# HYUNDAI Comfortable tomorrow ATTACHMENTS

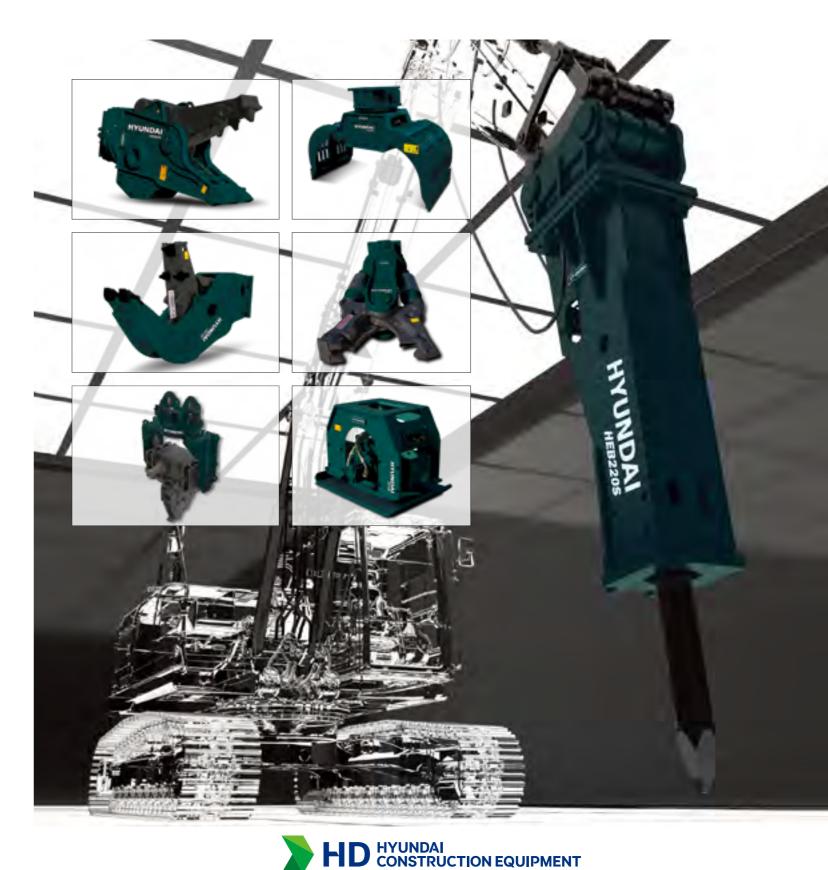
# building a comfortable tomorrow



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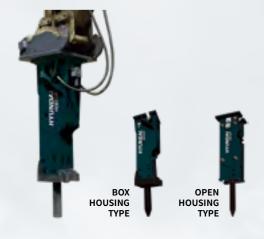
### C O N T E N T S

### Overview

### Product Line up

- Breaker
- HEB Series
- HDB Series
- HTB Series
- HRB Series
- Multiprocessor
- Pulverizer
- Grab
- Compactor
- Vibro Attachment
- Vibro Hammer
- Vibro Ripper





### Model

Standard	Premium
HEB010	HEB010P
HEB020	HEB020P
HEB030	HEB030P
HEB040	HEB040P
HEB050	HEB050P
HEB060	HEB060P
HEB100	HEB100P
HEB140S	HEB140P
HEB220S	HEB220P
HEB310	HEB310P
HEB400	HEB400P
HEB500	HEB500P
	HEB700P
	HEB010 HEB020 HEB030 HEB040 HEB050 HEB060 HEB100 HEB140S HEB220S HEB310 HEB400

### Multiprocessor



HEM130 HEM220 HEM320 HEM400

### Pulverizer



HEP080 HEP220 HEP320 HEP160 HEP190 HEP420

Rotatable Type
HEP160R HEP350R HEP200R HEP450R HEP250R

### Compactor



Model

HEC050N HEC100 HEC150 HEC200 HEC300

### **Vibro Ripper**



Grab

HEG030 HEG050 HEG080 HEG140 HEG200 HEG300



HSR500 HSR800

### Vibro Hammer



HSH250 HSH300 HSH400



HSH250T HSH300T HSH400T



Side grip HSH250SG

HSR250 HSR300 HSR400 HSH300SG



# BREAKERS

### **HEB SERIES**

Maximizing productivity and reliability
Minimizing maintenance and downtime
Right tools for all carriers and applications

- Optimized by high grade steel

and heat treatment

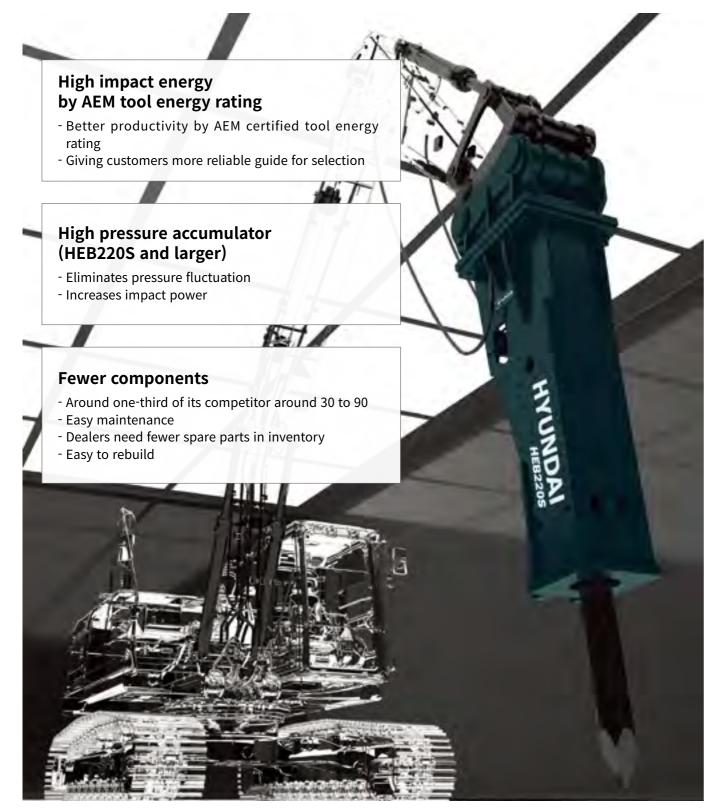
# Certified AEM Tool Energy Rating

### Consider AEM's tool energy rating

### Why develop the tool energy rating

Assesing and comparing hydraulic breakers have never been easier or more accurate than the tool energy developed by the mounted breaker manufacture bureau(MBMB) of the AEM which is U.S based international trade group serving the business needs of construction equipment manufacturers and construction services providers. The AEM tool energy rating is accepted by

hydraulic breaker manufacturers from Finland, France, Germany, Italy, Japan, Korea, Sweden and the United States. HYUNDAI CORE MOTION has been accredited to self-certify the tool energy rating obtained through test processes complying with "AEM Measuring Guide."



### **ADVANCED TECHNOLOGY**

### **Perfect cushion damper** Through bolt - Optimal damping system made of high - Reduces internal quality elastomer torsion stress to - Minimizing recoil shock induced by impact increase faster life - Reduces noise and vibration Full box enclosure Unique valve design - No rigid side bolts - Low maintenance cost - Lessens pressure fluctuation - Extremely durable welded - Less damage on carrier's pump structure - Reduces noise - Hammer is completely protected and quieter - Perfect sealed enclosure by dust Protector & Seal plugs (premium series only) Long piston stroke - Maximizes impact energy Wide and light-weight cover - Minimizes recoil - Noise insulation - Eliminates mechanical - Dust protection, Easy maintenance springs - Special heat-treated and hardened piston **Easy maintenance** - Fewer components - Wide and appropriate opening High quality working tool - Optimized by high grade steel and heat treatment Hardened rock dragger

### **BOX HOUSING TYPE**

Prime series are silenced type breakers that are developed for environment and human health according to international trend of noise restriction.

