

Atlas Copco small hydraulic breakers  
**High productivity at low cost**



*Sustainable Productivity*



# SB Solid Body – a powerful concept



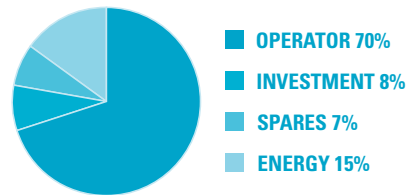
What makes the Atlas Copco SB breakers so unique is the Solid Body concept, which integrates the percussion mechanism and guide system into one single block of steel. This unique design makes these breakers extremely compact and easy to handle and it also yields a weight reduction of 20% compared to other breakers.

## Total cost of ownership

It is true that SB stands for Solid Body concept, but in fact it actually means a profitable business for the customer. Thanks to this concept, the uncontested benefits of the SB breakers are reliability, flexibility, high productivity and low maintenance. Total cost of ownership is the sum of all costs generated by a piece of equipment through-out its lifetime. The pie chart shows

### COST OF OWNERSHIP

Small breakers



the average over the economic lifetime. Accordingly the investment cost only represents a minor portion of the total cost. Please note that this may vary depending on local conditions.

## FLEXIBILITY

For a wide variety of carriers with a broad oil flow range and featuring an overload protection valve to prevent misuse. Prepared for special applications.

## RELIABILITY

Strong and wear-resistant, no tie rods, no body parting lines, robust working tool wear bushing system with dual retainer bars.

## LOW MAINTENANCE

Maintenance-free accumulator, fewer parts, central lubrication port (prepared for automatic lubrication).

## HIGH PRODUCTIVITY

Best percussive power-to-weight ratio, EnergyRecovery, slim shape for quick positioning and better view, easy to use in confined spaces.



# Product confidence by research and innovation

The new SB range has proven that high performance does not prevent a breaker from becoming even more environmentally friendly. Research, innovative product design and know-how make it possible. The results include lower fuel consumption, lower vibrations and less noise. Thanks to the integration of the impact mechanism and the guide system the weight is reduced by 20% on the solid body breakers. That means a smaller carrier equipped with an SB breaker can be used to achieve the same overall impact performance of competitive breaker/carrier combinations weighing more.

## Integrated maintenance-free accumulator

The accumulator is cast in the main body of the breaker, which offers a number of advantages. First, the accumulator is well-protected from bangs and knocks. Second, it is maintenance-free.



# Higher efficiency for profitable and environmental-friendly demolition

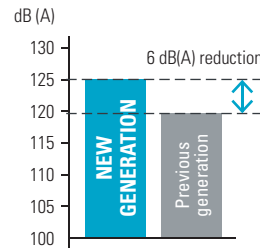
## Energy Recovery - makes the breaker more efficient

Thanks to Energy Recovery, all new SB breakers provide a much higher impact performance. Thus the efficiency of the new SB breakers has been increased. This higher efficiency is the whole secret of lower fuel consumption combined with greater productivity. Higher productivity is the direct result of greater impact performance.

## VibroSilenced - Effective noise and vibration damping as standard

The design of the SB breakers helps to reduce vibration levels while the Atlas Copco Energy Recovery system helps to absorb recoil. Lower vibrations support wear and tear reduction on carriers and this improves the working environment for operators. The Solid Body concept and the new impact mechanism have another advantage: less noise. As an example: thanks to the further development of this concept, the new SB 452 has a 6 dB(A) lower noise level than its predecessor, the SB 450.

