



## **HYDRAULIC BREAKERS SB RANGE**

A solid body, an innovative tool  
guiding system and a remarkable  
hydraulic design



**Atlas Copco**

# Solid productivity you can rely on!

## We introduced the innovative hydraulic breaker 50 years ago

And it transformed the construction and mining industries. With your productivity and total cost of ownership as our priority, we have continued to refine this winning concept.

## Everything you want from a hydraulic breaker

SB hydraulic breakers are slim, compact and simple to handle, making them extremely versatile. Combining superior efficiency and performance with high reliability and serviceability.

We are committed to Sustainable Productivity – it's our brand promise.

## With us you know what you're getting

Atlas Copco Construction Tools is certified according to ISO 9001:2008, ISO 14001:2004, and OHSAS18001:2007.

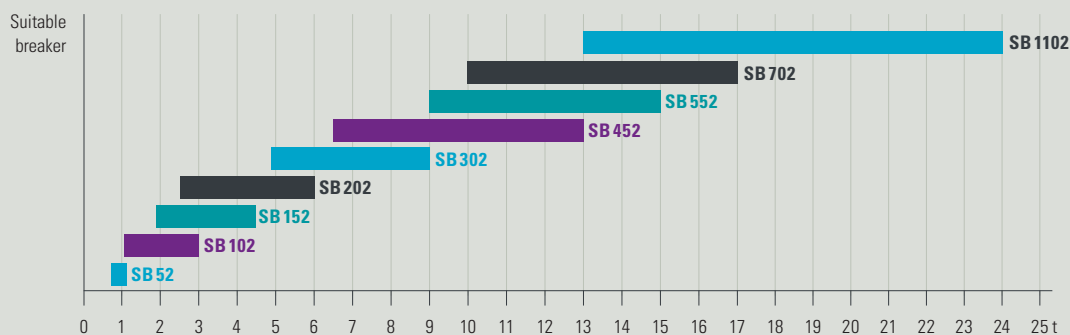
Our hydraulic breakers conform to the provisions of EC Directive 2006/42/EC (Machinery Directive) and 2000/14/EC (Noise Directive).

## Whatever your industry





Choose an SB hydraulic breaker as your partner for a huge range of tasks. Suitable for most carriers like excavators, backhoe and skid steer loaders as well as demolition robots, it will get the job done – quickly and economically!

## Carrier weight classes

This table provides a rough guide. For a perfect fit between carrier and attachment, contact your Atlas Copco customer center or your local distributor.

