



SQ Line Silenced Series

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SOOSAN HYDRAULIC BREAKERS

SQ Line Silenced Series



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SQ Line Silenced Series

The latest design from Soosan is the SQ hydraulic breaker. It is the result of more than 2 decades of experience since the company's inception in 1984. Through active communication and monitoring of a large group of valuable customers from around the world, we have gained working experience from quarry, mining and construction industries. The SQ series are practically an innovated hydraulic breaker while maintaining the superiority of the percussion mechanism and easy maintenance of the existing SB series.

The SQ-series have been designed with many special features :

The advanced gas & oil percussion mechanism generates extra power by accumulated gas pressure which ensures a very reliable performance with a wide range of excavator pump conditions.

IPC & ABH System, Integrated Power Control & Anti-Blank Hammering System allows you to choose from 3 different modes.

The automatic anti blank hammering function (shut off) can be switched off or on. The operator can select the correct operating mode from high frequency with normal power to low frequency with extra power. With this advanced system, the operator may choose the correct mode in accordance with site requirements in a matter of minutes and with a minimum of hassle.

Auto shut-off & easy start function

Hydraulic breaker operation can be automatically stopped in order to prevent consequential damage to the power cell due to the blank hammering. Especially in secondary breaking or when the operator is unskilled.

Hydraulic breaker operation is easy to restart when soft pressure is applied to the chisel to the work surface.

Enhanced vibration dampening & sound suppression system

Meet strict noise regulations and allow more comfort for the operator.

Further features are standard connections for underwater operation and an automatic lubrication pump.



IPC & ABH SYSTEM CONTROL

Technical Specifications SQ line I

Selector Switch offers three operating modes and can be simply altered to each mode :

- H - mode : Long stroke with maximum power, ABH is off
- L - mode : Short stroke with maximum frequency, ABH is off
- X - mode : Long stroke with maximum power, ABH is on
(Blank hammering → Auto stop)
- Easy start

Power control & Anti blank hammering system

H - mode : Long stroke & Extra power, ABH is OFF

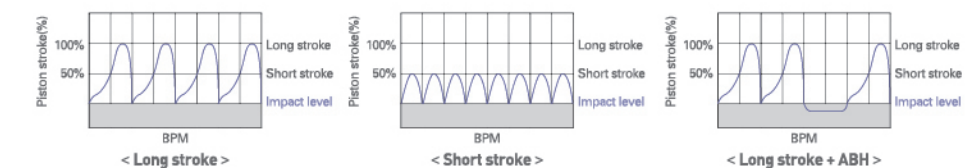
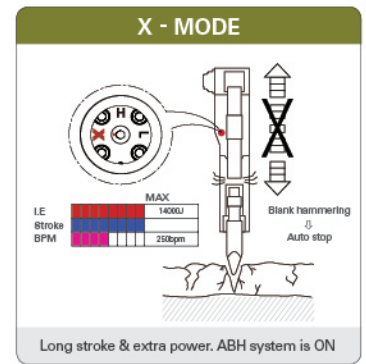
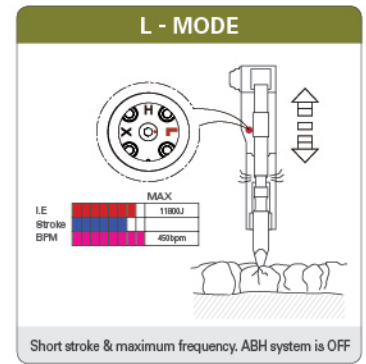
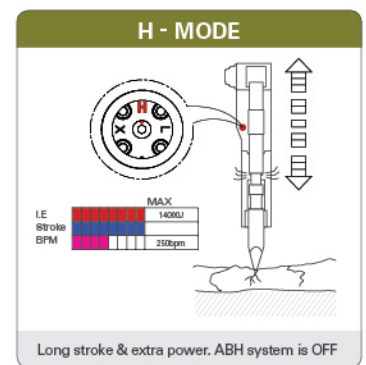
- Mode used for hard rock breaking such as primary breaking, trench works and foundation works where the rock condition is constant.
- Hydraulic breaker can be started without applying contact pressure to the working tool.