### SOUND LEVEL COMPARISON

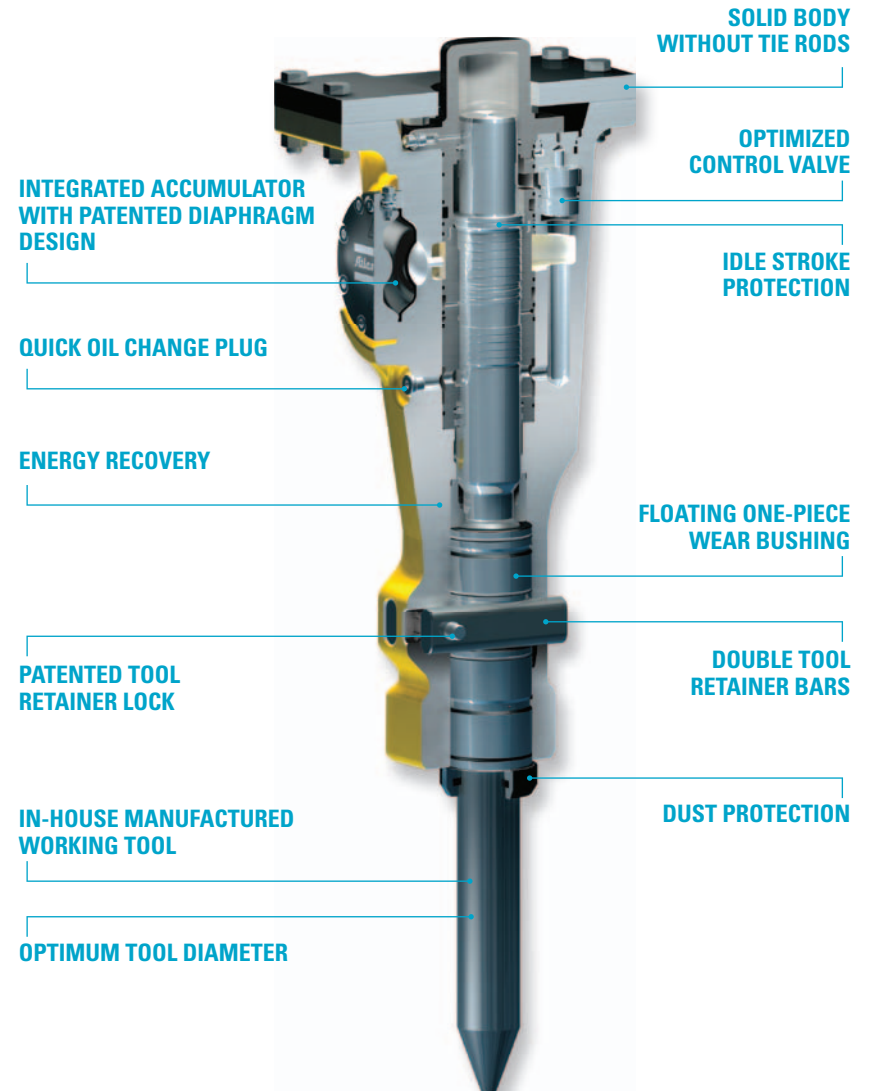


An increase of 10 dB(A) sounds twice as loud

### EFFICIENCY COMPARISON\*



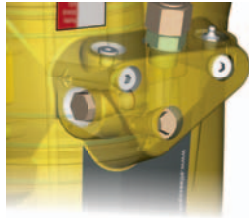
\* all figures according to AEM measurements



# Features **minimizing** maintenance costs

## Easy to set up

Installing an SB breaker is easy. The new SB breakers work with a wide oil flow range and can therefore be installed on a broad variety of carriers. In case of a hydraulic overload, the breakers are protected by an integrated protection valve which prevents damage to and downtime on the breakers. Installing another chisel for a different application is a matter of minutes using ordinary hand tools available on the job site. SB breakers are always ready for action and require very little maintenance.

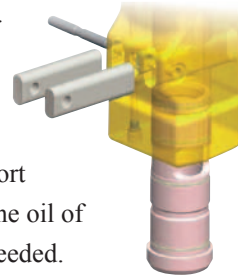


## Easy to use

Great attention has been paid to the design of the SB breaker range. Thanks to its sleek lines, it is easier for operators to see the working tool, thus boosting productivity. SB breakers are also unexpectedly compact, which makes it easier to work inside buildings or in narrow trenches. The standard air flushing port and dust suppression port make SB breakers flexible for use in special applications.

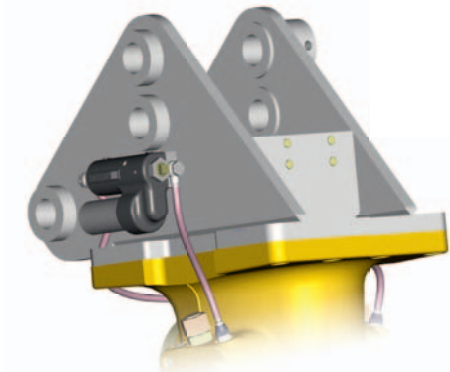
## Easy to service

SB breakers have been designed to be the most reliable on the market. And even when they do need attention, they are easy to service. For example, the double tool retainer bars minimize stress and wear on the working tools. It's easy to change the working tool thanks to the patented retainer bar lock system and replacing the floating working tool bushing can be done by the operator on-site with standard hand tools. The length of the bushing also provides excellent guidance for the working tool, which means less wear. And an oil drainage port has been added through which the oil of the breaker can bleed easily if needed.



