

A full-page photograph of a construction worker in a blue jumpsuit and white hard hat using a yellow Atlas Copco pneumatic rock drill on a concrete surface. The worker is wearing safety gloves and is captured in the middle of drilling, with dust rising from the bit. The background is a blurred construction site.

***PNEUMATIC
ROCK DRILLS***

Atlas Copco



YOUR SURFACE ROCK DRILL INSIDE OUT

This is how your breaker takes care of dangerous vibrations. It is also the story of our hand and arm protection system – HAPS.

We took on the challenge to create ergonomically designed breakers already in the 1960s. The first we did was to allow the piston to turn on cushions, a technique which has been fine-tuned over the years. During the 70s we introduced the first vibration damping handles. In the 80s and 90s we added vibration-damping springs and optimized the weight relationship between handle and body. Today we have added a flexible pivot point, where the energy is reduced in all three directions. The relationship between fixed and movable parts has also been adjusted in recent years.

THIS IS VIBRATION

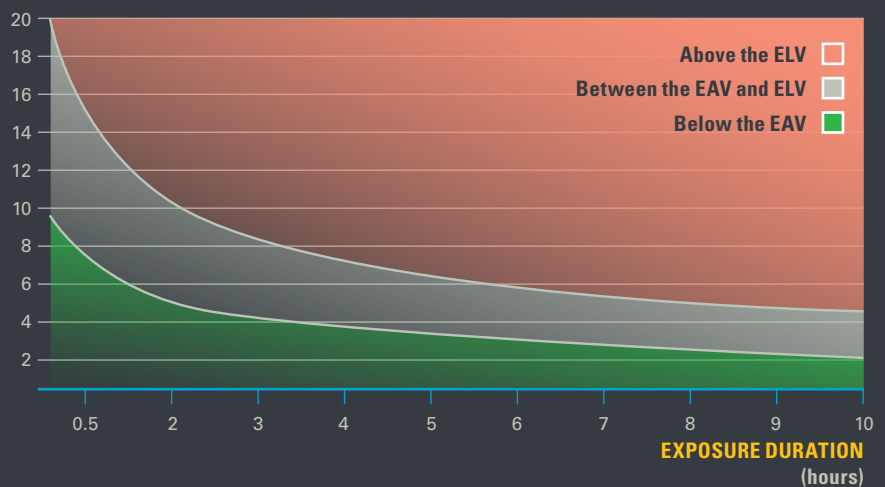
There are two types of forces that result in vibration. The first type comes from the machine itself. It occurs when the piston accelerates, when internal parts are in imbalance or when the tools are in imbalance. We battle this type of vibration with HAPS technology. The second vibration-source we have to battle is caused by the impact energy from the breaking itself. By using the right breaking techniques you can reduce the effect of impact-induced vibration.

10 SIMPLE WAYS TO REDUCE VIBRATION

- Use HAPS-enabled machines
- Use the right machine for the right job
- Use the proper machine maintenance
- Keep tools sharp
- Let go of the trigger while extracting the tool from the broken surface
- Switch work tasks
- Take regular breaks
- Don't grip the machine too hard
- Keep hands warm and dry
- Massage your fingers during breaks

RELATION BETWEEN VIBRATION AND EXPOSURE LEVEL

VIBRATION MAGNITUDE (m/s²)



