Cutting tools

for rotary drum cutters

Epiroc

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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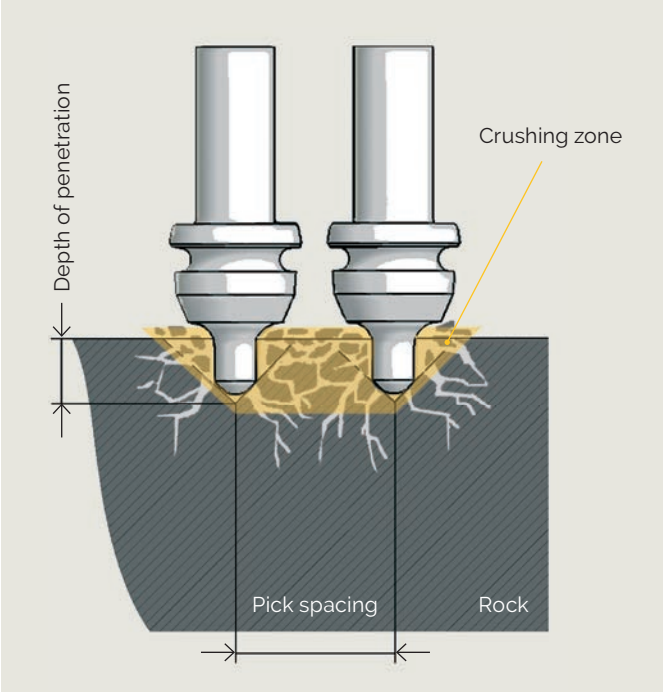
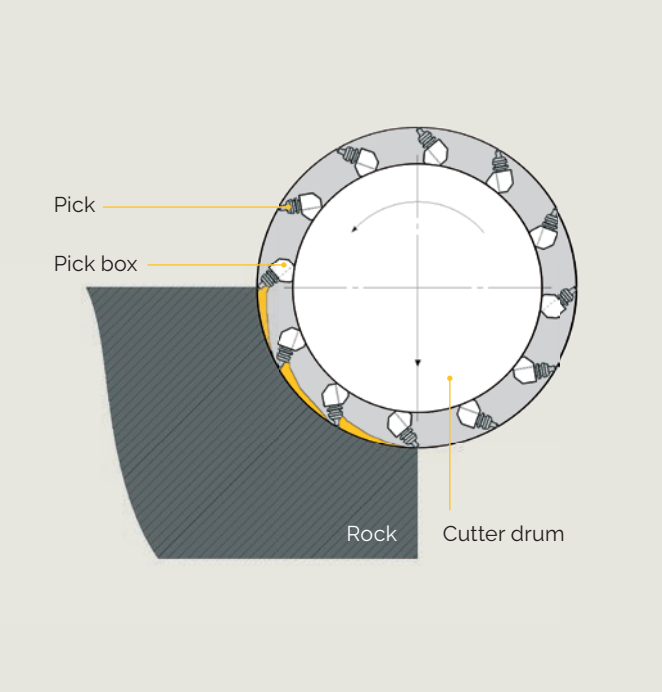
Several picks – “piece by piece”