## Easy to lubricate

ContiLube™ II micro as option: an automatic lubrication system that takes care of the necessary maintenance while working with the breaker. Thus ContiLube™ II micro safeguards low cost of ownership.




Installation of ContiLube™ II micro on an SB breaker.

# Find the breaker that suits you


The compact design of the new SB breaker generation makes it superior when working in confined spaces such as indoor demolition work, up along house walls and narrow trenching. Atlas Copco's hydraulic breakers have been developed for a wide variety of applications:

**Mining & quarrying**




		SB	MB	HB
Preliminary works	Overburden removal Bench, road & ramp levelling Roof, face & rib scaling	●	●	○
Secondary breaking	Boulder reduction in rock pile Removing blockages at crushing systems	○	●	●
Primary rock breaking	Selective rock breaking Blast-free mining	-	○	●

**Demolition & renovation**

		SB	MB	HB
Masonry structures	Brickwork Natural stone Autoclaved aerated concrete	●	○	-
Concrete structures	Lightweight concrete Standard concrete	●	●	○
	Heavyweight concrete	-	○	●
Composite steel & concrete structures	Steel-reinforced concrete Prestressed concrete Fibre-reinforced concrete	○	●	●
Pavements	Asphalt Concrete Composite surfaces	●	●	●

**Construction**



		SB	MB	HB
Earthworks	Trenching Pit building Ground excavation	○	●	●
	Tunneling	Tunnel driving Roof, face & rib scaling Floor levelling	○	●
Dredging	Canal deepening & extension Dock deepening & extension	○	○	●
	Gardening & Landscaping	Fencing Ground excavation Rock breaking	●	○
Foundation works	Ground levelling	-	○	●
Building construction	Foundation pile driving	-	○	●

**Metallurgical industry**



		SB	MB	HB
Slag recycling	Boulder reduction in slag heap Removing blockages at crushing systems	○	●	●
	Cleaning & debricking	Ladles Converter mouths Kilns	●	○

● Optimal ○ Suitable - Unsuitable

## SB HYDRAULIC BREAKERS

		SB 52	SB 102	SB 152	SB 202	SB 302	SB 452	SB 552
Carrier weight class <sup>1)</sup>	t	0.7 - 1.1	1.1 - 3.0	1.9 - 4.5	2.5 - 6.0	4.5 - 9.0	6.5 - 13	9.0 - 15.0
Service weight <sup>2)</sup>	kg	55	90	140	200	300	440	520
Oil flow	l/m	12 - 27	16 - 35	25 - 45	35 - 65	50 - 80	55 - 100	65 - 115
Operating pressure	bar	100 - 150	100 - 150	100 - 150	100 - 150	100 - 150	100 - 150	100 - 150
Impact rate	bpm	750 - 1,700	750 - 2,300	850 - 1,900	850 - 1,800	600 - 1,400	550 - 1,250	650 - 1,150
Working tool diameter	mm	40	45	50	65	80	95	100
Working length of tool	mm	255	250	250	300	440	470	475
Max. hydraulic input power	kW	7	9	11	17	20	25	29
Start-up mode		AutoStart	AutoStart	AutoStart	AutoStart	AutoStart	AutoStart	AutoStart
Sound power level guaranteed <sup>3)</sup>	(dB(A))	117	115	114	118	119	122	126
Sound pressure level (r=10m) <sup>3)</sup>	(dB(A))	89	87	85	90	91	94	97
Part number		8460 0300 10	8460 0300 30	8460 0300 40	8460 0300 50	8460 0300 60	8460 0300 70	8460 0300 80

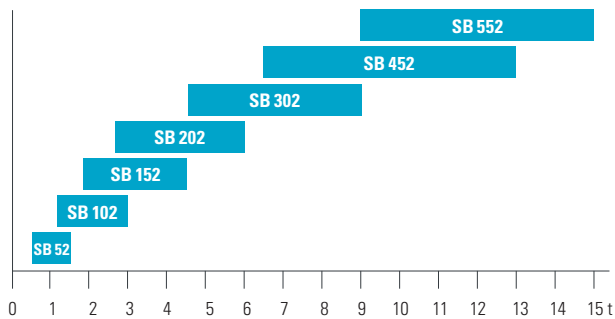
1) Weights apply to standard carriers only. Any variances must be agreed with Atlas Copco and/or the carrier manufacturer prior to attachment.

2) Breaker with standard adapter plus working tool and screw kit. 3) EN ISO 3744 in accordance with directive 2000/14/EC.