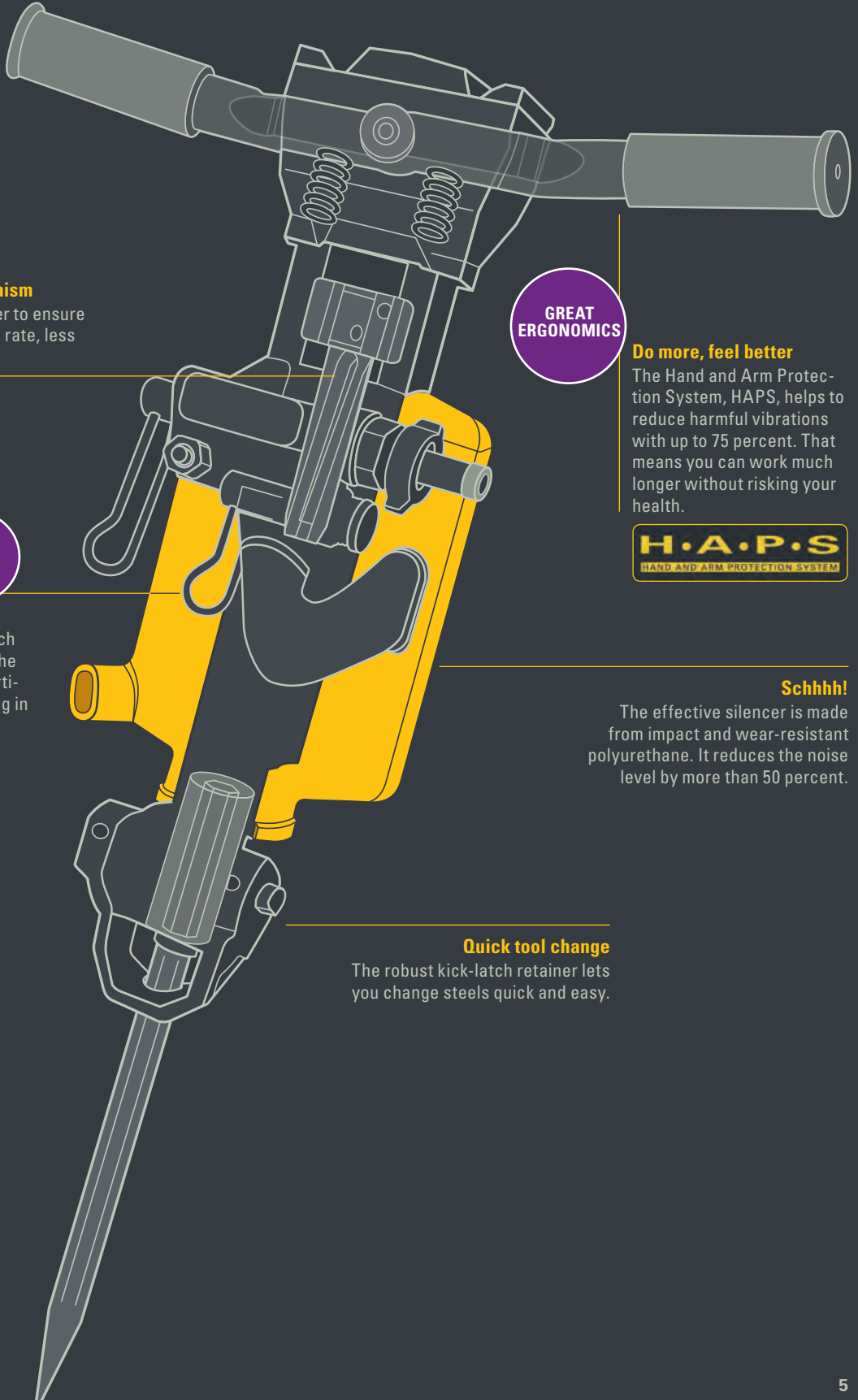
The Exposure Limit Value (ELV) is 5 m/s²
The red area = **immediate action to stop**

The Exposure Action Value (EAV) is 2.5 m/s²
The grey area = **establish an action plan**

LET THE MACHINE WORK

THIS IS HOW TO BEST USE YOUR HAPS-ENABLED MACHINE

Vibration-dampened HAPS-machines have prestressed spring handles. If you push down too hard on them, you hit a stop and lose the effect of the springs. Press the handle half-way down, and the right amount of feed force is applied automatically. Allow the machine to “float” between the handles.



Rifle bar rotation mechanism

Provides high impact power to ensure outperforming penetration rate, less dust sensitive.

**GREAT
ERGONOMICS**

Do more, feel better

The Hand and Arm Protection System, HAPS, helps to reduce harmful vibrations with up to 75 percent. That means you can work much longer without risking your health.



**GET
MORE
DONE**

Keep it clean

Air flushing lever let you switch the full air flow to the end of the drill steel to blow out dust particles quickly and avoid jamming in the rock or concrete.

Schhhh!

The effective silencer is made from impact and wear-resistant polyurethane. It reduces the noise level by more than 50 percent.

Quick tool change

The robust kick-latch retainer lets you change steels quick and easy.

CONQUER THE HARDEST ROCK

The RH drills were the backbone of the Swedish Method. And after more than 60 years development they are still on top.

The RH drills saw the light of day in the 1940s and they were an immediate success. Today, they carry on that tradition. The RH-model was designed for heavier jobs such as bench and secondary drilling, plus drilling for smooth blasting.

Thanks to the robust rifle-bar rotation mechanism and high impact energy for drilling in hard rock. The lightweight RH 571 is perfect for smaller jobs. The RH 658, slightly heavier and more powerful, is suitable for deeper drilling.

The RH 572E combines light weight with extra operator comfort, thanks to the vibration dampened handles and efficient silencer. All models are equipped with T-handles to give you a solid, comfortable grip. The best way to use the RH machines is when you do bench, secondary drilling and smooth blast drilling. Dust generated by drilling obscures vision and poses a health risk.



For every purpose

The RH-series carry several different rock drills for every need. The RH 658LS (top) is made for heavier jobs and deeper drilling. The RH 571 (above) weighs less and is suitable for smaller jobs.