By wearing a hard boots of reinforced rock dragger and bracket, prime series provides much innovative durability with maximum power than ever. The benefits of these series are dual speed control system, hard boots(HEB140S and larger), anti-blank firing function, auto stop & auto start and single high pressure accumulator(HEB220S and larger)



### • APPLICATION

Standard, △: Option, ×: N/A

Contents	HEB010/P	HEB020/P	HEB030/P	HEB040/P	HEB050/P	HEB060/P	HEB100/P	HEB140S	HEB140P	HEB220S	HEB220P	HEB310/P	HEB400/P	HEB500/P	НЕВ700Р
Grade	S P	S P	S P	S P	S P	S P	S P	S	Р	S	Р	S P	S P	S P	Р
Accumulator(o,x)	х	х	х	х	х	Х	Х	Х	Х	0	0	0	0	0	0
Dual speed control(o,x)	х	х	х	х	х	Х	Х	Х	0	0	0	0	0	0	0
Anti-blank firing func.(o,x)	х	Х	х	х	х	Х	х	Х	Х	0	0	0	0	0	0
Under water(o,x)	х	х	х	х	х	Х	х	Х	0	0	0	0	0	0	0
Auto greasing kit (o,x)	Х	х	х	х	Х	Х	х	х	Δ	Δ	Δ	Δ	Δ	Δ	Δ

### • SPECIFICATION

Specification	n	Unit	Grade	HEB010/P	HEB020/P	HEB030/P	HEB040/P	HEB050/P	HEB060/P	HEB100/P	HEB140S/P	HEB220S/P	HEB310/P	HEB400/P	HEB500/P	HEB700P
Maylinai	.la.t	l	S	106	106	129	161	299	370	504	691	1,530	2,109	2,843	3,598	
Working weig	nt	kg	Р	116	116	144	243	314	468	552	1,148	1,799	2,461	3,433	4,119	6,484
Over well less set	.l.		S	1,172	1,172	1,260	1,289	1,630	1,865	1,983	2,267	2,796	3,246	3,379	3,705	
Overall lengt	.n	mm	Р	1,215	1,215	1,257	1,403	1,682	1,933	2,066	2,375	2,935	3,281	3,531	3,735	4,236
0:1.61		l	S	15 ~ 25	20 ~ 35	25 ~ 35	30 ~ 50	35 ~ 65	45 ~ 90	60 ~ 110	80 ~ 140	130 ~ 180	170 ~ 240	200 ~ 280	230 ~ 330	
Oil flow		lpm	Р	15 ~ 25	20 ~ 35	25 ~ 35	30 ~ 50	35 ~ 65	45 ~ 90	60 ~ 110	80 ~ 140	130 ~ 180	170 ~ 240	200 ~ 280	230 ~ 330	320 ~ 420
0		la a sa	S	90 ~ 110	70 ~ 100	90 ~ 110	110 ~ 140	140 ~ 170	140 ~ 170	150 ~ 170	160 ~ 180	150 ~ 180	150 ~ 185	160 ~ 185	165 ~ 185	
Operating pres	sure	bar	Р	100 ~ 130	100 ~ 130	100 ~ 130	110 ~ 140	130 ~ 170	130 ~ 170	140 ~ 180	140 ~ 180	160 ~ 180	165 ~ 185	165 ~ 185	165 ~ 185	165 ~ 185
	low	I	S									350 ~ 500	310 ~ 450	300 ~ 410	250 ~ 370	
	speed	bpm	Р								380 ~ 700	330 ~ 500	310 ~ 490	330 ~ 450	250 ~ 370	280 ~ 370
Impact rate	high	I	S	600 ~ 1,200	700 ~ 1,200	550 ~ 1,000	600 ~ 1,000	450 ~ 950	500 ~ 900	400 ~ 850	450 ~ 750	450 ~ 600	400 ~ 560	380 ~ 540	300 ~ 420	
	speed	bpm	Р	700 ~ 1,200	700 ~ 1,200	550 ~ 1,000	600 ~ 1,000	550 ~ 1,000	520 ~ 1,000	500 ~ 1,000	550 ~ 850	430 ~ 650	400 ~ 680	420 ~ 600	350 ~ 500	370 ~ 480
Cl. II.			S	45	45	50	55	68	75	93	98	135	150	165	175	
Chisel diame	er	mm	Р	45	45	50	58	68	80	93	105	135	150	165	180	205
Applicable Carrier	Range		A 11	0.7 ~ 2.5	1.0 ~ 4.0	1.5 ~ 4.5	2.5 ~ 6.0	3.5 ~ 8.0	5.0 ~ 11.0	7.0 ~ 15.0	12 ~ 20	20 ~ 30	26 ~ 35	32 ~ 45	40 ~ 70	60 ~ 110
(Optimal ragr	ie)	ton	All	0.7 ~ 1.2	1.0 ~ 2.5	1.5 ~ 3.0	2.5 ~ 4.5	4.0 ~ 6.0	6.0 ~ 8.0	8.0 ~ 12.0	12 ~ 16/12 ~ 18	20 ~ 26	26 ~ 32	32 ~ 40	40 ~ 60	65 ~ 85

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

### **OPEN HOUSING TYPE**

The new design and color of power cell have been adapted for this standard series to improve protection of power cell in non-box enclosure breaker. Round open and long side brackets offer not only access for easy maintenance, but also better protection of power cell.











### APPLICATION

o : Standard, △ : Option, × : N/A

Contents	HEB010/P	HEB020/P	HEB030/P	HEB040/P	HEB050/P	HEB060/P	HEB100/P	HEB140S	HEB220S	HEB310	HEB400	HEB500
Grade	S P	S P	S P	S P	S P	S P	S P	S	S	S	S	S
Accumulator	х	х	Х	X	Х	х	х	х	0	0	0	0
Dual speed control	х	х	х	Х	Х	х	х	х	0	0	0	0
Anti-blank firing func.	х	х	х	х	Х	х	х	х	0	О	О	0
Under water	х	х	х	х	Х	х	х	х	0	О	О	0
Auto greasing kit	x x		х	Х	Х	х	х	х	Δ	Δ	Δ	Δ

### • SPECIFICATION

Specification	on	Unit	Grade	HEB010/P	HEB020/P	HEB030/P	HEB040/P	HEB050/P	HEB060/P	HEB100/P	HEB140S	HEB220S	HEB310	HEB400	HEB500
Mayling	-64	l.a	S	109	109	131	167	299	371	497	725	1,573	2,193	3,109	3,811
Working wei	gnı	kg	Р	116	116	142	211	330	455	549					
Overall long	+h	mm	S	1,181	1,181	1,270	1,316	1,635	1,850	1,985	80 ~ 140	130 ~ 180	170 ~ 240	200 ~ 280	230 ~ 330
Overall leng	,uii	111111	Р	1,207	1,207	1,242	1,390	1,674	1,916	2,049					
Oil flow		Inna	S	15 ~ 25	20 ~ 35	25 ~ 35	30 ~ 50	35 ~ 65	45 ~ 90	60 ~ 110	2,270	2,829	3,285	3,430	3,749
Oil now		lpm	Р	15 ~ 25	20 ~ 35	25 ~ 35	30 ~ 50	35 ~ 65	45 ~ 90	60 ~ 110					
On avating a vac		hau	S	90 ~ 110	70 ~ 100	90 ~ 110	110 ~ 140	140 ~ 170	140 ~ 170	150 ~ 170	160 ~ 180	150 ~ 180	150 ~ 185	160 ~ 185	165 ~ 185
1 01		bar	Р	100 ~ 130	100 ~ 130	100 ~ 130	110 ~ 140	130 ~ 170	130 ~ 170	170 ~ 180					
	low		S									350 ~ 500	310 ~ 450	300 ~ 410	250 ~ 370
lua na at vata	speed	h	Р												
Impact rate	high	bpm	S	600 ~ 1,200	700 ~ 1,200	550 ~ 1,000	600 ~ 1,000	450 ~ 950	500 ~ 900	400 ~ 850	450 ~ 750	450 ~ 600	400 ~ 560	380 ~ 540	300 ~ 420
	speed		Р	700 ~ 1,200	700 ~ 1,200	550 ~ 1,000	550 ~ 1,000	550 ~ 1,000	520 ~ 1,000	500 ~ 1,000					
Chisel diame	tor	mm	S	45	45	50	55	68	75	93	98	135	150	165	175
Chiset diame	eter	mm	Р	45	45	50	58	68	80	93					
Applicable Carrie	r Range	ton	All	0.7 ~ 2.5	1.0 ~ 4.0	1.5 ~ 4.5	2.5 ~ 6.0	3.5 ~ 8.0	5.0 ~ 11.0	7.0 ~ 15.0	12 ~ 20	20 ~ 30	26 ~ 35	32 ~ 45	40 ~ 70
(Optimal rag	ne)	ton	All	0.7 ~ 1.2	1.0 ~ 2.5	2.5 ~ 4.5	2.5 ~ 4.5	4.0 ~ 6.0	6.0 ~ 8.0	8.0 ~ 12.0	12 ~ 16	20 ~ 26	26 ~ 32	32 ~ 40	40 ~ 60

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

### **SKIDSTEER LOADER**

Skidsteer Loader series are developed for Skidsteer loader to meet the market requirement of higher impact energy and optimal performance.