Important: More detailed technical specifications are available in the product Safety and Operating Instructions (ID-number: 9800 0648 90) at [www.acprintshop.com](http://www.acprintshop.com)

## Carrier weight classes - SB

This table provides a rough guide. For a perfect fit between carrier and breaker, contact your local dealer.



## CONTILUBE™ II MICRO

## PART NUMBER

ContiLube™ II micro	3315 3831 90
Hose set	3315 3862 80
Mounting parts	3315 3867 80
Chisel Paste 20 x 150 g	3363 1064 47



# Keep your machines performing

## Genuine working tools

The dimensions, material properties and tip geometry of working tools have a major impact on reliability, wear behavior, performance and productivity. So don't take any risks. Only genuine working tools will ensure that your Atlas Copco breaker continues to be the unit that you bought: a reliable and safe production unit good for many millions of impacts.

## Maintenance kits

These kits include all the parts needed to carry out servicing in accordance with factory specifications

and contain all the wearing components needed for proactive replacement and preventive maintenance. They include a detailed list of contents and an exploded view to simplify identifications.

## Lubricants

Atlas Copco chisel paste is a mineral oil-based paste containing an aluminium complex soap and solid lubricants. For temperatures from -20 to +1100°C. Chisel paste provides maximum service life and availability for working tools and bushings of hydraulic breakers.

## 1+2 program = three years warranty without extra cost

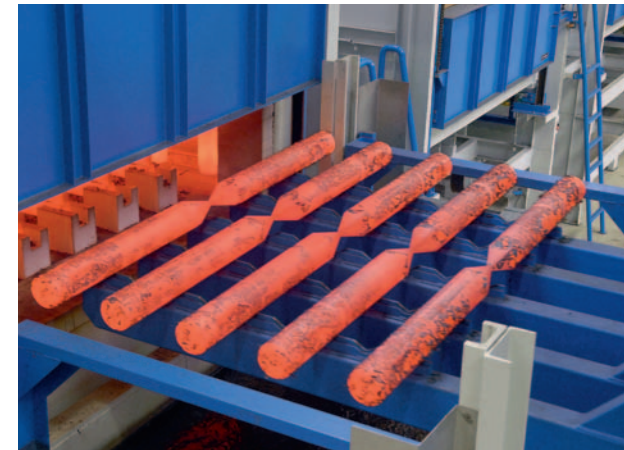
For all Atlas Copco hydraulic breakers, three years of warranty at no extra cost. Benefits: Protected investment and peace of mind - Time to focus on your business - Breaker availability assured - Higher breaker resale value. Register at: [www.1plus2program.com](http://www.1plus2program.com)



## WORKING TOOLS TOOL LENGTH

SB 52	SB 102	SB 152	SB 202	SB 302	SB 452	SB 552
255 mm	250 mm	250 mm	300 mm	440 mm	470 mm	475 mm

Tool type	Product Line	Part number						
Moil point	ClassicLine	3083 3409 18	3083 3409 08	3083 3169 00	3083 3162 00	3083 3191 00	3083 3177 00	3083 3409 05
Moil point (XProfile)	SilverLine	3363 0982 46	3363 0982 48	3363 0982 50	3363 0982 52	3363 0982 54	3363 0982 56	3363 0982 58
Chisel (cross)	ClassicLine	3083 3409 19	3083 3409 09	3083 3170 00	3083 3161 00	3083 3192 00	3083 3178 00	3083 3409 06
Chisel (XProfile)	SilverLine	3363 0982 47	3363 0982 49	3363 0982 51	3363 0982 53	3363 0982 55	3363 0982 57	3363 0982 59
Blunt tool	ClassicLine		3083 3409 35	3083 3182 00	3083 3411 00	3083 3195 00	3083 3188 00	3083 3409 07
Wide chisel (cross)	SilverLine	3083 3409 20	3083 3409 10	3083 3171 00	3083 3163 00	3083 3193 00	3083 3179 00	3083 3409 24
Asphalt cutter (cross)	ClassicLine	3083 3409 22	3083 3409 12	3083 3173 00	3083 3409 46	3083 3409 44	3083 3198 01	3083 3409 42
Shaft	SilverLine	3315 3699 00	3315 3700 00	3315 3701 00	3315 3702 00	3315 3703 00	3315 3704 00	3315 3705 00
Tamping pad	ClassicLine		3315 3706 00		3315 3709 00		3315 3712 00	
Post driver pad	SilverLine		3315 3714 00		3315 3717 00		3315 3720 00	



**Atlas Copco**

[www.easybreaking.com](http://www.easybreaking.com)

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