Pneumatic rock drill		RH 572E	RH 571-5L	RH 571-5LS	RH 658L	RH 658LS
Weight	kg	22.8	17.8	18.9	24	25
Length ¹	mm	583	510	510	565	565
Air consumption at 6 bar	l/s	37	39	39	58	58
Impact rate	blows/min	2,040	2,100	1,980	2,040	2,040
Rotation speed	rpm	170	190	190	215	215
Hose connection	mm	19	19	19	19	19
Drill steel chuck: Hex	mm	22x108	22x108	22x108	22x108	22x108
Part number		8311 0301 78	8311 0301 29	8311 0301 37	8311 0301 86	8311 0301 87

Important: Full details of measurement are available in the Safety and Operating Instruction of the product (part no 9800 0970 90). They can be found on www.acprintshop.com 1) Including drill steel retainer

Optional equipment	Part number
Hand hose, 19 mm x 3 m complete with claw coupling and hose clamps	9030 2047 00

RH Drills For hard rock and holes



Bigger

The RH 658 is slightly heavier and more powerful than its little sister. That means it can drill deeper.

Quiet breaking

The silencer brings down noise levels by up to 50 percent.

Perfect for ...

Production drilling in quarry and dimension stone industry.

RH
658
LS



More comfort

The design combines light weight with extra comfort for the operator, thanks to the vibration dampened handles and the efficient silencer.

Clean out!

All RH-models have built in air flushing. A direct air flow within the drill steel removes drill chippings and prevents the drill from jamming.

For smaller jobs

The RH 572E is specialised for your smaller jobs in confined spaces and can drill to six metres depth.

RH
572
E

- The RH-models have built-in air-flushing which reduces the risk of jamming and gives faster blasting cycles
- Stepless throttle for easy collaring
- Robust kick-latch retainer for quick and easy tool change
- Spring-dampened handles reduce vibrations by 75 percent
- Silencer in impact- and wear-resistant polyurethane reduces noise levels by more than 50 percent





GRAB A BBD AND GO!

The BBD drills are light and easy to handle, which makes them ideal for those quick jobs and for working in difficult-to-get-to areas.

Rock drilling is tough work, but we always try to make it as easy as possible for you. The light-weight BBD 12 rock drill is great when you need to get smaller jobs done and haven't got the time to start up the heavy machinery.

The BBD is available in two versions. Equipped with a D-type handle, it is used for horizontal drilling, plug hole drilling, and drilling in concrete to a maximum depth of one meter. Equipped with T-handles, the BBD 12T is designed for vertical drilling of up to two meters.

The medium-weight BBD15E has a combined "T/D handle" that make it easy for you to carry. It offers a high power-to weight ratio and a high operational safety. The E means it's equipped with spring dampened handles and a highly effective silencer. The largest BBD drill is available in a version with a trigger valve, BBD 15ET. If you have an older machine it's possible to retrofit it with a trigger conversion kit.

Pneumatic rock drill		BBD 15E	BBD 15E	BBD 15 ET	BBD 15 ET	BBD 12T-01	BBD 12TS-01	BBD 12D Horizontal	BBD 12DS Horizontal
Weight	kg	15.5	15.5	15.6	15.6	11.1	12.1	9.8	10.7
Length ¹	mm	575	575	575	575	505	505	565	565
Air consumption at 6 bar	l/s	22	22	22	22	24	22	24	22
Impact rate	blows/min	2,520	2,520	2,520	2,520	2,580	2,520	2,580	2,520
Rotation speed	rpm	220	220	220	220	220	220	220	220
Hose connection	mm	19	19	16	16	19	19	13	13
Drill steel chuck: Hex	mm	19x108	22x108	19x108	22x108	22x108	22x108	19x108	19x108
Part number		8311 0104 02	8311 0104 10	8311 0104 12	8311 0104 13	8311 0102 95	8311 0102 98	8311 0102 47	8311 0102 80

1) Including drill steel retainer

Optional equipment	Partnumber
Hand hose, 13 mm x 3 m complete with claw coupling and hose clamps	9030 2066 00
Hand hose, 16 mm x 3 m complete with claw coupling and hose clamps	9030 2046 00
Hand hose, 19 mm x 3 m complete with claw coupling and hose clamps	9030 2047 00
Retro-fit kit BBD 15E to BBD 15ET	8311 0104 95

BBD Drills For lighter jobs

D handle special

With the D-handle the BBD 12D is ideal for horizontal rock drilling, plug hole drilling and concrete drilling.

Shallow drilling

The BBD 12D drills holes down to two metres depth.

Use it for ...