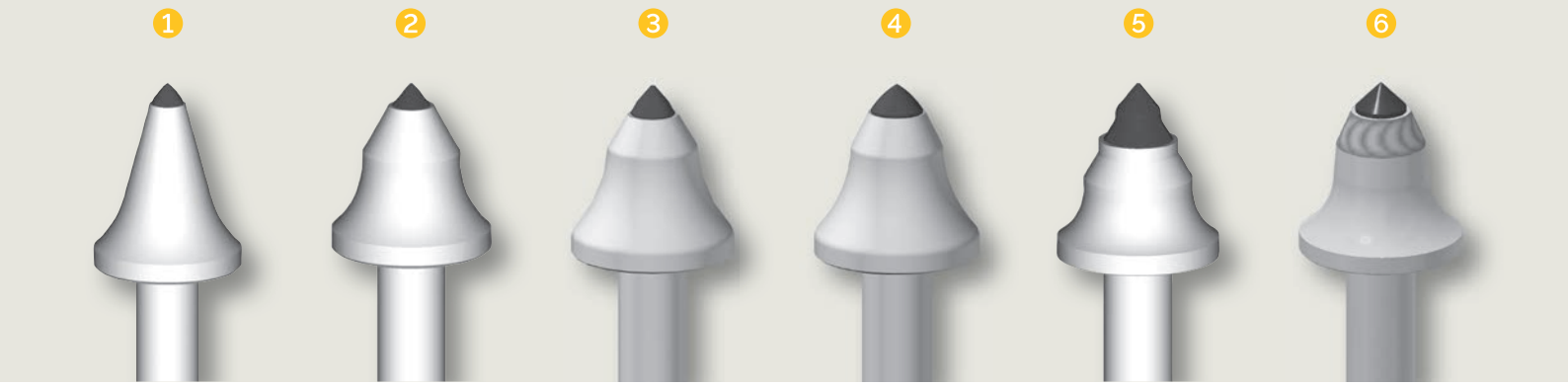
The optimum shape

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

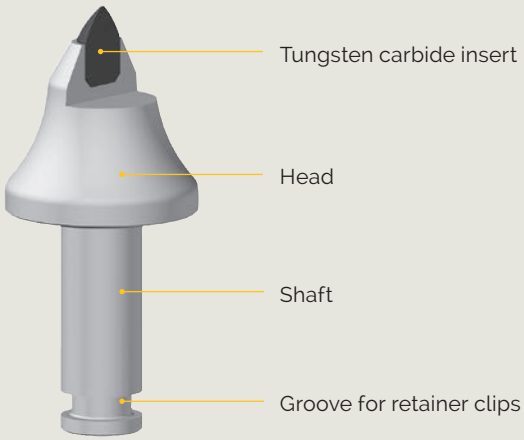
ER 19/75/70/30 6
Standard pick head with medium diameter insert and additional hard facing, for use in medium to hard abrasive rock

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.

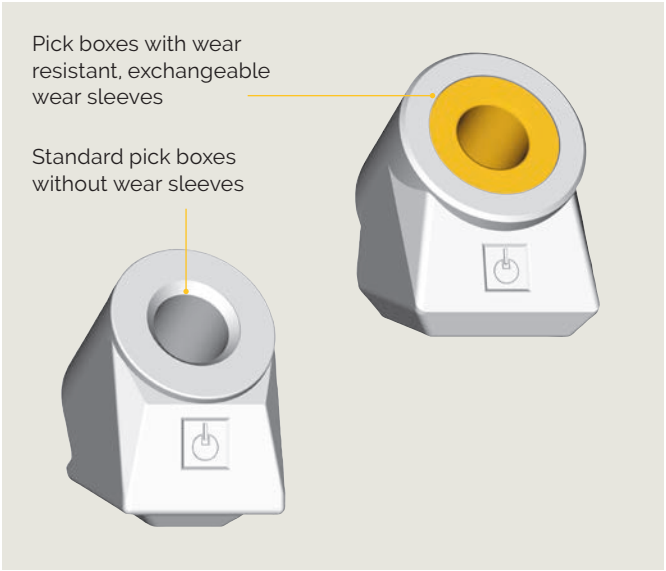


Pick boxes and retaining clips

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.

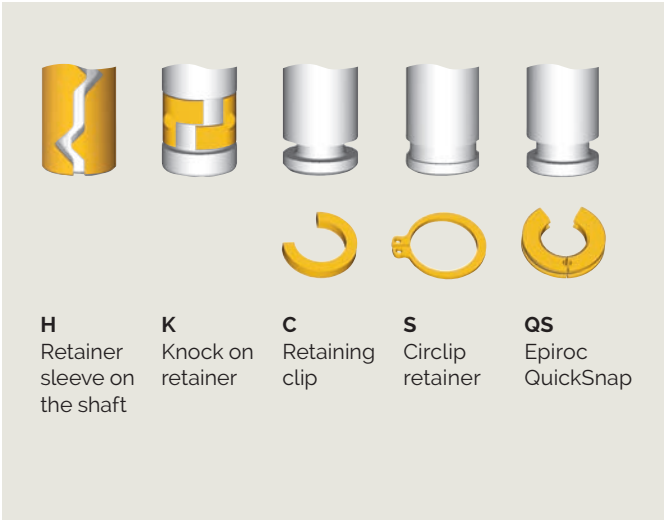
The correct angle ensures maximum productivity with minimum wear. Pick boxes are also made from specially heat treated steel and depending on applications, are available with exchangeable wear sleeves.



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.

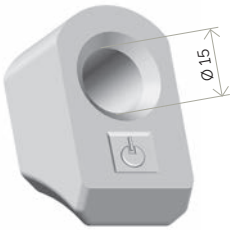
For quick and easy changing of picks, Epiroc offers the **QuickSnap** retaining system, which allows picks to be changed in a matter of seconds. This represents a saving of over 50% in time compared with normal circlip or knock on retainer systems.