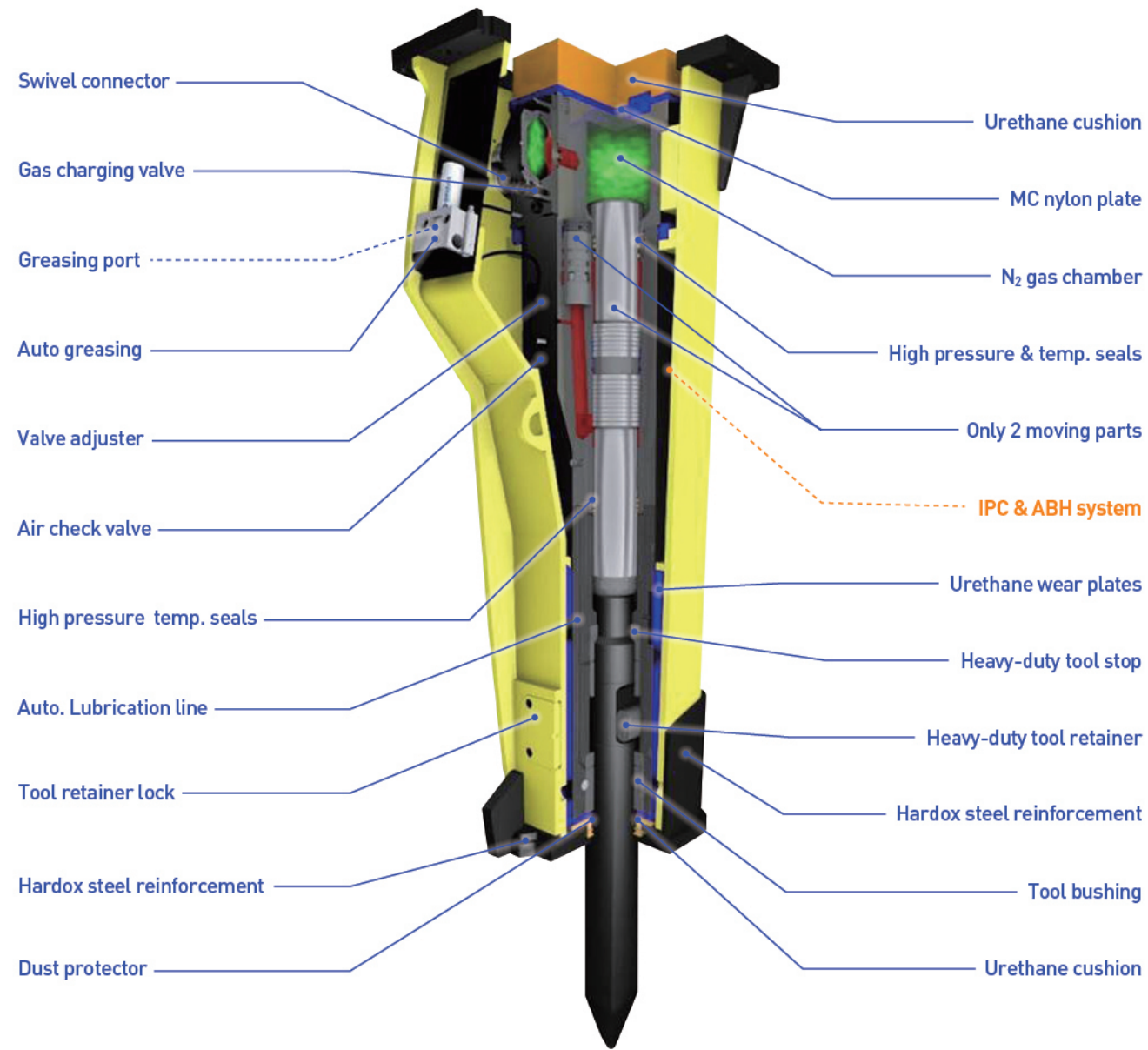
L - mode : Short stroke & Maximum frequency, ABH is OFF

- Hydraulic breaker can be started without applying contact pressure to the working tool.
- This mode is used for soft rock and semi-hard rock breaking.
- High impact frequency and normal power provides higher productivity and reduces strain on the hydraulic breaker and the carrier

X - mode : Long Stroke & Extra power, ABH is ON

- This mode is used for hard rock breaking such as primary breaking, trench work, and secondary reduction works, where the rock condition is not constant.
- In ABH (Anti-blank hammering) working mode, it switches off the hydraulic breaker automatically and prevents the blank hammering, as soon as the material is broken.
- The hydraulic breaker can be easily restarted when minimal contact pressure is applied to the working tool.
- The ABH system reduces strain on the hydraulic breaker and the carrier.