It's perfect for plug hole drilling, anchor and wedge hole drilling.



BBD
12
D



BBD
12
DS

Ideal for

Just like it's sister the BBD 12 DS with a D-handle works best in horizontal rock drilling, plug hole- and concrete drilling.

Silent

The DS model is equipped with a polyurethane cover that can reduce noise by up to 50 percent.

Vibration reduction

HAPS, Hand and Arm Protection System for all E-versions

Built in air flushing



BBD
15
E



BBD
15
ET

Watch the E

The BBD's designated E are equipped with HAPS, Hand Arm Protection System. The vibration reduction let's you work longer hours without risking health.

Watch the T

T stands for Trigger, which gives you better start and control during the operation. It's excellent for gas companies' pipe service maintenance.



Drill/chippers

GRAB IT AND GO

The DKR 36 is small enough to fit in a (very deep) pocket and strong enough to do both chipping and drilling.

The quick-release chuck is a money saver. It helps you change between drilling and chipping operations and you can do more work in shorter time. Lubrication is especially important to think about when you are drilling. With the DKR 36 you can concentrate on the task at hand.

A built-in lubricator lasts a whole normal shift and helps keep the drill chipper and tools in shape.

The nimble size together with a mass of applications make this a “grab and go”-tool. There is almost always a use for it, and the weight helps you

work in almost impossible positions. You can go overhead or under water. Divers especially like this model because they can do so much with it – anything from underwater drilling to chipping – thanks to low feed force.

Drill/chipper		DKR 36	DKR 36 R
Weight	kg	4.5	4.5
Length	mm	375	375
Air consumption at 6 bar	l/s	10	10
Impact rate	blows/min	2,820	2,820
Revolutions	rpm	250	250
Hose connection	mm	19	19
Vibration level 3 axes (ISO 28927-10) - breaking	m/s ²	20.2	20.2
Vibration level 3 axes (ISO 28927-10) - drilling	m/s ²	21.2	21.2
Sound power level guaranteed (2000/14/EC)	Lw, dB(A)	103	103
Sound pressure level (ISO 11203)	Lp, r=1m	88	88
Shank size: Round	mm	R19xH14.7x89	R19x95
Part number		8463 0103 60	8463 0103 50

1) 19 mm drill in granite

Accessories	Part number
Hand hose 10 mm x 3 m complete with claw coupling and quick coupling (incl. nipple)	9030 2042 00
Adapter for fitting 8, 10, 12 mm drills (only for DKR 36)	0701 1001 32
Knock-out block for removal of 8, 10, 12 mm drills	3085 0210 00

Please note: the above hand hose is equipped with Atlas Copco standard claw couplings. For N. American and Australian markets, hand hoses with couplings according to the local claw coupling standard should be used.

GRAB AND GO-KIT

At just 10 kg, it's easy to carry around. And the steel case is complete with both hose and accessories.

Kits	DKR 36
Part number	8463 0103 61



VERSATILE

Be prepared for anything

The DKR 36 is tiny, but it handles anything from cracking rocks to chipping brickwork.

Never mind the lubrication

We take care of it for you. The DKR 36 has a built-in lubricator that lasts for a whole shift.

SAVE TIME & MONEY

Quick tool change

The quick release helps you change between drilling and chipping in seconds.

DKR 36



ALL-ROUNDERS SAVE MONEY

As soon as you pick up the drill, you'll feel the quality. That pays off from day one.

It's solid, well made. Start it up and you'll notice the raw power. Your drill is a good long-term investment and it makes money from day one. For every litre of air you put in, you'll get high impact energy out.

Our water flushed, pusher leg mounted rock drills are designed for driving drifts and tunnels with

a small cross section. They are intended for use for hole diameter range of 27 to 41 mm (1-1 5/8 in) with Hex 22 (7/8") rotation shank as a standard. When used with Atlas Copco tapered button bits, penetration rate will improve some 25-50 percent compared to conventional integral steels. And they have three to five times longer service

life. These all-rounders can be used in a wide range of applications. They have a robust riflebar rotation, long stroke length and high penetration rates.