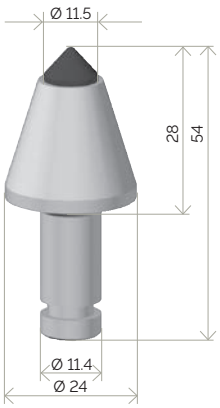
Easier and quicker pick changes with Epiroc QuickSnap

ER 1500
Epiroc

Pick box	PH 50 ●
Part Number	3311000774

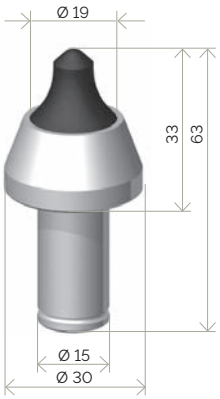


Pick box	PH 50 N ●
Part Number	3311003538



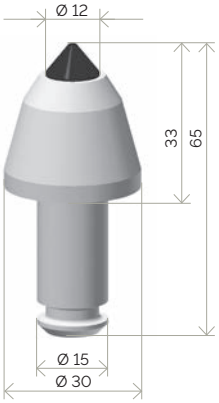
Pick type	ER 11/28/24/12 C ●
Part Number	3311004555 (100)[1]
Application	Concrete, soft to medium hard rock

Retainer	Retaining clip **ES 50**
Part Number	3311001264



Pick type	ER 19/33/30/15 S ●
Part Number	3311004557 (100)[1]
Application	Asphalt, soft to medium hard abbrasive rock

Retainer	Circlip retainer **SG 100**
Part Number	3311002950

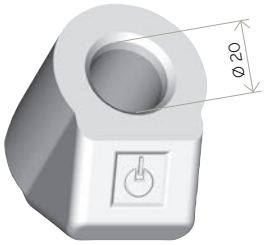


Pick type	ER 12/33/30/15 C ●
Part Number	3311004556 (100)[1]
Application	Concrete, soft to medium hard rock

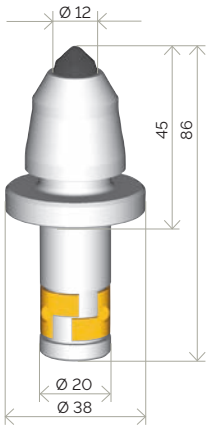
Retainer	Retaining clip **ES 100**
Part Number	3311002701

[1] **Picks are delivered with retainers. Number in ( ) shows quantity.**

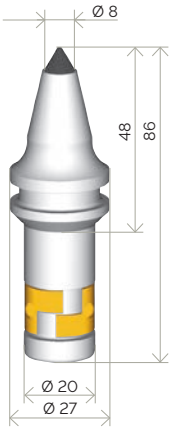
Dimension in mm | Associated installation and removal tools on page 19 | ● Delivery ex stock | ● Delivery upon request



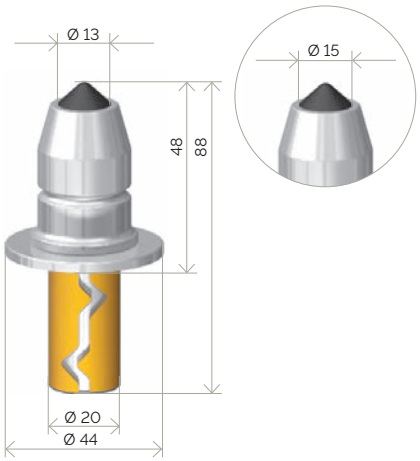
Pick box	PH 250 ●
Part Number	3311000832



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

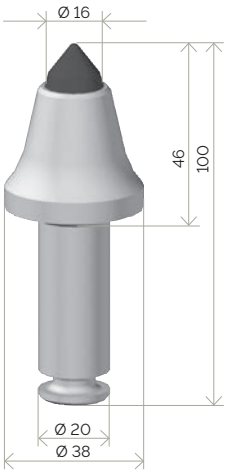


Pick type	ER 09/51/25/20 K ●
Part Number	3311004560 (50)[1]
Application	Soft rock, salt, gypsum



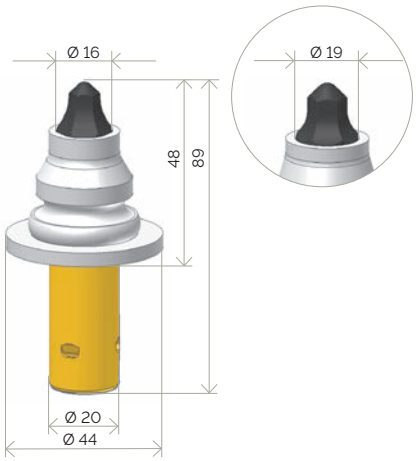
Pick type	ER 13/48/44/20 H ●
Part Number	3311004561 (50)[1]