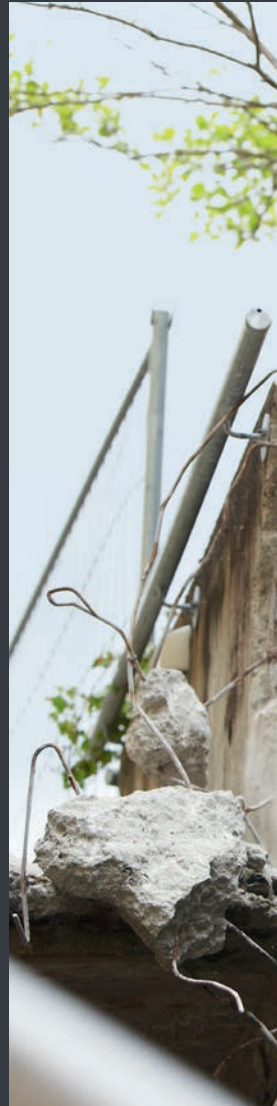


# Application overview

			SB	MB	HB
<b>Mining &amp; quarrying</b>					
	<b>Preliminary works</b>	<ul style="list-style-type: none"> <li>› Overburden removal</li> <li>› Bench, road &amp; ramp leveling</li> <li>› Roof, face &amp; rib scaling</li> </ul>	●	●	○
	<b>Secondary breaking</b>	<ul style="list-style-type: none"> <li>› Boulder reduction in rock pile</li> <li>› Removing blockages at crushing systems</li> </ul>	○	●	●
	<b>Primary rock breaking</b>	<ul style="list-style-type: none"> <li>› Selective rock breaking</li> <li>› Blast-free mining</li> </ul>	—	○	●
<b>Demolition &amp; renovation</b>					
	<b>Masonry structures</b>	<ul style="list-style-type: none"> <li>› Brickwork</li> <li>› Natural stone</li> <li>› Autoclaved aerated concrete</li> </ul>	●	○	—
	<b>Concrete structures</b>	<ul style="list-style-type: none"> <li>› Lightweight concrete</li> <li>› Standard concrete</li> </ul>	●	●	○
		› Heavyweight concrete	—	○	●
	<b>Composite steel &amp; concrete structures</b>	<ul style="list-style-type: none"> <li>› Steel-reinforced concrete</li> <li>› Prestressed concrete</li> <li>› Fiber-reinforced concrete</li> </ul>	○	●	●
	<b>Pavements</b>	<ul style="list-style-type: none"> <li>› Asphalt</li> <li>› Concrete</li> <li>› Composite surfaces</li> </ul>	●	●	●
<b>Construction</b>					
	<b>Earthworks</b>	<ul style="list-style-type: none"> <li>› Trenching</li> <li>› Pit building</li> <li>› Ground excavation</li> </ul>	○	●	●
	<b>Tunneling</b>	<ul style="list-style-type: none"> <li>› Tunnel driving</li> <li>› Roof, face &amp; rib scaling</li> <li>› Floor leveling</li> </ul>	○	●	●
	<b>Dredging</b>	<ul style="list-style-type: none"> <li>› Canal deepening &amp; extension</li> <li>› Dock deepening &amp; extension</li> </ul>	○	○	●
	<b>Gardening &amp; Landscaping</b>	<ul style="list-style-type: none"> <li>› Fencing</li> <li>› Ground excavation</li> <li>› Rock breaking</li> </ul>	●	○	—
	<b>Foundation works</b>	› Ground leveling	—	○	●
	<b>Building construction</b>	› Foundation pile driving	—	○	●
<b>Metallurgical industry</b>					
	<b>Slag recycling</b>	<ul style="list-style-type: none"> <li>› Boulder reduction in slag heap</li> <li>› Removing blockages at crushing systems</li> </ul>	○	●	●
	<b>Cleaning &amp; debricking</b>	<ul style="list-style-type: none"> <li>› Ladles</li> <li>› Converter mouths</li> <li>› Kilns</li> </ul>	●	○	—