Rock drills		BBC 16W	BBC 16 WS ²	BBC 34 WTH	BBC 34 W	BBC 34 WS ²	BBD 94 W	BBD 94 WE ²	BBD 94 WS ATEX	RH 656 W
Hole range	mm	27-41	27-41	27-41	27-41	27-41	27-41	27-41	27-41	27-41
Weight	kg	28.5	29.5	34	33.5	34.5	28	28.5	31	22
Length	mm	705	705	740	775	775	670	670	670	658
Air consumption	l/s	69	69	88	88	88	97	97	97	48
Impact rate	blows/min	2,340	2,340	2,280	2,280	2,280	3,300	3,300	3,300	2,040
Piston diameter	mm	70	70	80	80	80	90	90	90	65
Stroke length	mm	55	55	70	70	70	45	45	45	59
Vibration level 3 axes (ISO 5349-2) ¹	m/s ²	16.6	16.6	20.4	20.4	20.4	15	15	15	21.2
Sound power level guaranteed (2000/14/EC) ¹	Lw, dB(A)	122	114	127	127	120	125	120	125	120
Sound pressure level (ISO 11203) ¹	Lp, r=1m	111	103	116	116	109	114	109	114	115
Part number		8311 0401 10	8311 0303 46	8311 0408 10	8311 0408 05	8311 0303 47	8311 0206 09	8311 0303 44	8311 0206 12	8311 0303 45

¹) Important: Full details of measurement is available in the Safety and Operating Instruction of the product. It can be found on www.acprintshop.com. Data at 6 bar (90 psi) air pressure. ²) Silenced version

Pusher legs		BMT 51	ALF 71	ALF 71-1	ALF 72D	ALF 72D-1	BMK 62S	BMK 91RS	ALF 67/80	ALF 67/80D
Product type		Single telescope						Double telescope		
Suitable for rock drill:		BBC 16W, 34W	BBC 16W, 34W	BBC 16W, 34W	BBD 94W	BBD 94W	RH 656W	BBD 94WS	BBC 16W, 34W	BBD 94W
Feeding length	mm	1,300	1,300	950	1,300	1,200	1,300	1,300	1,855	1,855
Length retracted	mm	1,658	1,805	1,455	1,970	1,830	1,815	1,870	1,495	1,595
Length extracted	mm	2,958	3,105	2,405	3,270	3,030	3,115	3,170	3,350	3,450
Weight	kg	15	14	13	19	16	17	24	17	19
Piston bore	mm	60	70	70	70	70	53	67	67/80	67/80
Part number		8321 0301 01	8321 0201 94	8321 0201 95	8321 0201 80	8321 0201 81	8321 0102 02	8321 0104 27	8321 0201 85	8321 0201 69

Rock drills **Medium range**

Anytime, anywhere

The Puma is an all-round rock drill, suitable for most drilling applications in medium to hard rock.

VERSATILE



PUMA
BBC
16
W

GET MORE DONE

Drill deep

With its long stroke the Puma has good penetration rate. And the quality rifle bar rotation mechanism can handle the load.

Easy reach

With the pusher leg control placed in back head of the rock drill, they are easy to reach.



LEOPARD
BBC 34 W

- Highly efficient in medium to hard rock
- Long stroke, high impact energy
- Large piston diameter makes it very efficient even at low air pressure
- Powerful rifle bar rotation mechanism
- Pusher leg control placed in back head of the rock drill



PANTHER
BBD 94 W

- High performance rock drill for soft to hard rock
- Short stroke and high impact rate makes it ideal for soft rock
- Large piston diameter for high efficiency even at low air pressure
- Ratchet wheel rotation mechanism
- Pusher leg control is placed on the pusher leg



RH 656 W

- Suitable for soft to medium hard rock
- Good ratio between high penetration/low air consumption
- Due to low weight, it can also be used as a sinker. Supplied with T-handle
- Robust rifle bar rotation mechanism
- Pusher leg control is placed on the pusher leg

Pusher legs **Your best legs**

These pusher legs were made with an aluminium alloy that was first developed for use in spacecrafts. They're strong and feature a large piston diameter for high feed force. The simple and robust design makes operations reliable and promise minimum maintenance time.

Double telescopic

The legs provide a long feeding length from a relatively short length feed. Intended for drilling holes high up or when extra feed length is required.



Double action

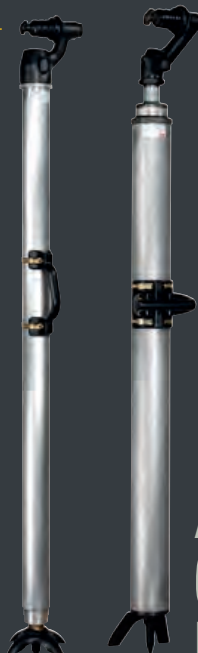
The Alf 72-pushers are double-acting, they push out and pull back in.

Quick connect

When time is short, simple connection means money saved.

Easy reach

The feed control is placed on the pusher leg, which makes it easy to reach.



ALF
72
D

ALF
67/80
D

Go further

The double-telescopic leg makes for long reach.

GREAT ERGONOMICS

Light and durable

Spacecraft aluminium alloys makes the legs strong and light.



KEEP PRODUCTION ON THE UP!

You can go deep with our all-steel stoppers. These rock drills will deliver even at low air pressure.