### **BACKHOE LOADER**

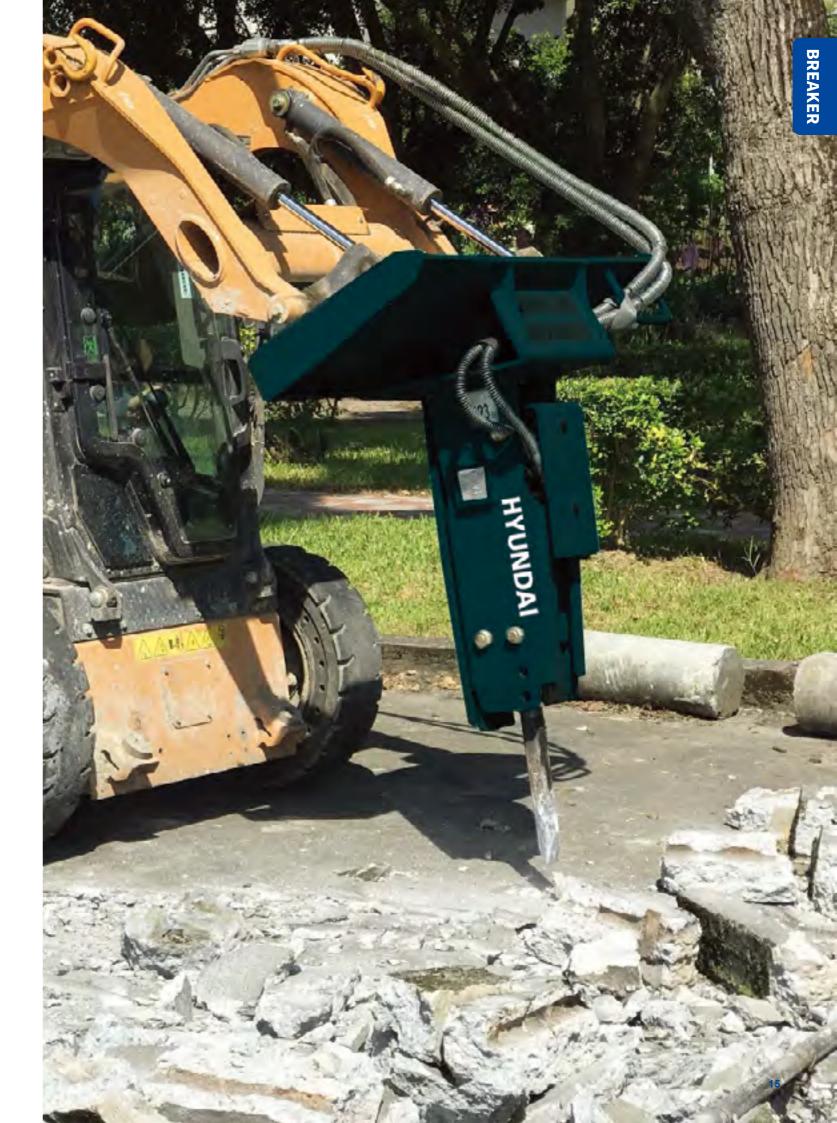
Backhoe Loader series are developed for Backhoe loader to meet the required design for transportation.



### • SPECIFICATION

Specifi	cation	Unit	Grade	HEB040SL/PSL	HEB050BL/PBL	HEB060BL/PBL
10/	Specification  Working weight  Overall length  Oil flow  Operating pressure  low speed high speed  Chisel diameter  Pplicable Carrier Range	1	S	276	278	352
Working	gweignt	kg	Р	255	312	400
Overall	Working weight  Overall length  Oil flow  perating pressure  low speed high speed		S	1,285	1,597	1,728
Overall	tength	mm	Р	1,352	1,585	1,767
0:14	1	la aa	S	50 ~ 75	35 ~ 65	45 ~ 90
Oiti	low	lpm	Р	50 ~ 75	35 ~ 65	45 ~ 90
0		h	S	110 ~ 140	140 ~ 170	140 ~ 170
Operating	pressure	bar	Р	110 ~ 140	130 ~ 170	130 ~ 170
	low		S			-
l	speed	h	Р			
Impact rate	high	bpm	S	550 ~ 1,000	450 ~ 950	500 ~ 900
	speed		Р	550 ~ 1,000	550 ~ 1,000	520 ~ 1,000
Chicald	:t		S	55	68	75
Chiset a	iaiiietei	mm	Р	58	68	80
Applicable C	arrier Range	4	All	2.5 ~ 8.0	3.5 ~ 8.0	5.0 ~ 11.0
(Optima	l ragne)	ton	All	4.0 ~ 6.0	4.0 ~ 6.0	6.0 ~ 8.0

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.



### **Features and benefits**

### Proven Working Principle (oil and gas assist)

 Pressurized nitrogen gas is the main power source, to operate with less demand on the carrier's hydraulic system.

### **Fewer Components**

- Around one-third as its competitor, around 30 to 90 items depending on model
- Easy maintenance
- Dealers need fewer spare parts in inventory
- Easy to rebuild

### **Dual speed Control**

- Control blow frequency according to hardness of rock

### **Anti-blank firing function**

- Significantly reduces blank blow induced failures (HEB220S and larger)

### **Underwater application**

- Allowing hammer submerged in water (HEB140P and larger)

### **Option**

 Auto dispense of lubricating paste, each time hammer is operating

### **Swivel Joint**

- Reduces vibration induced hose failure.

### **Centralized Lubricating system**

- Enable to utilize centralized auto grease system

## Increased life time of dampers and wear plates

- This gives longer maintenance interval.

### **Rugged Construction**

- Jigsaw shaped main bracket design achieves better resilience from external force. This ensure sound and long lasting body structure.

### **BREAKER SELECTION GUIDE**

Break	er Selectio	ion Guide (applicable carrier range and minimum required hydraulic power)			
		Weight of carrier in tonnes (t)		Hydraulic po	wer of carrier
ľ	Model	1 2 3 4 5 6 7 8 10 12 14 16 18 20 22 24 26 28 30 35 40 45 50 60 70 80 90 100 110 120 130 140  Weight of carrier in kilopounds (klbs)  2 4 6 8 10 15 20 30 40 50 60 70 80 90 100 110 130 150 180 200 220 240 260 280 300 320	Minimu Oil Flov Ipm	im w (gpm)	Minimum Pressure bar (psi)
	HEB010P	0.7 1.2 2.5 1.57 2.6 5.5	15	(4.0)	160 (2,300)
Size	HEB020P	1.0 2.5 4.0  2.2 5.5 8.8  Available range ->	20	(5.3)	180 (2,600)
Αï	HEB030P	1.5 3.0 4.5 ———————————————————————————————————	25	(6.6)	180 (2,600)
	HEB040P	2.5 4.5 6.0 5.6 9.9 13.2	30	(7.9)	180 (2,600)
9 Z	HEB050P	3.5 4.0 6 8 7.7 8.8 13 18	35	(9.2)	200 (2,900)
Small Size	HEB060P	5 6 8 11 11 13 18 24	45	(12)	210 (3,000)
<u> </u>	HEB100P	7 8 12 15 15 18 26 33	60	(16)	210 (3,000)
m Size	HEB140P	12 18 20 26 40 44	80	(21)	220 (3,200)
Mediun	HEB220P	20 26 30 ————————————————————————————————————	130	(34)	220 (3,200)
Size	HEB310P	26 32 35 57 71 77	170	(45)	230 (3,300)
Large Si	HEB400P	32 40 45 71 88 99	200	(53)	230 (3,300)
<u>"</u>	HEB500P	40 60 70 	230	(61)	230 (3,300)
Super	HEB700P	60 65 85 110 132 143 187 242	320	(85)	230 (3,300)

This guide is valid for the normal excavators equipped with standard boom-arm.