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



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

Retainer	Retaining clip **ES 250**
Part Number	3311001648

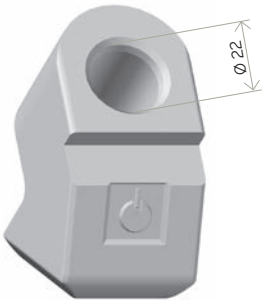


Pick type	ER 16/48/32/20 H ●
Part Number	3311004562 (50)[1]

Pick type	ER 19/48/36/20 H ●
Part Number	3311004563 (50)[1]
Application	Asphalt

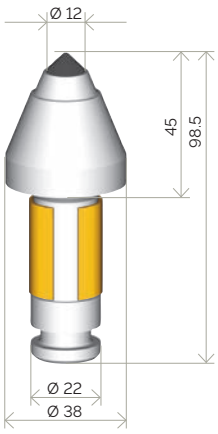
[1] **Picks are delivered with retainers. Number in ( ) shows quantity.**

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



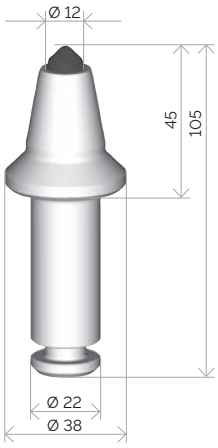
Pick box	PH 450 UA ●
Part Number	3311001804
	replaces the previous type PH 450

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



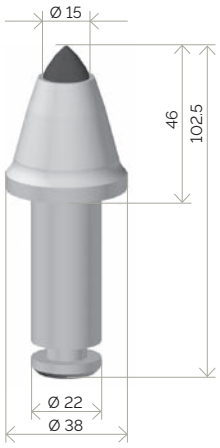
Pick type	ER 12/45/38/22 HC ●
Part Number	3311004565 (40)[1]
Application	Concrete, medium hard and abrasive rock

Retainer	Retaining clip **ES 450**
Part Number	3311000990



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

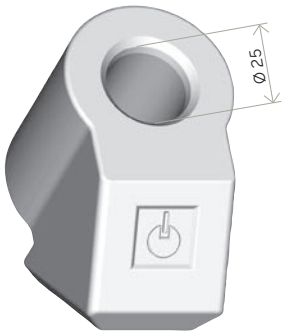
Retainer	Retaining clip **ES 450**
Part Number	3311000990



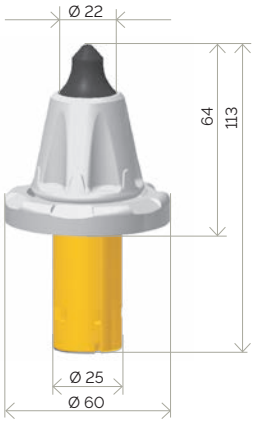
Pick type	ER 15/46/38/22 C ●
Part Number	3311004567 (40)[1]
Application	Concrete, medium hard rock

Retainer	Retaining clip **ES 450**
Part Number	3311000990

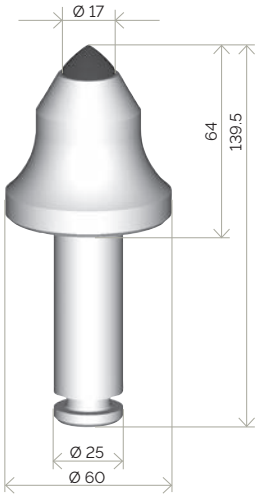
[1] **Picks are delivered with retainers. Number in ( ) shows quantity.**



Pick box	**PH 600** ●
Part Number	3311003040

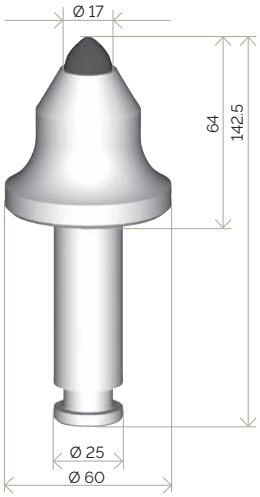


Pick type	**ER 22/64/60/25 H** ●
Part Number	3311004572 (15)[1]
Application	Asphalt, soft and abrasive rock