Stoppers are made for vertical or inclined environments. The machines are especially designed for production drilling, raise driving and roof bolting. Thanks to the ratchet wheel rotation and short piston stroke you get good penetration rates in soft and medium hard rock.

While you are drilling, air blows through the system to clean the rotation chuck and lubricate the drill steel shank. The WR versions has clockwise rotation and can be used for tightening or installing screen on threaded roof bolts.

Powerful

The stopper provides short stroke with good penetration rates. The large piston diameter gives high efficiency even at low air pressure.

Falcon for softer rocks

The BBD 46WS – Falcon provides a high impact rate for good performance in soft to medium rock.



**BBD
46
WS**

Go clockwise

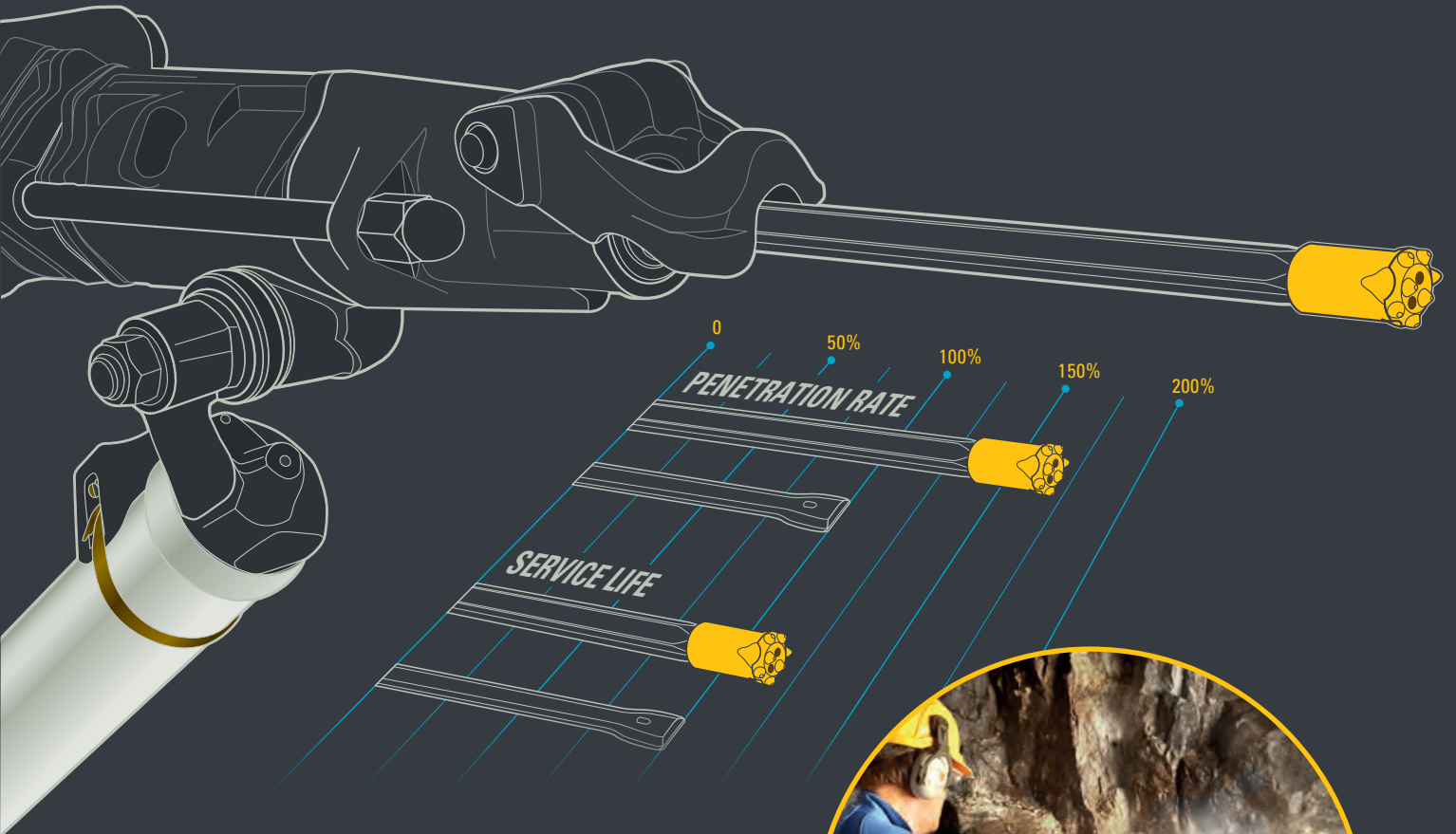
The WR versions comes with clockwise rotation for tightening nuts and roof bolting.

When you do ...