# BREAKERS

### **HDB SERIES**

Maximizing productivity and reliability
Minimizing maintenance and downtime
Right tools for all carriers and applications

### **HDB Series**

## The best choice



Market Powerful Performance

Market Advanced Technology

**™** Innovative Durability

### **Features for HDB Series Breakers**

The new HDB series has innovating technology, unmatched durability and high productivity.

HDB series offer high performance and optimum durability by enlarging the diameter of the T/Bolt.

Changing the hose connecting port from a split flange structure (in/out port) to a new adapter type port avoid bolt breakage and oil leakage.

Hyundai breakers have an optimised form and intelligent look. The box housing is specially designed for advanced durability.

Hyundai breakers have a more powerful impact by enlarging the chisel's diameter, the bigger diameter also increases the strength of the chisel and therefore also improves durability.

The product range consists of 15 diversified products to fit any work conditions

More options: Anti-Blank Firing On/Off Valve, TPC System(2 stages stroke valve), Provision Hole for underwater works and Auto Grease System.

Hyundai breakers ensure long life for the tools (Chisel Pins, T/Bolts, F/Heads, etc.) by applying the Anti-Blank Firing system.



Tool & Option Technology

### **Choice of Options**

### Auto Grease Bracket Mounted System

This system has many advantages:

- · Save human negligence of filling grease.
- To greasing several times a day, manual control does not need.
- · Contributing to longer machine life, especially for chisels.
- No extra power source to drive.
- Applicable breakers are from HDB70 to HDB800.





### **Shape of Chisel**

Classification	Major (	Contents
Moil	•	Concrete, Rocks, Pavements, Slopes
Wedge		Trench, Slopes, Finishing
Blunt	•	Quarries
Conical	• •	Concrete, Rocks, Pavements

### Choosing the Chisel for Different Rock Types

Classification	Rock	Recommended Breakers	Recommended Chisels
Hard Rock	Basanite, Granite Diabase	HDB140 to HDB800	Blunt type, Wedge type
Soft Rock	Sandstone, Limestone Coal	HDB10 to HDB800	Moil type, Wedge type, conical type

### Seal System



By using only NOK seals on the HDB series, we have achieved longer seal life.

•On models HDB210 and up, an additional square buffer seal was added to

increase the durability of the gas seals, step seals, and the piston.

•This buffer seal also helps to minimise the piston's shaking action.

### ABF(Anti Blank Firing) System with Auto Control Valve



 ABF(Anti Blank Firing)
 System is provided as a standard starting from HDB50 to HDB800 Model.

 This system will help to protect the Chisel pins, T/Bolts and Front heads

from Blank Firing, and it is suitable for all kinds of working environment.

- When Auto control valve is turned on, breaker operation will automatically start again by giving a small amount of pressure to Chisel, It will automatically stop when chisel is lift up or after breaking.
- But, from HDB650 to HDB800 models can not turn off the auto control valve to protect the breaker more perfectly.
- The distinctive feature will protect the equipment from Secondary breaking and amateur's operation by having the functioning of Anti Blank Firing automatically on breaker.

### Valve Case with TPC (Total Power Control) system



 We have shortened the Height & Length of the valve case, but made the width wider for additional balance.
 Valve Plate: Increased

the durability by using

6 bolts instead of 4 bolts.

• 2 stroke selector is located on the Valve case as a standard (HDB210~HDB450) to change from long stroke to short stroke according to operator's need for optimal performance.

### 2 Stroke Selector System



- 2 stroke selector is
- · located on the side of
- Cylinder as a standard
- (HDB50~HDB180) to
- change from long stroketo short stroke according
- · to operator's need for
- · optimal performance.

### **HDB Series Breaker Specification**

ltem	Unit	HDB10	HDB20	HDB40	HDB50	HDB70	HDB90	HDB140	HDB180	HDB210	HDB250	HDB300	HDB360	HDB450	HDB650	HDB800
	kg	115	150	224	333	431	614	929	1209	1738	2165	2832	2937	3713	4380	5625
Operating Weight (Top Box BKT.)	lb	253	330	493	734	950	1354	2048	2665	3832	4773	6243	6475	8186	9656	12401
O	mm	1110	1239	1408	1603	1805	1981	2225	2455	2764	2898	3200	3200	3595	3766	4059
Overall Length (w/STD. MTG. BKT)	Inch	43.7	48.8	55.4	63.1	71.1	78	87.6	96.7	108.8	114.1	126	126	141.5	148.3	159.8
Overall Length	mm	973	1090	1258	1419	1591	1760	1962	2153	2395	2526	2790	2790	3173	3271	3505
(w.o/MTG. BKT)	Inch	38.3	42.9	49.5	55.9	62.6	69.3	77.2	84.8	94.3	99.4	109.8	109.8	124.9	128.8	138
Operating Weight	kg	-	-	162	271	340	513	773	1199	1647	2020	2796	2806	3628	-	_
(Side BKT.)	lb	-	-	357	597	750	1131	1704	2643	3631	4453	6164	6186	7998	-	-
Overall Length	mm	-	-	1192	1560	1657	1842	1903	2094	2348	2457	2732	2732	3070	-	-
(Side BKT.)	Inch	-	-	46.9	61.4	65.2	72.5	74.9	82.4	92.4	96.7	107.6	107.6	120.9	-	-
Chisel	mm	40	45	62	70	78	85	105	120	135	145	150	155	165	180	200
Out Dia.	Inch	1.6	1.8	2.4	2.8	3.1	3.3	4.1	4.7	5.3	5.7	5.9	6.1	6.5	7.1	7.9
Chisel	mm	420	500	610	730	806	850	975	1165	1250	1280	1400	1400	1650	1500	1700
Length	Inch	16.5	19.7	24	28.7	31.7	33.5	38.4	45.9	49.2	50.4	55.1	55.1	65	59.1	66.9
Setting Pressure	kgf/ cm²	150	150	150	170	180	190	190	210	210	210	210	210	210	240	250
Fressure	psi	2134	2134	2134	2418	2560	2702	2702	2987	2987	2987	2987	2987	2987	3414	3556
Working	kgf/ cm <sup>2</sup>	70~110	80~120	100~140	100~140	100~140	100~140	120~160	120~170	130~170	140~180	140~180	140~180	140~180	150~190	150~190
Pressure	psi	996~ 1565	1138~ 1707	1422~ 1991	1422~ 1991	1422~ 1991	1422~ 1991	1707~ 2276	1707~ 2418	1849~ 2418	1991~ 2560	1991~ 2560	1991~ 2560	1991~ 2560	2134~ 2702	2134~ 2702
Oil	lpm	15~30	20~40	30~50	30~55	45~80	50~100	90~110	100~140	110~160	150~210	180~250	180~250	200~280	280~400	320~450
Flow	gpm	4.0~ 7.9	5.3~ 10.5	7.9~ 13.2	7.9~ 14.5	11.9~ 21.1	13.2~ 26.4	24~ 29	26.4~ 37	29.1~ 42.3	39.6~ 55.5	47.6~ 66.0	47.6~ 66.0	52.8~ 74.0	74.0~ 105.7	322~ 119.9
Blow Rate (H/ Speed)	BPM	600~ 1200	600~ 1200	500~ 1000	350~ 900 (450~ 1000)	350~ 900 (450~ 1000)	300~ 700 (550~ 950)	350~ 550 (500~ 750)	350~ 550 (450~ 600)	350~ 500 (450~ 600)	250~ 350 (300~ 450)	200~ 350 (300~ 480)	200~ 350 (300~ 480	200~ 300 (300~ 450)	250~ 420 (300~ 500)	230~ 370 (300~ 480)
Back Head	kgf/ cm²	12	12	12	12	12	12	12	12	11	11	11	11	11	16	11
N2 Gas Pressure	psi	171	171	171	171	171	171	171	171	156	156	156	156	156	228	156
Suitable	ton	0.5~1.5	0.8~3	3~5	4~6	6~8	7~12	10~15	16~20	18~25	22~29	26~32	28~40	38~50	42~81	55~100
Exca.	lb	1102~ 3307	1764~ 6614	6614~ 11023	8818~ 13227	13227~ 17637	15432~ 26455	22046~ 33069	35274~ 44092	39683~ 55116	48502~ 63934	57320~ 70548	61729~ 88185	83775~ 110231	92594~ 178574	121254~ 220462