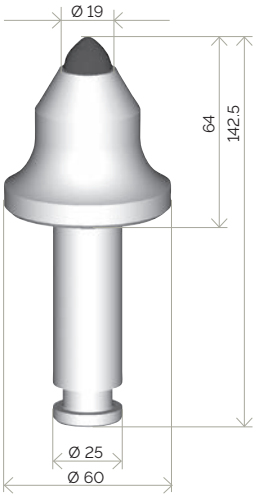
Pick type	**ER 17/64/60/25 C** ●
Part Number	3311004571 (15)[1]
Application	Concrete, medium hard to hard rock

Retainer	Retaining clip **ES 600**
Part Number	3311000988



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

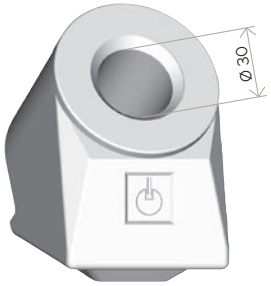
Retainer	QuickSnap **QS 600**
Part Number	3311000977



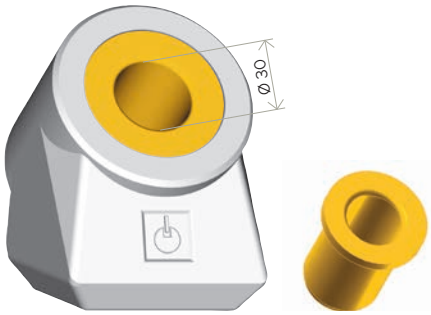
Pick type	**ER 19/64/60/25 Q** ●
Part Number	3311004570 (15)[1]
Application	Concrete, medium hard to hard rock

Retainer	QuickSnap **QS 600**
Part Number	3311000977

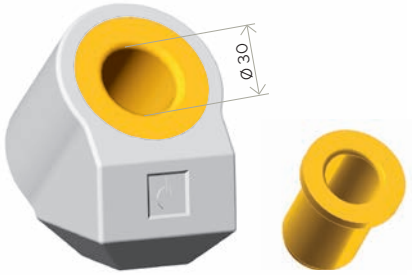
[1] **Picks are delivered with retainers. Number in ( ) shows quantity.**
Dimension in mm | Associated installation and removal tools on page 19 | ● Delivery ex stock | ● Delivery upon request



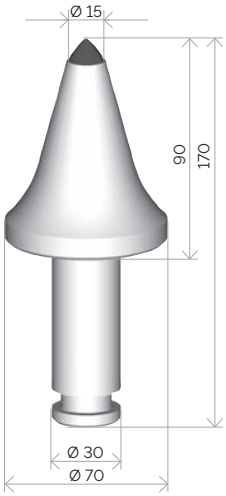
Pick box	PH 1200 ●
Part Number	3311000797
For drum cutter model	ER 1200



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

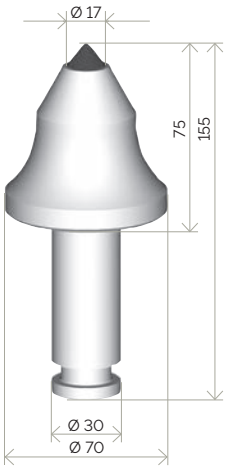


Pick box	PH 1100 ●
Part Number	3311004253
For drum cutter model	ER 650 from 09-2018
	Replacement wear sleeve
Part Number	3311000801



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

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



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

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

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

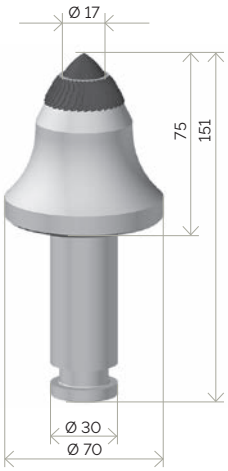
Retainer	QuickSnap **QS 5000**	Retaining clip **ES 5000**
Part Number	3311000978	3311002869

[1] **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

ER 650 from 01–2016

ERL 1100

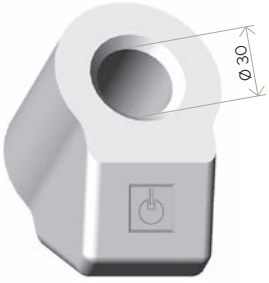


Pick type	ER 19/75/70/30 Q ●
Part Number	3311004582 (10)[1] with **QS** 3311004617 (10)[1] with **ES**
Application	Abbrasive medium hard rock and concrete

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

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

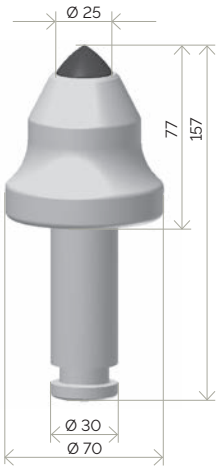
Retainer	Retaining clip **ES 1500**
Part Number	3311000992



