



HYDRAULIC ROCK SPLITTER

**HRB-1000
HRB-1700**

The Yamamoto Hydraulic Rock Splitter is specifically designed for excavation of hard rock without producing vibration, noise, or flying debris. It offers an ideal alternative to blasting in densely populated or sensitive areas, ensuring safety, accuracy and efficiency.



THE MOST EFFICIENT, SAFE AND QUIET WAY FOR ROCK EXCAVATION

PRODUCTIVITY

As the largest splitter in the market, Yamamoto Rock Splitter also offers the highest productivity. With larger wedge you can increase the spacing between holes and go deeper with each split. Productivity is dependent on the hardness of the rock and types of projects.

Model	HRB-1000	HRB-1700
Hole size	Ø 102 mm 4"	Ø 127 mm 5"
Bench height	1.2 m 4 ft	2.0 m 6.5 ft
Typical hole spacing	600-1000 mm 2-3.5 ft	900-1500 mm 3-5 ft
Volume per split	0.5-1.0 m ³ 0.7-1.3 yard ³	1.6-4.5 m ³ 2.0-5.5 yard ³
Productivity	up to 25 m ³ /hr up to 32 yard ³ /hr	up to 45 m ³ /hr up to 60 yard ³ /hr

ROBUSTNESS

The Yamamoto Rock Splitter is designed with minimal number of parts, utilising the pressure of the excavator to avoid boosters. Extra long counter wedges help protect the tip of the centre wedge, minimising the risk of machine failure.

DURABILITY

All components are designed with large safety margins and precise finishing, allowing the splitter to run trouble-free for a long time. The wedge set is made from forged steel with optimal hardness and heat treatment to ensure both wear-resistant and flexible. Many customers have used the splitter for years without any repairs apart from greasing and wedge changes.



APPLICATIONS

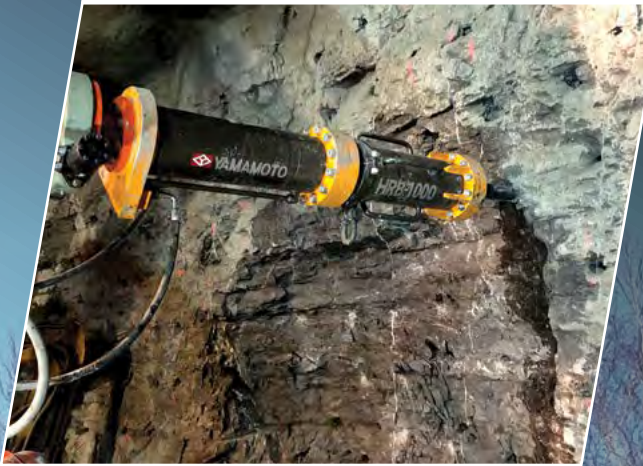
Excavation often requires efficiency, precision, and control. Traditional blasting requires extensive preparation, and obtaining permits can slow down progress of the work.

The Hydraulic Rock Splitter is not subject to the same restrictions, making it an efficient solution for projects in sensitive environments.

Yamamoto Rock Splitter has been working in various construction and civil engineering projects across the globe since 1981.

Some of the key applications include:

TUNNELLING



LAND DEVELOPMENT



CONFINED SPACE



TRENCHING



HOW IT WORKS

The Rock Splitter works by inserting two counter wedges into a predrilled hole.

The hydraulic cylinder pushes the centre wedge between the counter wedges to push them apart, forcing the rock to crack.



STEP 1

Insert half of the total length of the wedge and use the Yamamoto splitter to split.



STEP 2

Then insert 3/4 of the total length of the wedge to split again.



STEP 3

Finally, insert the full length of the wedge and split to complete.

WORK PROCESS



DRILLING

First, drill split holes of specific diameter and depth, normally done with a crawler drill. Hole spacing depends on splitter model, rock hardness and types of projects, and is often adjusted as the project progresses.



SPLITTING

Insert the wedge into the hole and split the rock. Position the wedge so that it is splitting towards the free face to maximise the splitter's productivity.



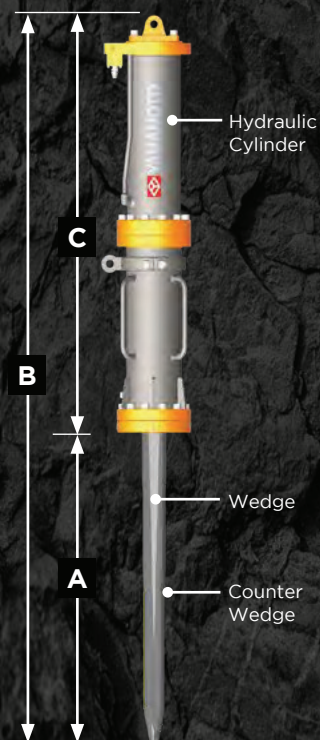
ROCK REMOVAL

Remove the split rock with a rock breaker or ripper to maintain the free face. Normally three rows of holes can be split before the rock has to be removed and the free face recreated.

TECHNICAL SPECIFICATION

Model	HRB-1000	HRB-1700
Weight	670 kg 1,480 lbs	1,530 kg 3,370 lbs
Drill hole diameter*	Ø 102 mm Ø 4 in	Ø 127 mm Ø 5 in
Drill hole depth	1,500 mm 5 ft	2,500 mm 9 ft
Split hole spacing	600-1,000 mm 2-3.5 ft	750-1,500 mm 3.5-5 ft
Splitting force	22 MN 2,250 ton	34 MN 3,550 ton
Wedge length (A)	1,350 mm 53 in	2,090 mm 82 in
Splitter length (B)	3,200 mm 126 in	4,540 mm 178 in
Body length (C)	1,850 mm 73 in	2,450 mm 96 in
Hydraulic pressure (min/max)	320/350 bar 4,500/5,100 psi	320/350 bar 4,500/5,100 psi
Hydraulic flow	80-100 lpm 18-22 gpm	100-150 lpm 22-32 gpm
Carrier weight	12-20 ton 5,500-10,000 lbs	18-30 ton 8,000-14,000 lbs

*Also available for 76 mm / 3 in drill hole diameter



ABOUT YAMAMOTO

The history of Yamamoto Rock Splitter started back in 1915 and over the years manufacturing expanded into rock drills, pneumatic drifters and hydraulic drifters.

The first excavator mounted hydraulic rock splitter was developed in 1981. Since then, we have supplied nearly 400 splitters worldwide. International sales, logistics and spare parts are facilitated by our offices in Singapore, India and the UK.

All manufacturing and product development still takes place in the original factory in Tojo, Japan, which allows us to maintain strict quality control and to build upon the 110 years of experience in manufacturing quality products.

Your local dealer / distributor:



EMAIL
admin@controlservices.com.au

AUSTRALIA
Ph +61 407 232 172

NEW ZEALAND
Ph + 64 21 792 451

International sales and distribution
Yamamoto Rock Splitter International

Phone: +44 20 3637 6430

Fax: +44 20 3603 5580

Email: info@yamamotorocksplitter.com



Factory
Yamamoto Rock Machine Co., Ltd.

424-1 Kawanishi, Tojo-Shobara, Hiroshima-Pref. 729-5125, Japan