Production drilling, raise driving and bolting in soft to medium hard rock.

Stoppers		BBC 34 WS-6	BBC 34 WS-8	BBD 46 WS-6	BBD 46 WS-8	BBD 46 WR-6	BBD 46 WR-8
Hole range	mm	27-41	27-41	27-41	27-41	27-41	27-41
Weight	kg	45.5	46.5	39	40	39	40
Length retracted	mm	1,610	1,810	1,435	1,650	1,435	1,650
Length extracted	mm	2,380	2,780	2,205	2,620	2,205	2,620
Air consumption	l/s	125	125	90	90	90	90
Impact rate	bpm	2,340	2,340	3,000	3,000	3,000	3,000
Piston diameter	mm	80	80	75	75	75	75
Stroke length	mm	70	70	45	45	45	45
Vibration level 3 axes (ISO 20643) ¹	m/s ²	30.5	30.5	10	10	10	10
Sound power level guaranteed (2000/14/EC) ¹	Lw, dB(A)	129	129	124	124	124	124
Sound pressure level (ISO 11203) ¹	Lp, r=1m	118	118	121	121	121	121
Part number		8311 0104 03	8311 0104 04	8311 0202 03	8311 0202 11	8311 0202 29	8311 0202 37

¹) Important: Full details of measurement is available in the Safety and Operating Instruction of the product. It can be found on www.acprintshop.com. Data at 6 bar (90 psi) air pressure. R = right rotation



GO FOR TAPERED

Tapered drilling equipment beats integral in speed and cost of operations.

First and foremost, penetration is faster with tapered steel. In some rock you can shave time by over 50 percent. Tapered bits are also easier to use; collaring is faster, drilling straight holes is simpler and vibrations are considerably lower. And in addition to all of this, tapered equipment actually gives you lower total drilling costs. Still not convinced? Do a test run and judge for yourself.



FOUR ACTIONS FOR SUCCESSFUL DRILLING



ACTION 1:
PERCUSSIVE IMPACT

Percussive drilling breaks the rock by hammering impacts transferred from the rock drill to the drill bit at the bottom of the hole.



ACTION 2:
FEED FORCE

The purpose of the feed force is to keep the drill bit in close contact against the rock. The engineering challenge is to combine high feed force with good rotation.



ACTION 3:
ROTATION

Rotation moves the drill bit to a new position to make the next blow as effective as possible. When the drilling starts you need even and smooth rotation.



ACTION 4:
FLUSHING

Drill systems with a high output need good flushing technology to be able to remove drill cuttings. Particle size, shape and material affect the flushing methods.



GO INDUSTRIAL

With our heavy range you can break rock with industrial efficiency and still keep noise down.

When you see the DSI designation on a drill, you'll know it's made for bigger operations. DSI stands for Dimension Stone Industry and these well-proven pneumatic rock drills can be mounted on a drill column to make you really productive. The BBD and BBC-models can drill holes of up to 27- 41 mm in diameter and they come equipped with an H22 chuck and air flushing as standard. You can get water flushing as an option and the machines can be equipped with both cable or chain feeds. These heavy drills come from a proud lineage of products.

We have been crafting quality tools for more than 100 years and every bit is machined to the highest standards. But quality is more than just the nuts and bolts. It's also how you experience the machine. The silenced BBC 34DSI is pure quality in all aspects. If you are operating in sensitive areas the silencer can prove invaluable for your business.



This is dimension stone

The most common commercial stones are marble, granite and slate. Dimension stone is the name given to natural rock that has been quarried and shaped to certain dimensions or specifications for use in building, construction, monument and tombstone industries.



Rock drill		BBD 94-DSI	BBC 34-DSI
Weight	kg	26	31
Length	mm	670	775
Impact rate at 6 bar	Hz	55	38
Stroke length	mm	45	70
Piston bore	mm	90	80
Air consumption at 6 bar	l/s	97	88
Part number		8311 0206 10	8311 0408 06

Heavy range For industrial use



**BBD
94
DSI**

Recipe for productivity

The BBD 94DSI weighs 26 kg, has great impact energy and can handle low air pressures.

When to use ...

Short stroke and high impact rate makes it ideal for soft rock.

GREAT FOR BUSINESS

High efficiency

A large piston diameter makes the drill efficient even at low air pressure.

Harder stuff

The BBC 34-DSI is highly efficient in medium to hard rock.

Cut noise

The silencer can reduce the noise by up to 5 dB(A), which is perceived as a 50 percent improvement of noise levels to the human ear.

Rotation that lasts

The powerful rifle bar rotation mechanism is dimensioned to handle industrial demands.