Pick box	PH 1000 ●
Part Number	3311002688

Pick type	ER 22/75/70/30 Q ●
Part Number	3311004577 (10)[1] with **QS** 3311004608 (10)[1] 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)[1] with **QS** 3311004609 (8)[1] with **ES**
Application	Steel, concrete, hard to very hard rock

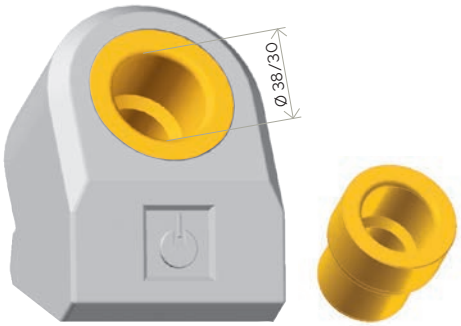
Retainer	QuickSnap **QS 5000**	Retaining clip **ES 5000**
Part Number	3311000978	3311002869

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

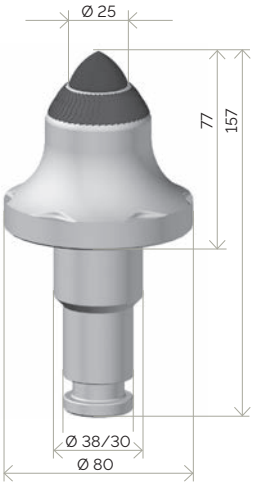
Retainer	QuickSnap **QS 5000**	Retaining clip **ES 5000**
Part Number	3311000978	3311002869

[1] **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

ER 3000

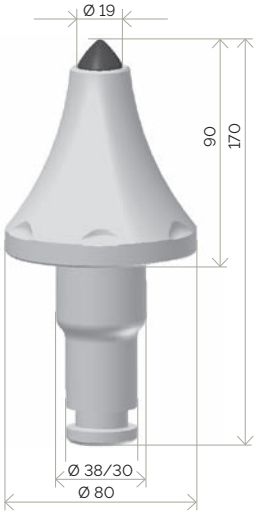


Pick box	PH 5300 ●
Part Number	3311002261
	Replacement wear sleeve
Part Number	3311002263



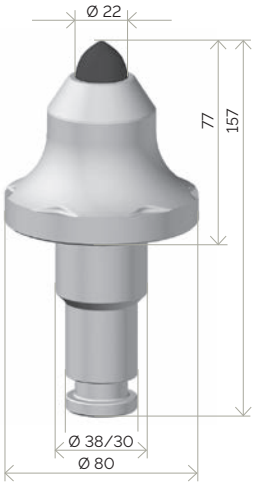
Pick type	ER 25/77/80/38-30 PQ ●
Part Number	33110038532
Application	medium hard to very hard abrasive rock

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



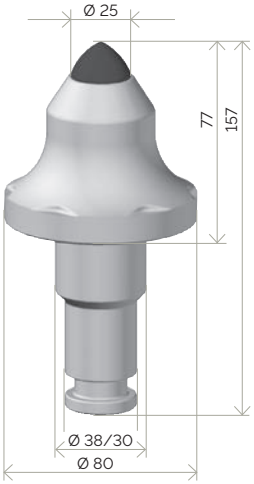
Pick type	ER 19/90/80/38-30 Q ●
Part Number	3311004588 (6)[1] with **QS** 3311004621 (6)[1] with **ES**
Application	Soft rock

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)[1] with **QS** 3311004620 (8)[1] with **ES**
Application	Concrete, medium hard to hard rock

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

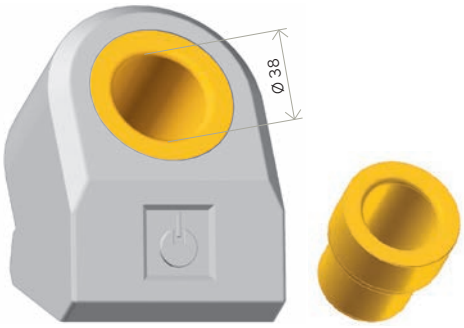


Pick type	ER 25/77/80/38-30 Q ●
Part Number	3311004586 (8)[1] with **QS** 3311004619 (8)[1] with **ES**
Application	Concrete, medium hard to very hard rock