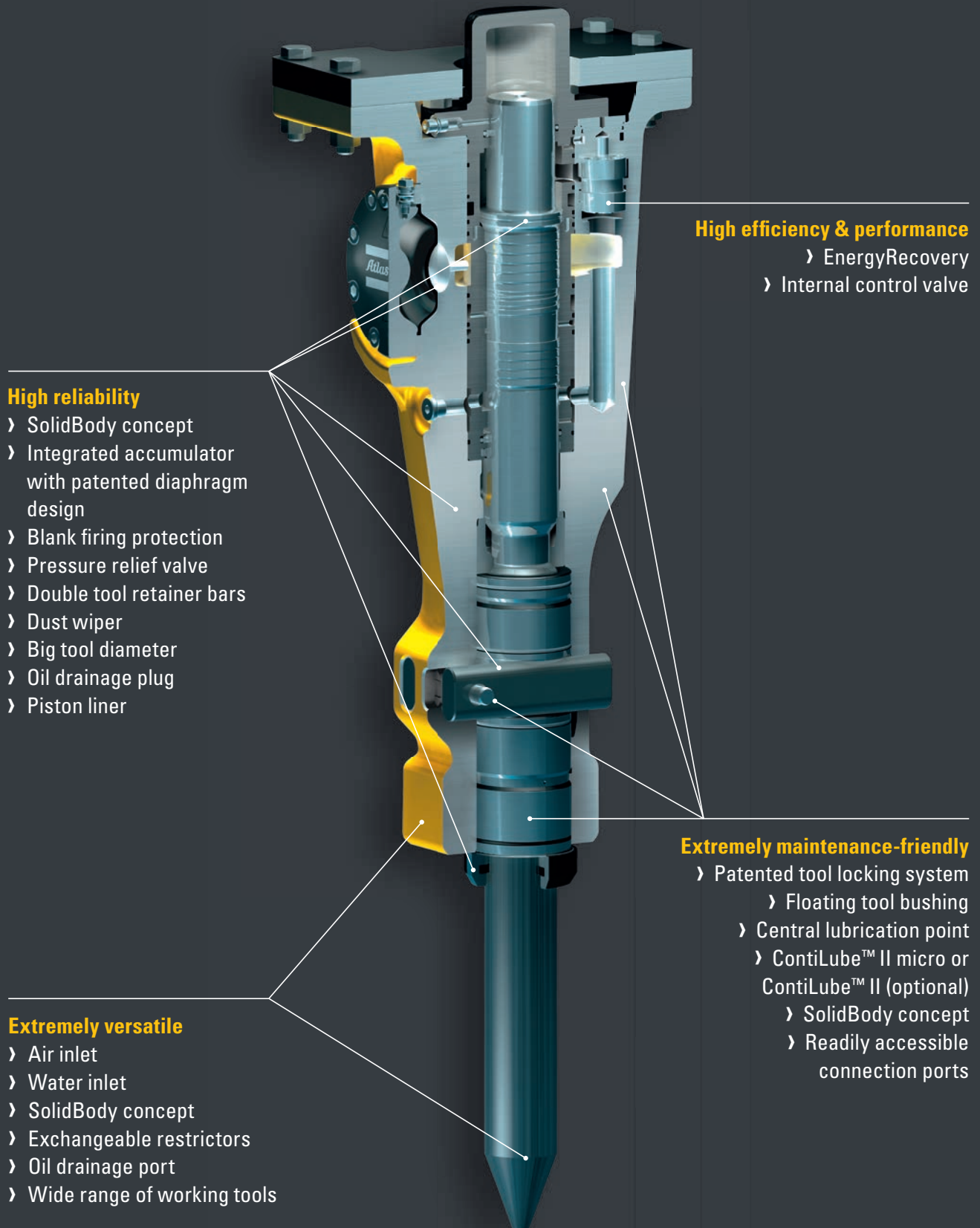
● Optimal   ○ Suitable   — Unsuitable

# Your job, our breakers





# Our features make the difference



## High reliability

- › SolidBody concept
- › Integrated accumulator with patented diaphragm design
- › Blank firing protection
- › Pressure relief valve
- › Double tool retainer bars
- › Dust wiper
- › Big tool diameter
- › Oil drainage plug
- › Piston liner

## High efficiency & performance

- › EnergyRecovery
- › Internal control valve

## Extremely maintenance-friendly

- › Patented tool locking system
  - › Floating tool bushing
- › Central lubrication point
- › ContiLube™ II micro or ContiLube™ II (optional)
  - › SolidBody concept
  - › Readily accessible connection ports

## Extremely versatile

- › Air inlet
- › Water inlet
- › SolidBody concept
- › Exchangeable restrictors
- › Oil drainage port
- › Wide range of working tools

## UNIQUE DESIGN STRUCTURE

- › **SolidBody concept** integrating percussion mechanism and guide system into a single block of special cast iron, decreasing the total number of parts significantly, eliminating certain components, e.g. damping & guiding elements and tie rods or stud bolts, completely and resulting in an extremely slim and compact shape to simplify handling
- › Replaceable **piston liner** for low repair costs
- › **Oil drainage plug** for quick & controlled oil exchange or release prior to oil quality changes or general overhauling
- › Readily accessible lateral **connection ports** for quick carrier installation and improved protection
- › **Water inlet** and integrated water channel for dust suppression
- › **Air inlet** to connect compressed air supply for underwater and tunneling work
- › Fully **interchangeable parts and components** for condition-based maintenance and servicing

## INNOVATIVE TOOL GUIDING SYSTEM

- › **Patented tool locking system** with lock buffer and solid pin for quick tool exchange
- › **Central lubrication point** to simplify manual tool greasing
- › Atlas Copco designed self-priming lubrication pump **ContiLube™ II micro** (SB 52-552) or **ContiLube™ II** (SB 702-1102) with adjustable grease volume for uninterrupted operation and optimized lubrication
- › Tool bushing with **floating fit** for easy exchange on-site with standard hand tools
- › Integrated **dust wiper** to extend service life of bushing and retainer bars
- › Two oval-shaped tool **retainer bars** and a **big tool diameter** to increase durability