### **Suitable Excavator**

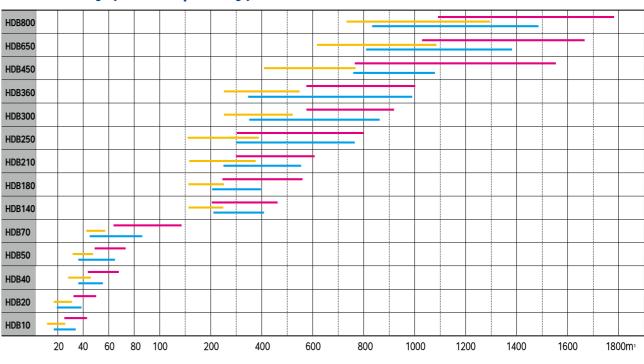
Item	HDB10	HDB20	HDB40	HDB50	HDB70	HDB90	HDB140
Model	R16-9	R27Z-9, R25Z-9A	R35Z-9, HSL850-7A	R55-9, R55W-9, R60-9S, R60W-9S, R60CR-9, HX60	H930S, H940S, H930C, H940C, R60-9	R80-7, R80CR-9	R140LC-9, R140LC-9S, R140W-9, R140W-9A, R140W-9S, R145LCR-9, R145LCR-9A, R140W-7
Item	HDB180	HDB210	HDB250	HDB300, 360	HDB450	HDB650	HDB800
Model	1 '	R210LC-9, R210NLC-9, R210W-9, R210W-9S, R220LC-9A, R220LC-9S, R220LC-9SH, R235LCR-9, R235LCR-9A, HX220	R250LC-9, R260LC-9A, R260LC-9S	R290LC-9, R300LC-9A, R300LC-9SH, R320LC-9, R330LC-9A, R330LC-9S, R330LC-9SH, R380LC-9, R380LC-9A, R380LC-9SH, R430LC-9, R430LC-9SH	HX480	R520LC-9, R520LC-9A, R520LC-9S, HX520	R800LC-9

### **HDB Application**

Contents	HDB10	HDB20	HDB40	HDB50	HDB70	HDB90	HDB140	HDB180	HDB210	HDB250	HDB300	HDB360	HDB450	HDB650	HDB800
Underwater works	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•
Auto Greasing System Hole	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•
TPC(Total Power Control) System Selector Type	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•
ABF(Anti Blank Firing) System	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•
Auto Greasing Unit	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•
Central Grease Supply Unit	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•

Standard: •, Option: •

### Productivity (8 hours per day)



•Productivity can be changed depending on operator's skill, using machine and job site condition. The above data is reference purpose only.

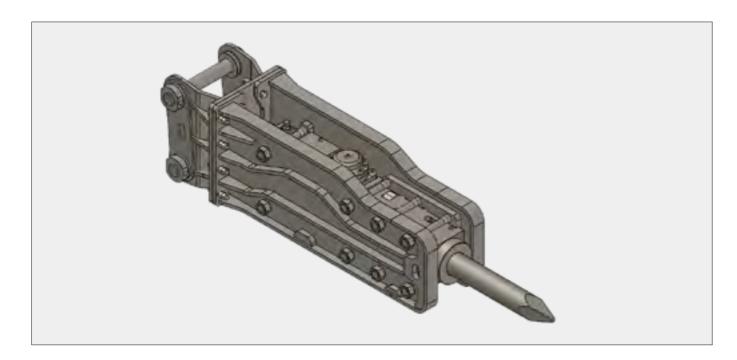
Hard Sand Stone
Reinforced Concrete
Non-Reinforced Concrete



# BREAKERS

**HTB SERIES** 

### **HTB Series**



### • SPECIFICATION

Spec	ification	Unit	HTB220
On a ratio a Waisht	Total Ass'y	kg	2,010
Operating Weight	w/o Chisel	mm	1,890
Overall Length (L)	Total Ass'y	mm	2,880
Overall Length (L)	w/o Chisel	mm	2,060
Overall Height (H)	Total Ass'y	mm	680
Overall Width (W)	Total Ass'y	mm	575
Standard Tool (Moil)	Diameter	mm	Ø135
Standard 100t (Mott)	Length	mm	1,200
Operati	ng Pressure	kgf/cm2	170 ~ 210
Requir	ed Oil Flow	L/min.	130 ~ 150
Play Fraguency	Low Speed	h	400
Blow Frequency	High Speed	bpm	800
Acceptable Ba	ck Pressure (Max.)	kgf/cm2	6.3 ~ 7
Relief Set	ting Pressure	kgf/cm2	210
•	ust Valve Setting e → Open)	turns	2
Car Chausina Buranan	Back Head	kgf/cm2	6.5
Gas Charging Pressure	Accumulator	kgf/cm2	55 ~ 60
	Length	mm	2,500
Connecting Hose	Inner Size	in.	1"
Fitting Size		-	ORF 1-7/16"*12UNF-SF
Applicable	Carrier Range	ton	18 ~ 25

### \* Specifications above are subject to change without notice for quality improvement.

### • Easy maintenance

### • Cooling efficiency

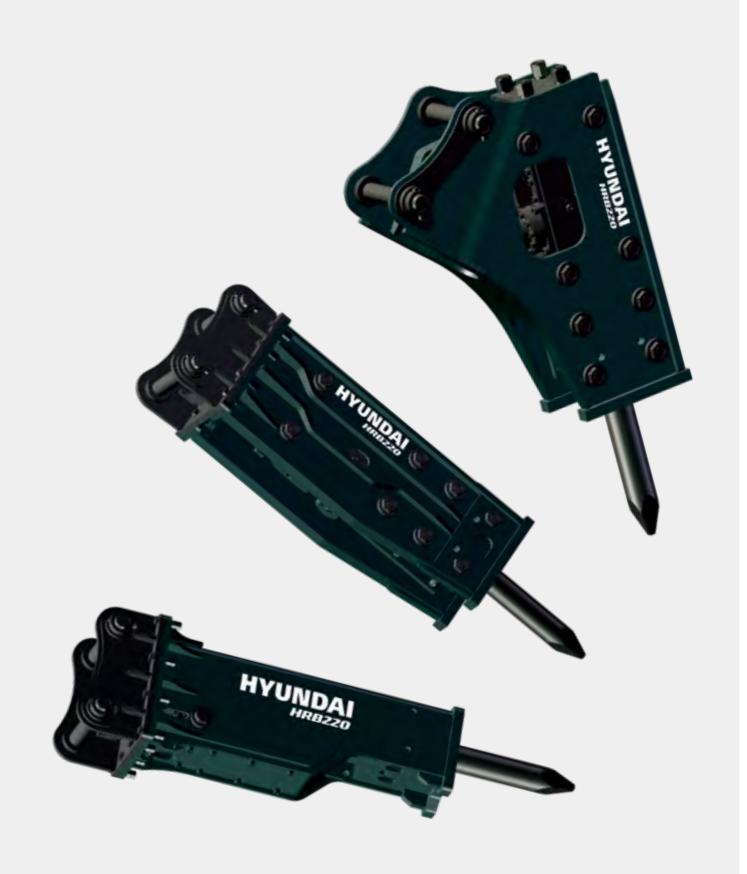
The valve is separately mounted on the outside of the cylinder for good cooling efficiency.