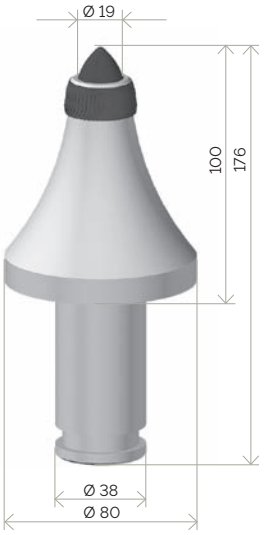
Retainer	QuickSnap **QS 5000**	Retaining clip **ES 5000**
Part Number	3311000978	3311002869

[1] **Picks are delivered with retainers. Number in ( ) shows quantity.** [2] This pick is only sold as single Part Number.
Dimension in mm | Associated installation and removal tools on page 19 | ● Delivery ex stock | ● Delivery upon request

ER 5500

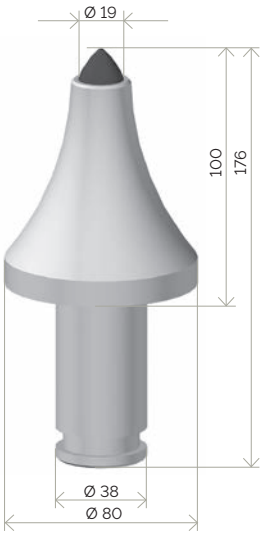


Pick box	**PH 5500** ●
Part Number	3311002262
	Replacement wear sleeve
Part Number	3311002264



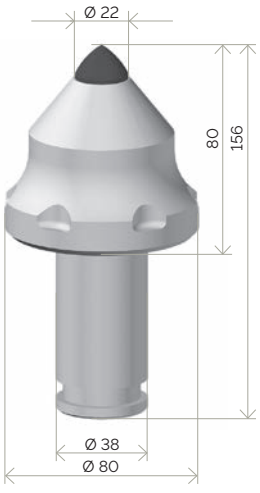
Pick type	**ER 19/100/80/38 PS** ●
Part Number	3311004593 (6)[1]
Application	Soft abrasive rock

Retainer	Circlip retainer **SG 5500**
Part Number	3311000979



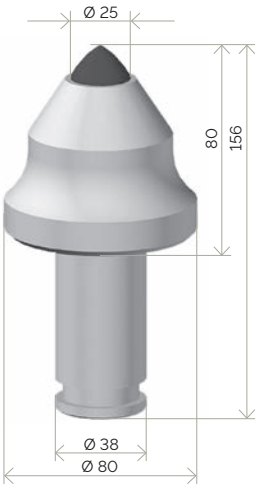
Pick type	**ER 19/100/80/38 S** ●
Part Number	3311004592 (6)[1]
Application	Soft rock

Retainer	Circlip retainer **SG 5500**
Part Number	3311000979



Pick type	**ER 22/80/80/38 PS** ●
Part Number	3311004591 (8)[1]
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)[1]
Application	Concrete, medium hard to very hard rock

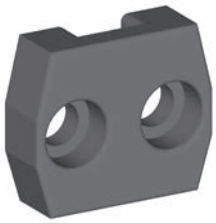
Retainer	Circlip retainer **SG 5500**
Part Number	3311000979

[1] **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

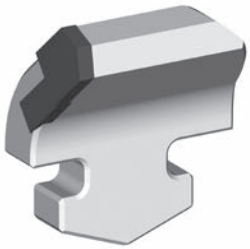
Special and non-standard picks

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



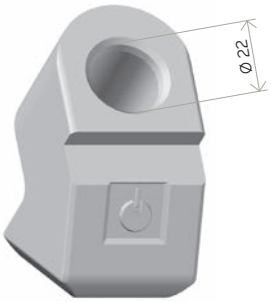
Pick box	20 cutters right ●
Part Number Typ till 12/2014 from 01/2015	 70 65 57 14 R 3311003204
Application	Wood, tree stump

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

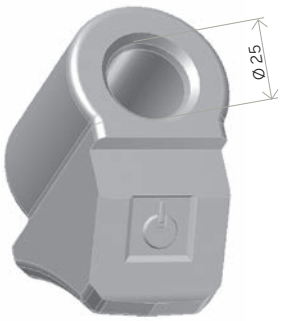
Pick box	40 cutters straight ●
Part Number Typ till 12/2014 from 01/2015	 70 65 58 14 3311003205
Application	Wood, tree stump