Watch video: scan the QR code or visit us on <http://www.youtube.com/atlascopcoconstruct>



## REMARKABLE HYDRAULIC DESIGN

- › Built-in **pressure relief valve** to protect against overloads
- › **EnergyRecovery** utilizing automatically the piston recoil energy to increase the performance without additional hydraulic input and to lower vibrations
- › **Internal control valve** for increased efficiency
- › Maintenance-free **high-pressure accumulator** integrated in the hammer body for higher protection and a patented diaphragm support to extend service life
- › Dampening chamber on piston for lowering stresses caused by **blank firing protection** and vibrations
- › A number of exchangeable **restrictors** enable the adaptation to different carrier oil flows

# SB breaker range



			SB 52	SB 102
Technical data	Carrier weight class <sup>1)</sup>	t	0.7–1.1	1.1–3.0
	Service weight <sup>2)</sup>	kg	55	90
	Oil flow rate	l/min	12–27	16–35
	Operating pressure	bar	100–150	100–150
	Max. hydraulic input power	kW	7	9
	Impact rate	bpm	750–1,700	750–2,300
	Working tool diameter	mm	40	45
	Sound power level guaranteed <sup>3)</sup>	dB(A)	117	115
	Sound pressure level (r=10m) <sup>3)</sup>	dB(A)	89	87
Feature overview	EnergyRecovery		●	●
	ContiLube™ II micro/ContiLube™ II		○	○
	AutoStart		●	●
	Water inlet (for dust suppression)		–	–
	Water nozzles		–	–
	Air inlet (for underwater/tunneling work)		●	●
	Oil drainage plug		–	–
	Pressure relief valve		●	●
	Dust wiper		●	●
Replaceable wear protection plate		–	–	

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

2) Hydraulic breaker with standard adapter and working tool

3) Important: EN ISO 3744 in accordance with directive 2000/14/EC. Full details of measurement are available in the Safety and Operating instruction of the product. It can be found on: [www.acprintshop.com](http://www.acprintshop.com)

● = standard ○ = optional

The automatic lubrication device is easy to access and provides optimum lubrication. The transparent cartridge can be changed quickly without need for special tools. When operating a hydraulic breaker it is essential to use the right grease. Our special hydraulic breaker chisel paste provides excellent properties in a wide temperature range.

**ContiLube™ II micro**  
with 150 g cartridge



**ContiLube™ II**  
with 500 g cartridge





SB 152	SB 202	SB 302	SB 452	SB 552	SB 702	SB 1102
1.9–4.5	2.5–6.0	4.5–9.0	6.5–13.0	9.0–15.0	10.0–17.0	13.0–24.0
140	200	300	440	520	720	1,060
25–45	35–65	50–80	55–100	65–115	80–120	100–135
100–150	100–150	100–150	100–150	100–150	120–170	130–180
11	17	20	25	29	34	40
850–1,900	850–1,800	600–1,400	550–1,250	650–1,150	600–1,050	550–850
50	65	80	95	100	105	120
114	118	119	122	126	122	123
85	90	91	94	97	94	94
●	●	●	●	●	●	●
○	○	○	○	○	○	○
●	●	●	●	●	●	●
●	●	●	●	●	●	●
○	○	○	○	○	○	○
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
–	–	–	–	–	●	●

## SCALERS

- › Optimized frequency and impact energy
- › Integrated water, air & lubrication channels

			SB 302 Scaler	SB 452 Scaler
Technical data	Carrier weight class <sup>1)</sup>	t	4.5–9.0	6.5–13.0
	Service weight <sup>2)</sup>	kg	300	440
	Oil flow rate	l/min	50–80	70–100
	Operating pressure	bar	100–110	100–110
	Max. hydraulic input power	kW	15	19
	Impact rate	bpm	950–1,250	850–1,150
	Working tool diameter	mm	80	95
	Sound power level guaranteed <sup>3)</sup>	dB(A)	118	122
	Sound pressure level (r=10m) <sup>3)</sup>	dB(A)	89	94