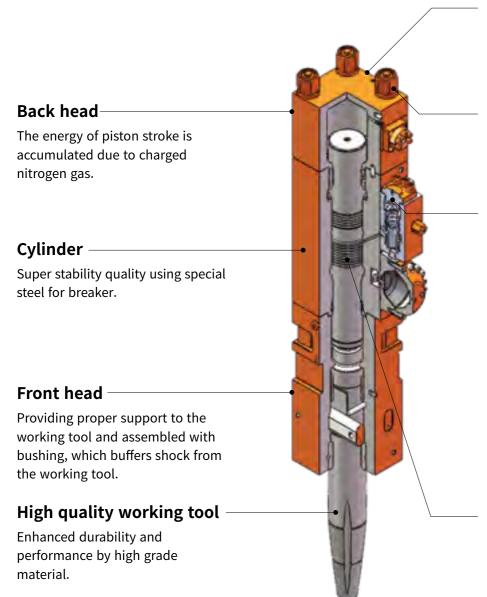
# BREAKERS

### **HRB SERIES**

Excellent Performance
Enhanced Durability
Customer Convenience
Easy Maintenance



### **TECHNOLOGY**



### **Urethane damper**

Vibration dampering prevents carrier damage and improves operator comfort.

### Through bolt

Best in class service life due to adoption of advanced heat treatment process.

### **Outward valve system**

Easy to access for service and maintenance of control valve. (HRB220, 320)

### **Inward valve system**

Simple structure and less inner parts. (HRB030/040/050/060/140/250/320)

### **Built-in accumulator**

Enhancing equipment durability through this efficiency shock absorption system.

#### Piston

Quality and durability as a result of quality proven material in intensity, anti-wear, heat resistance, tenacity, anti-impact, internal pressure etc..

#### **TOOL SELECTION**

### **USE THE RIGHT TOOL FOR THE RIGHT JOB**

Working tool is a wear part and tool consumption is the main causative for wear part costs. It's important to select an appropriate tool according to the working condition.

Moil Point (Conical)

Demolition

Hard Ground

Hard Ground with Failures

Concrete

### Moil Wedge (Pyramidal)

Trenching
General Excavation
Asphalt
Mass Excavation in Quarry
Soft Ground with Faults
Concrete
Painforced Concrete

### Flat Wedge

Trenching
General Excavation
Mass Excavation in Quarry
Soft Ground with Faults
Concrete
Reinforced Concrete

#### Flat End (Blunt)

Block Splitting Compact Abrasive Difficult to Position Concrete Slab on Demolition

### **Type of HRB Breakers**



### **BOX HOUSING TYPE**

Recommended for professional contractors working in urban zones, where noise level must be controlled and/or where local regulation may require silenced breakers.

- Silenced design
- Less vibration due to urethane damper inside



#### **OPEN HOUSING TYPE**

Simplified design, offer easy access to the power cell for easy on-site maintenance.

- Simple design
- Easy on-site maintenance
- More reach than side mounting



#### **SIDE MOUNT TYPE**

Similar characteristics as the open housing type, the mounting on the arm of the excavator is made at an angle.

- Simple design
- Easy on-site maintenance
- Convenience to carry on with excavator



### **HRB SERIES**



### • **APPLICATION** ○ : Standard, △ : Option, × : N/A

Contents	HRB030	HRB040	HRB050	HRB060	HRB140	HRB220	HRB250	HRB310	HRB320
Accumulator	x	x	x	x	x	0	0	0	0
Dual speed control	х	Х	X	х	x	х	х	х	х
Anti-blank firing func.	х	Х	х	х	х	х	х	х	х
Under water	х	х	х	х	х	х	х	х	х
Auto greasing kit	х	х	x	Х	х	Δ	Δ	Δ	Δ

### • SPECIFICATION

				HRB030			HRB040			HRB050			HRB060	)		HRB140			HRB220	)	ı	HRB250	,		HRB310	,	ı	HRB320	)
Specif	fication	Unit	Box Housing	Open Housing	Side Mount	Box Housing		Side Mount																					
Workin	ıg weight	kg	129	95	95	180	158	158	361	343	263	451	410	335	1,007	866	761	1,893	1,847	1,653	2,046	2,094	1,809	2,457	2,380	2,218	2,968	2,745	2,577
Overal	ll length	mm	1,331	1,235	1,090	1,417	1,344	1,178	1,660	1,684	1,373	1,717	1,738	1,630	2,354	2,387	1,994	2,847	2,900	2,423	2,793	2,866	2,480	3,002	2,897	2,640	3,075	3,102	2,776
Oil	flow	lpm		20 ~ 30			25 ~ 50			40 ~ 70			50 ~ 90			80 ~ 110		]	30 ~ 150	)	1	120 ~ 180	)		150 ~ 190	)	1	.80 ~ 240	0
Operatin	g pressure	bar		88 ~ 117			88 ~ 117			108 ~ 137		:	118 ~ 14	7	]	L47 ~ 166	j .	]	57 ~ 177	7	1	L57 ~ 177	7		157 ~ 17	7	1	.57 ~ 17	7
Impact rate	low speed	hnm		-			-			-			-			-			-			-			-			-	
Impact rate	high speed	bpm		700 ~ 1,200	)		600 ~ 1,100			500 ~ 900		4	400 ~ 800	)	3	350 ~ 700	)	4	100 ~ 600	)	3	350 ~ 550	)		350 ~ 700	)	3	800 ~ 45	O
Chisel	diameter	mm		45			53			68			75			100			135			140			150			155	
Applicable (	Carrier Range	ton		1.2 ~ 3.0			2.5 ~ 4.5			4.0 ~ 7.0			6.0 ~ 9.0			10 ~ 15			18 ~ 26			18 ~ 26			27 ~ 35			28 ~ 35	

\* Specifications above are subject to change without notice for quality improvement.

# MULTIPROCESSOR

### **Multiprocessor for professional demolition**

Multiprocessor series are featured interchangeable jaw sets mounted on a single base unit providing the efficiency of four tools in one.



### **MULTIPROCESSOR**



**Unlimited 360° Hydraulic** rotation

With heavy-duty swing gear



One pin type jaw mechanism for enhanced shearing force and

working & maintenance efficiency



Speed up valve

High jaw opening & closing speed



**Customized tooth type** 

Welding type or replaceable type can be chosen



Fully reversible rectangular blades

for lower maintenance cost



User friendly blade clearance

Adjustment by using one set of adjust nut



**HEM220** 

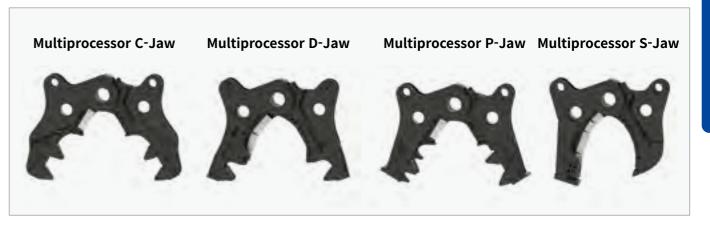


HEM320



**HEM400** 

### • JAW TYPE



### **Crushing Jaw set**

For the primary demolition operations. Crushing down the main structure of a building.

### **Demolition Jaw set**

Specially designed and engineered for mixed concrete and steel applications, combining the advantages of shear jaw set and concrete jaw set. Processing heavily reinforced concrete structures and concrete encased I-beam steel barrels without jaw change.

### **Pulverizing Jaw set**

For the secondary demolition operations. Starting to process the demolished materials. for example Separating reinforcing bar from concrete.

#### **Shear Jaw set**

The shear jaw set can be used on all industrial demolition sites for cutting materials such as section bars, pipes, tanks railway carriages, etc..