Advanced design technology for output energy

The well known powerful performance of the SB hydraulic breakers is continued on the SQ line. With improvements to the percussion mechanism allows even more reliable and durable operation than the SB line.

Slim profile with robust structure

State of art slim profile for better visibility in narrow trench work. Hardox steel reinforcements at the lower end of the housing, protect the casing and power cell.

Improved vibration damping system

Fully isolated power cell with premium quality urethane cushions and wear plates absorbs shock and vibration resulting in reduced wear.

Fully enclosed housing and dust protector

For quieter operation and reduced dirt contamination.

Enhanced performance & productivity

By using a valve adjuster and an advanced power control system, SQ hydraulic breakers can be adjusted to the excavator's specifications and jobsite conditions to enable maximum productivity.

Service and maintenance friendly

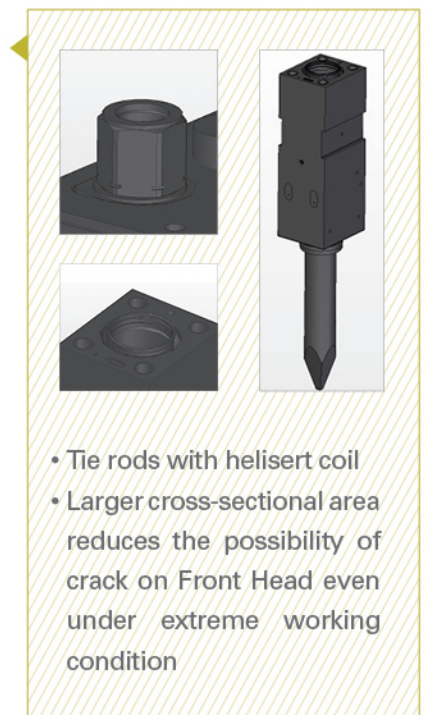
The greasing port is located on the service panel. The service panel gives direct and easy access to key components without removing the power cell from the housing.

Locking device for the tie bolt nut

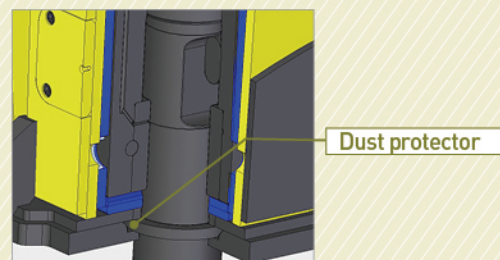
This prevents the power cell from consequential damage that may be caused by the loosening of the tie bolt.

High power to weight ratio

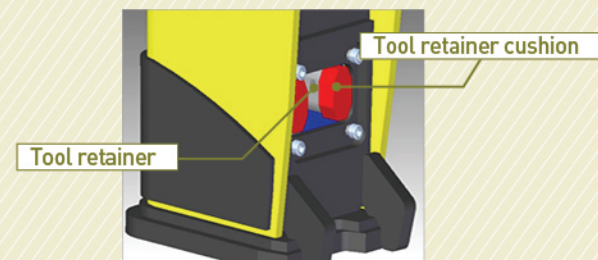
The use of high quality materials and high technology results in less weight, and higher performance.



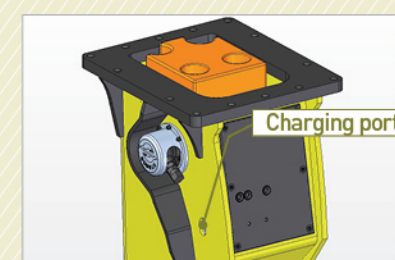
· Dust protector reduces the noise level and dirt incoming



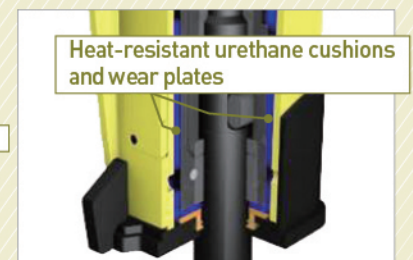
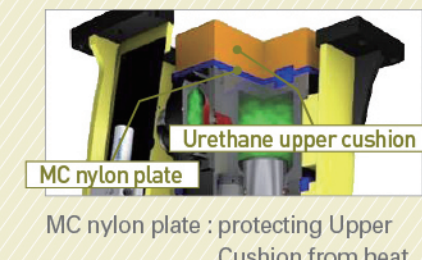
· Improved tool retaining system.