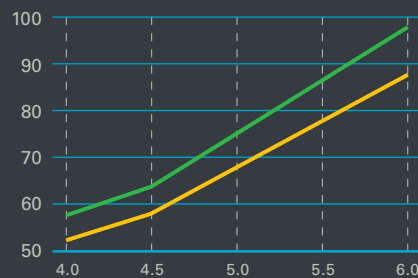
GREAT ERGONOMICS

**BBC
34
DSI**

AIR SUPPLY

The rock drill needs a certain flow of air at a given pressure to produce sufficient impact energy. The DSI-rock drill is designed for optimum performance at an air pressure of 6 bar, unless stated otherwise. Air pressure and flow should be measured dynamically at the intake nipple of the rock drill.

AIR CONSUMPTION (liters/sec)



LUBRICATION

The drill rig must be fitted with an in-line lubricator that's compatible with the air pressure and flow rate of your rock drills. Fill the lubricator with air tool oil that has a viscosity suited for the ambient working temperature. When the lubrication is effective, a continuous film of oil wets

the neck of the shank adapter during operation. Remember that oil in the exhaust air is not a guarantee for effective lubrication.

See recommended air tool lubricant table on page 18.

EASY RIG MOUNTING

CORRECT MOUNTING

The rock drills can be rig-mounted for use in a number of applications within the dimension stone industry. For good results, however, the following conditions must be met:

Use the attachment point (1) on the underside of the rock drill as the main means of fixing it to the cradle. To further secure the rock drill, a support (2) must be mounted at the rear end and attached with the side bolts. To minimize stress and hole deviation, the rock drill chuck

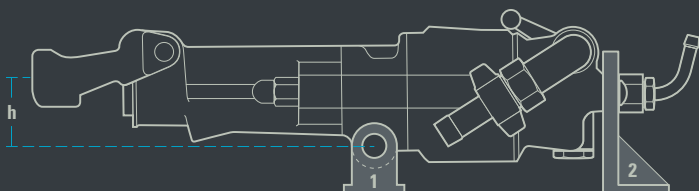
and drill steel support must be aligned perfectly. If drill steels longer than 1.8 m are used, an intermediate drill steel support is recommended to improve hole straightness.

ADEQUATE FEED FORCE

To get the most from your drill's impact energy, the drill bit has to be pressed against the rock with a certain force. How much force depends on the impact energy and the rock's hardness. Higher air pressure gives higher impact energy.

On rigs for light rock drills, a minimum feed force of 1.4 kN (140 kp) is recommended for each rock drill. The feed system must include a pressure regulator for seamless control of the feed force.

If two or more rock drills are mounted on the same feed unit, the cradle must be designed to permit variations in the rate of penetration between the individual drills while maintaining the correct feed force on each rock drill.



Rock drill type		BBD 94-DSI	BBC 34-DSI
Height to drill center (h)	mm	53	75
Attachment bolt diameter (1)	mm	23-24	23-24
Attachment hole diameter (2)	mm	23-24	18

TOOLS FOR EVERY JOB

Drill		BBD 12D/DS	BBD 12T/TS-01	BBD 15E/ET	RH 571-5L/LS	RH 572E	RH 658L/LS	RH 658 L-01
Hole dimension	mm	17-29	24-34	17-29	28-34	28-34	29-40 (-64)	35-40
Hole depth	m	1	1-2	1-2	1-3	1-3	1-6 (short hole reaming)	1-6
Shank size	mm	19x108	22x108	22x108	22x108	22x108	22x108	25x108
		-	19x108	-	-	-	-	-
		-	22x82.5	-	-	-	-	-



BBC/BBD/RH – Optional equipment

Pos	Description	Part number
Compressed air hose for rock drill and feed, fitted with couplings for:		
1	BBC 16, BBC 34, BBD 46	9030 2051 00
2	RH 656	9030 2067 00
2	BBD 94	9030 2068 00
3	Water flushing hose with fitted couplings for BBC, BBD, RH	9030 2069 00
Lubricator for BBC, BBD, RH		
4	BLG 30	8202 5102 05
4	CLG 30	8202 5102 39
Tools for roof bolting with BBD 46 WR		
5	Mandrel for 25 mm bolt	3081 0001 00
6	Socket for 37 mm hexagon nut	3081 0006 00

Rock drill oil, synthetic lubricant				
Oil volume	l	1	5	20
Weight	kg	1.1	5.8	23
Part number		8099 0202 36	8099 0202 02	8099 0202 15

BBD 94 DSI, BBC 34 DSI – Recommended air tool lubricants.
Use a mineral-based air tool oil.

Ambient temperature	Viscosity grade
°C	(ISO 3448)
-30 to 0	ISO VG 32-68
-10 to +20	ISO VG 68-100
+10 to +50	ISO VG 100-150