### • SPECIFICATION

**HEM130** 

		1																
Specification		Unit		HEN	<b>M130</b>			HEN	1220			HEM	1320			HEN	1400	
Jaw Type			Crushing	Demolition	Pulverizing	Shear	Crushing	Demolition	Pulverizing	Shear	Crushing	Demolition	Pulverizing	Shear	Crushing	Demolition	Pulverizing	Shear
Working weight		kg	1,231	1,330	1,351	1,256	2,166	2,126	2,233	2,034	3,032	3,012	3,078	2,947	4,694	4,635	4,781	4,575
Overall length		mm	1,940	1,945	1,972	1,890	2,326	2,291	2,342	2,175	2,533	2,565	2,563	2,553	2,807	3,063	2,971	2,968
Overall width		mm	1,200	1,187	1,157	989	1,438	1,368	1,508	1,083	1,684	1,560	1,643	1,348	1,970	1,879	1,895	1,612
Max. Jaw opening	5	mm	643	629	647	360	903	797	893	503	1,119	983	1,008	573	1,274	1,209	1,184	676
Cutter blade lengt	h	mm	214	214	219	319	237	355	237	348	240	461	240	566	264	507	264	631
Required oil flow		lpm		100	~ 180			150 ~ 25	50			200	~ 300			280	~ 360	
Max. Operating press	ure	bar		3	50		350			350				350				
Crushing force(tip	)	ton	62	62	64	65	74	77	70	88	104	110	113	114	159	158	166	178
Applicable Carrier Ra	nge	ton		14 ~ 19		20 ~ 28			28 ~ 36				36 ~ 47					
Standard features	Hyd. Slew	ving motor		Strai	ndard		Strandard			Strandard				Strandard				
Standard leatures	Speed-	up valve		Strandard			Strandard			Strandard				Strandard				

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

# PULVERIZER

### Produced with increased power and durability

Pulverizer series are designed for both primary demolition work, secondary concrete reduction and material sorting.





### **PULVERIZER - Fixed type**



**Cracking tooth** 

On the outer end of jaw for high productivity during pulverizing job



**Hardened teeth** 

made of special materials for enhanced durability



Fully reversible rectangular blades

for lower maintenance cost



Integrated speed-up valve

delivering easy maintenance and roomy space



**Tooth bolting style** 

for quick and effective replacement (welding type is also available)



### Wider jaw

With its wider jaw, exceptional closing force and short cycle times, Pulverizer series provide excellent productivity in concrete reduction and reinforced steel separation.

### Integrated speed-up valve with cylinder

Maximum maintenance efficiency

### Replaceable tooth system

Fast ans effortless replacement of tooth allowing high productivity.

### **Durability**

Increased durability has been achieved with the use of abrasive-resistant material.

Powerful and durable attachments produced by advanced design and high quality production are able to handle the toughest jobs.

### • SPECIFICATION

Specificatio	n	Unit	HEP080	HEP160	HEP190	HEP220	HEP320	HEP420
Working weig	ht	kg	518	952	1310	1,930	2,349	3,321
Overall lengt	h	mm	1,275	1,656	1,985	2,435	2,074	2,633
Jaw width(Fixed/Mo	ving Jaw)	mm	340 / 290	384 / 330	438 / 350	470 / 376	510 / 392	550 / 428
Max. Jaw open	ing	mm	478	680	732	968	970	1,105
Max. Operating pr	essure	bar	300	350	350	350	350	350
Crushing force	(tip)	ton	39	56	59	77	84	116
Cutter blade ler	ngth	mm	110	240	240	360	360	240
Required oil fl	ow	lpm	80 ~ 100	100 ~ 180	150 ~ 250	150 ~ 250	200 ~ 300	200 ~ 300
Applicable Carrier	Range	ton	7~10	13 ~ 20	16 ~ 25	20 ~ 28	28 ~ 36	36 ~ 44
Standard features	Speed-up v	alve	Not available	Not available	Standard	Standard	Standard	Standard
Standard leatures	Bolting to	oth	Not available	Not available	Not available	Standard	Standard	Standard

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

### **PULVERIZER - Rotatable type**



Wide jaw opening

for a large demolition work surface



Fully reversible rectangular blades



Integrated speed-up valve

with cylinder delivering easy maintenance and roomy space



**Hardened teeth** 

made of special materials for enhanced durability



**Hydraulic 360 rotation unit** 

allowing fast and targeted positioning to materials



### Integrated speed-up valve with cylinder

Maximum maintenance efficiency

### **Hydraulic 360 rotation unit**

Limitless rotation for fast and positioning in all conditions

### **Trunnion type cylinder**

Improved pulverizer with trunnion supported cylinder gives you high breaking forces through-out the entire working cycle as well as stable movement

### Wider jaw

With its wider jaw, exceptional closing force and short cycle times, Pulverizer series provide excellent productivity in concrete reduction and reinforced steel separation.

### **Durability**

Increased durability has been achieved with the use of abrasive-resistant materials.

Advanced design and construction produces a powerful and durable attachment to handle the toughest jobs.

### • SPECIFICATION

Specif	ication	Unit	HEP160R	HEP200R	HEP250R	HEP350R	HEP450R
Working	g weight	kg	1,250	1,817	2,517	2,934	4,219
Overal	l length	mm	1,840	2,134	2,474	2,586	3,075
Jaw width(Fixe	ed/Moving Jaw)	mm	384 / 298	438 / 350	470 / 372	510 / 392	550 / 398
Max. Jaw	v opening	mm	720	765	925	974	1,142
Max. Operat	ing pressure	bar	350	350	350	350	350
Crushing	force(tip)	ton	56	61	73	83	114
Cutter bla	ade length	mm	240	240	360	360	240
Require	d oil flow	lpm	100 ~ 180	150 ~ 250	150 ~ 250	200 ~ 300	200 ~ 300
Applicable C	Carrier Range	ton	13 ~ 16	17 ~ 25	20 ~ 27	28 ~ 36	40 ~ 50
Standard features	Speed Speed		Not available	Standard	Standard	Standard	Standard
Standard leatures	Boltin	g tooth	Not available	Not available	Standard	Standard	Standard

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

# GRAB

Grab series are designed for selective demolition, sorting of recycle material and loading of various materials.



### **GRAB**

### Reinforced body & jaw

Body and jaw are reinforced to prevent from deformation against external force.

(from HEG140 and larger)

Mainframe is tightly protected from crushing debris.

Thus inner parts remain intact in any condition.

### **Stopper**

Reinforced stopper is located on body and it has the structure much stronger to be fixed. (from HEG140 and larger)

### **Using quality material**

HARDOX plates are adapted on the jaw and bottom plate of body where the wear resistance and durability are required.

### Easy maintenance and repairing

New Grab series provide easy maintenance and repairing.

### **Hydraulic 360' Rotation unit**

The continuous 360' hydraulic rotation got stronger with two rotation motors. (from HEG140 and larger)

This can make sorting job much easier with strong torque.

### 2 cylinders are applied

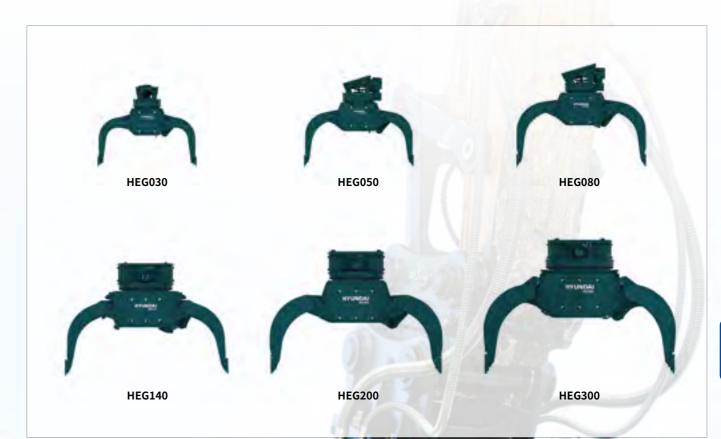
2 cylinders are applied for equal distributed load & better productivity of jaws.
(from HEG140 and larger)

### **Improved Cutting edge plate**

Separable cutting edge plate for easy replacement. Hardened bolts and stopper block are applied.