· Nitrogen gas is rechargeable without window cover removal



· Improved vibration damping system





Medium & Heavy duty range of breakers

| Technical Specifications SQ line |



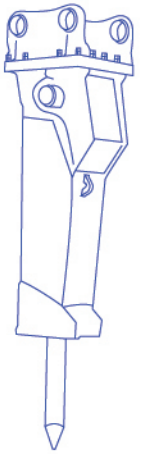
Special Features

- IF Design Award – Winner
- Advanced power control & anti blank hammering system
- Premium quality materials
- Enhanced performance, productivity and durability
- Improved vibration-noise damping system
- Robust housing including dust protector
- Reduced noise levels



Applications ;

- Primary and secondary breaking in quarries
- Site preparation, foundation works
- Road construction
- Demolition works, highly reinforced concrete
- Trenching
- Tunneling
- Bench leveling
- General construction works



Medium range ;

For excavators from 15 ~ 25 ton

Heavy-duty range ;

For excavators from 21 ~ 100 ton

Specifications

Description	Unit	SQ60	SQ70	SQ80	SQ100	SQ120
Impact Energy Class	ft/lb	3,000	4,000	5,000	6,000	7,500
Operating Weight	lb (kg)	3,543 (1,607)	3,878 (1,759)	4,526 (2,053)	4,817 (2,185)	5,889 (2,671)
Required Oil Flow	ℓ /min gal/min	90~120 (23.8~31.7)	100~150 (26.4~39.6)	120~180 (31.7~47.6)	150~210 (39.6~55.5)	180~240 (47.6~63.4)
Operating Pressure	psi (kg/cm ²)	2,276~2,560 (160~180)	2,276~2,560 (160~180)	2,276~2,560 (160~180)	2,276~2,560 (160~180)	2,276~2,560 (160~180)
Impact Rate	Low	bpm	350~650	350~600	350~500	300~450
	High	bpm	600~850	500~850	500~700	430~580
Hose Diameter	in	1	1	1	1	1 ¼
Tool Diameter	in (mm)	4.9 (125)	5.3 (135)	5.5 (140)	5.9 (150)	6.1 (155)
Applicable Carrier	lbs (ton)	33,000~40,000 (15~18)	40,000~46,000 (16~21)	40,000~58,000 (18~26)	55,000~66,000 (25~30)	62,000~77,000 (28~35)
Noise Level	dB(A)	115	120	118	120	123

Description	Unit	SQ130	SQ140	SQ150	SQ181
Impact Energy Class	ft/lb	8,500	10,000	12,000	15,000
Operating Weight	lb (kg)	6,687 (3,033)	6,986 (3,169)	8,708 (3,950)	12,983 (5,889)
Required Oil Flow	ℓ /min gal/min	200~260 (52.8~68.7)	200~260 (52.8~68.7)	210~290 (55.5~76.6)	350~450 (93~119)
Operating Pressure	psi (kg/cm ²)	2,276~2,560 (160~180)	2,276~2,560 (160~180)	2,276~2,560 (160~180)	2,560~2,845 (180~200)
Impact Rate	Low	bpm	250~400	200~350	200~350
	High	bpm	380~550	300~500	320~470
Hose Diameter	in	1 ¼	1 ¼	1 ¼	1 ¼
Tool Diameter	in (mm)	6.5 (165)	6.5 (165)	6.9 (175)	7.9 (200)
Applicable Carrier	lbs (ton)	66,000~100,000 (30~45)	71,000~110,000 (30~45)	88,000~121,000 (40~55)	110,000~200,000 (50~90)
Noise Level	dB(A)	124	124	125	125