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

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

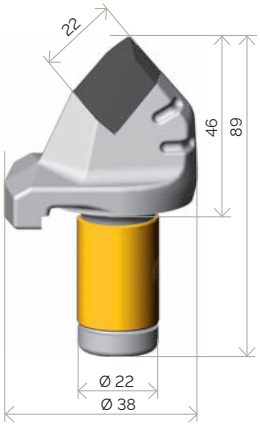


Pick box	PH 450 UA ●
Part Number	3311001804
For drum cutter model	ER 250

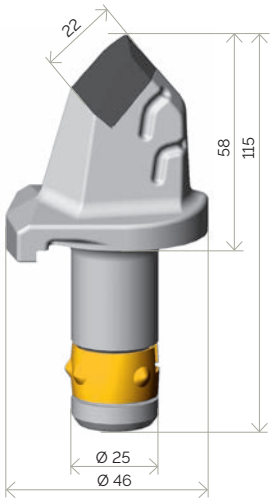


Pick box	PH 600 UA ●
Part Number	3311003040
For drum cutter model	ER 600 ER 650

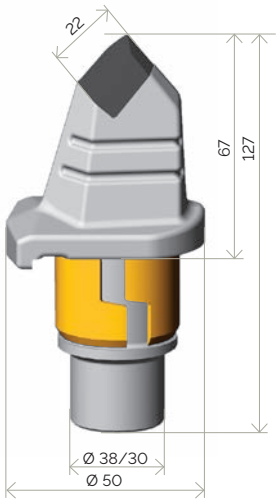
Pick box	PH 5300 DT ●
Part Number	3311003346
For drum cutter model	ER 1500 ER 2000



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



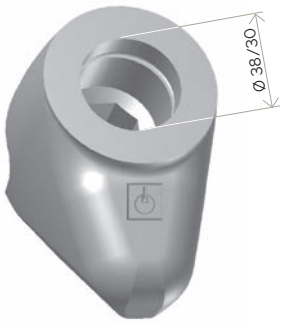
Pick box	DT 22/58/46/25 H ●
Part Number	3311002699
Application	Soft to medium hard, abrasive ground and rock



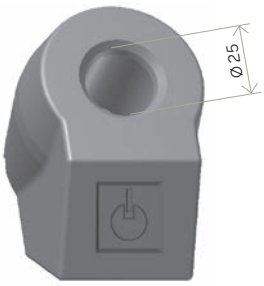
Pick box	DT 22/67/50/38-30 H ●
Part Number	3311003344
Application	Soft to medium hard, abrasive ground and rock

Special and non-standard picks

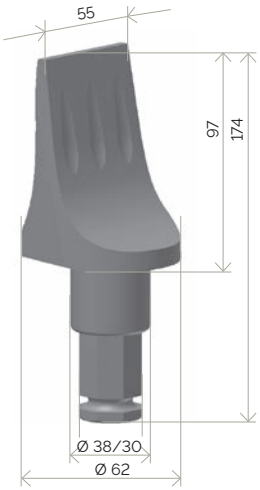
ER 650 | 1200 | 1500
Picks for mixing applications



Pick box	PH 3000 MIX ●
Part Number	3311001499

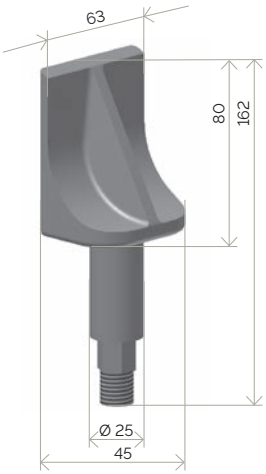


Pick box	PH 600 MIX ●
Part Number	3311000886



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

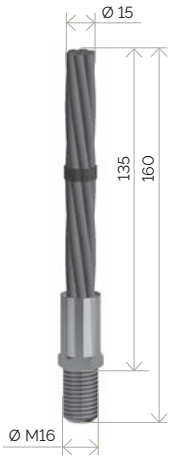
Retainer	ES 3000 MIX
Part Number	3311002186



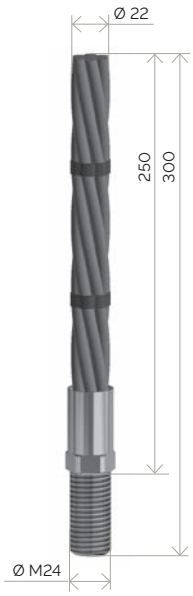
Pick type	EF 63/80/45/25 W ●
Part Number	3311000887
Application	homogene, soft and sticky ground

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

ER Range
Steel brush for brush drum



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



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

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

Tools for installation and removal

Tool	Knockout tool
Part Number	
for picks with shaft diameter 20–30mm	3311000989

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

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

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

Tool	Puller tool for QuickSnap retainers
Part Number	3311000980

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

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