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

2) Hydraulic breaker with standard adapter and working tool

3) Important: EN ISO 3744 in accordance with directive 2000/14/EC. Full details of measurement are available in the Safety and Operating instruction of the product. It can be found on: [www.acprintshop.com](http://www.acprintshop.com)

# Working Tools



## Moil point

- › Non-reinforced concrete breaking
- › Primary breaking of compact and slightly fractured sedimentary rock

## Chisel

- › Reinforced concrete breaking
- › Primary breaking of highly fractured sedimentary, metamorphic & igneous rock

## Blunt tool

- › Secondary breaking of concrete & all rock types
- › Primary breaking of compact to slightly fractured metamorphic & igneous rock
- › Scaling

## Wide chisel

- › Reinforced concrete breaking
- › Cleaning foundry ladles
- › Frozen ground breaking

## Asphalt cutter

- › Asphalt breaking
- › Frozen ground breaking

## ClassicLine

Model		SB 52	SB 102	SB 152	SB 202	SB 302	SB 452
Standard total length	mm	420	450	510	600	800	840
Standard working length	mm	255	250	250	300	440	470
Moil point		●	●	●	●	●	●
Chisel (cross/parallel)		●	●	●	●	●	●
Blunt tool			●	●	●	●	●
Wide chisel (cross/parallel) <sup>1)</sup>		●	●	●	●	●	●
Asphalt cutter (cross/parallel) <sup>1)</sup>		●	●	●	●	●	●
Tamping tool <sup>1)</sup>		●	●	●	●	●	●
Post driver tool <sup>1)</sup>		●	●	●	●	●	●
Pile driver tool <sup>1)</sup>		●	●	●	●	●	●
Bushing tool <sup>1)</sup>		●	●	●	●	●	●

<sup>1)</sup> Total & working length may vary from standard measurements

## ProLine

Prevention of dust cushions due to lateral grooves at Moil point & Chisel and special alloy for extending the lifetime in very dust intense work and abrasive material

Model		SB 52	SB 102	SB 152	SB 202	SB 302	SB 452
Standard total length	mm	420	450	510	600	800	840
Standard working length	mm	255	250	250	300	440	470
Moil point		●	●	●	●	●	●
Chisel (cross)		●	●	●	●	●	●
Blunt tool							



### Tamping pad

- › Compacting of soil & gravel



### Post drive pad

- › Ramming of post & pipes



### Pole drive pad

- › Ramming of piles

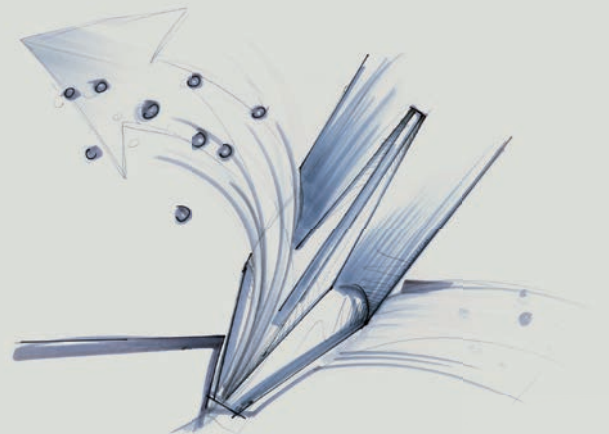


### Bushing pad

- › Roughing up concrete surfaces

SB 552	SB 702	SB 1102
900	1,000	1,150
475	570	680
●	●	●
●	●	●
●	●	●
●	●	
●		
●	●	
●	●	
●	●	
●	●	

SB 552	SB 702	SB 1102
900	1,000	1,150
475	570	680
●	●	●
●	●	●
		●



## ***COMMITTED TO SUSTAINABLE PRODUCTIVITY***

We stand by our responsibilities towards our customers,  
towards the environment and the people around us.  
We make performance stand the test of time.  
This is what we call – Sustainable Productivity.

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

