tool	Knockout tool
<b>Part Number</b> for picks with shaft diameter 20–30mm	3311000989



Tool	Puller for picks with retaining sleeves
<b>Part Number</b> for picks with shaft diameter 20–22mm for pick ER 16/48/32/20 H (page 9)	3311000991 3311002042



Tool	Mounting tool for retaining clips	Dismantling tool for retaining clips
<b>Part Number</b> for retaining clip ES 100 for retaining clip ES 250 for retaining clip ES 450 for retaining clip ES 600 for retaining clip ES 1500 for retaining clip ES 5000	3311004215 3311002612 3311002196 3311002377 3311002876 3311004217	3311004216 3311002613 3311002197 3311001335 3311002195 3311004218



Tool	Mounting gripper for circlip retainers
<b>Part Number</b> for picks with shaft diameter till 25mm for picks with shaft diameter from 30mm	3311002520 3311002194



Tool	Puller tool for QuickSnap retainers
<b>Part Number</b>	3311000980




Tool	Knockout tool for stuck picks
<b>Part Number</b> for picks with shaft diameter 20–25mm for picks with shaft diameter 30–38mm	3311002039 3311002872



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