### • SPECIFICATION

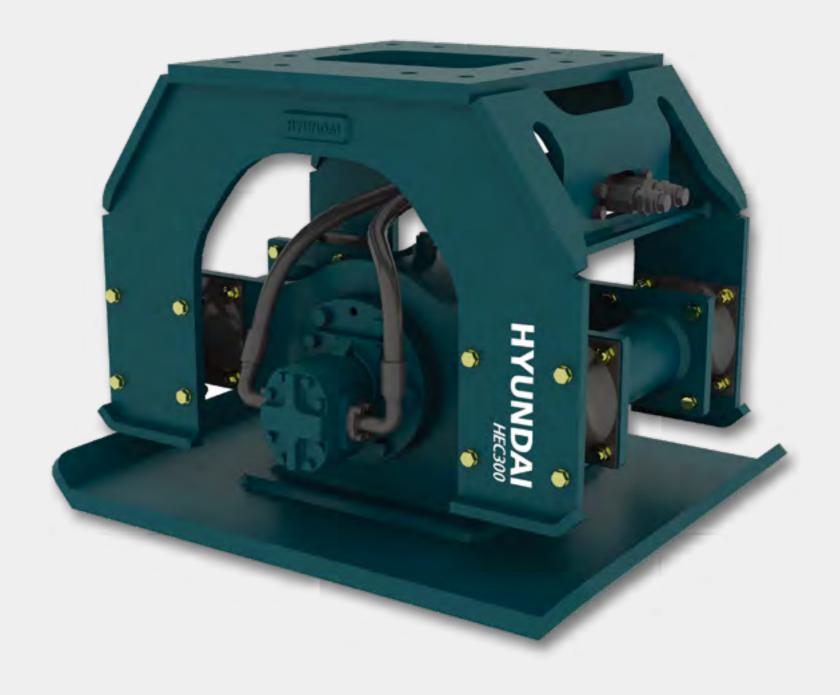
SI	pecification	Unit	HEG030	HEG050	HEG080	HEG140	HEG200	HEG300
Num	Number of Cylinder		1	1	1	2	2	2
Wo	orking weight	kg	265	432	568	1,086	1,494	2,370
Max	c. Closing force	ton	1.7	2.5	3.2	6.1	7.3	8.6
	Oil flow	lpm	10~30	20~60	20~60	40~80	60~120	80~160
Ope	rating Pressure	bar	270	300	300	350	350	350
	Capacity	liter	100	230	320	430	620	995
Longth	Closing Position	mm	802	1,042	1,186	1,202	1,393	1,531
Length	Opening Position	mm	1,182	1,533	1,736	1,748	2,050	2,285
11-1-4-	Closing Position	mm	949	1,162	1,303	1,325	1,459	1,599
Heigth	Opening Position	mm	1,018	1,292	1,447	1,417	1,573	1,742
	Width	mm	450	600	700	900	1,000	1,250
Applica	Applicable Carrier Range		3~4	4~8	7 ~ 10	11 ~ 16	18 ~ 25	25 ~ 38





# COMPACTOR

Compactor series are designed for soil compaction, utility, construction and road maintenance applications.



COMPACTOR

### **COMPACTOR**



### Oil bath type

Compaction weight chamber is filled with gear oil, thus, it eliminates periodical greasing & oil changing interval is now changed to 1 year.



### Stopper

It limits excessive pressing force from excavator.



### **Durable frame design**

Durability of main body is increased by flat and solid frame.



Wider cushion rubber for HEC050N

It increases the durability of cushion rubber



### Easy and versatile mounting

Direct Mount frame: the pin-on type frame is designed to accept a variety of slip-fit bushings and pins, resulting in versatile installation on any carrier that does not require OEM's pin-to-pin distance.

### Single hose block

All hoses are routed within the frame and connected to a mono hose block located on the back. It keeps the hoses from easy damage.

### **Cushion rubber**

Specially designed cushion rubbers protect machine and operator from vibrations.

### **Heavy duty gear motor**

Heavy duty and high efficiency gear motor with splined shaft and high pressure motor seals prevent easy damage caused by pressure shock during startup and shutdown.

### **Self-aligning bearing**

Self-aligning double row spherical roller bearing provides a long service life to rotating components.

### **Easy maintenance**

All grease fittings are located for easy access.

### Cross-check valve as standard

Built-in cross check valve within motor protects the motor and bearing from damage caused by abrupt shutdown of hydraulic flow. And it also eliminates the need for a case drain.

### Valve pack as standard

Flow control valve (Priority flow divider) regulates hydraulic in flow to the motor and prevents it from over-speeding. Thus, the compactor can be installed on carrier not equipped with a flow control valve on its auxiliary plumbing.

Pressure relief valve is also incorporated in the valve pack and it prevents system from overpressure. An attachment, such as breaker, which works at a relatively higher pressure than compactor can be easily switched to the compactor on the same auxiliary plumbing without re-setting of the carrier's relief valve pressure.

By-pass check valve, flow control valve, and pressure relief valve are packed within a signle hose block.

### SPECIFICATION

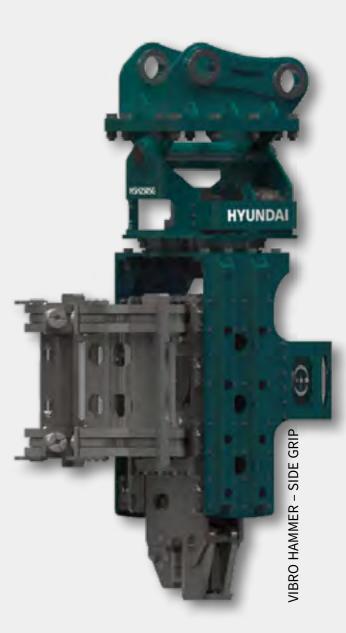
Speci	fication	Unit	HECO50N	HEC100	HEC150	HEC200	HEC300
Implu	se force	ton	2.1	4.0	6.4	11.2	17.3
M. S. L.	Adapter mount type		260	430	689	1,094	1,502
Weight	Direct mount type	kg	264				
11.*.1.1/11	Adapter mount type	mm	650	640	750	840	943
Height(H)	Direct mount type	mm	695				
Wid	th(W)	mm	320	610	740	860	1,000
Base pla	ate (W x L)	mm	320 x 745	610 x 900	740 x 1,050	860 x 1,200	1,000 x 1,300
Compa	ction area	m	0.24	0.55	0.78	1.03	1.30
Oil flow	required	lpm	45 ~ 65	50 ~ 120	80 ~ 170	110 ~ 200	160 ~ 250
Max. Cycle	e per minute	rpm	2,100	2,000	2,000	2,000	2,000
0 "	Free load	bar	30 ~ 50	30 ~ 50	30 ~ 50	30 ~ 50	30 ~ 50
Operating pressure	With load	bar	100 ~ 220	100 ~ 138	100 ~ 138	100 ~ 138	100 ~ 138
Applicable	Applicable Carrier Range		4~6	6~10	11 ~ 16	17 ~ 25	26 ~ 40

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

# VIBRO HAMMER









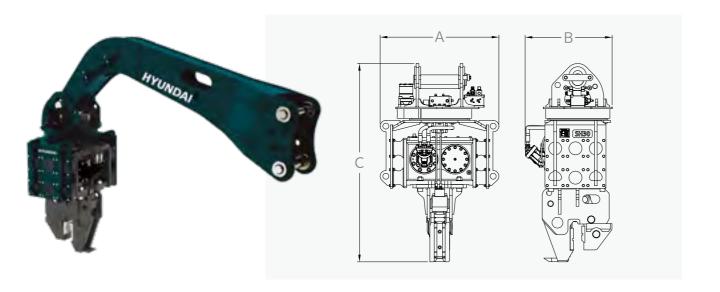


SEA SIDE

RIVER SIDE



SAND FIELD



### • SPECIFICATION

Specification	Unit	HSH250	HSH300	HSH400
Weight (Incl. Mounting Cap)	kg	1,520	1,810	2,050
Extension boom weight	kg	500	600	715
Setting Pressure	bar	250	250	280
Oil flow	lpm	170 ~ 200	180 ~ 220	240 ~ 260
Centrifugal Force	kN	400	520	550
Frequency	rpm	2,800 ~ 3,600	2,600 ~ 3,600	2,200 ~ 2,800
Rotation	degrees	360	360	360
Jaw open	mm	65	65	65
Dimension (A x B x C)	mm	1,094 x 711 x 1,862	1,094 x 805 x 1,862	1,200 x 900 x 1,950
Max. Working height	m	8.5	10.5	11.5
Applicable Carrier Range	ton	20 ~ 30	30 ~ 40	40 ~ 55

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

### Faster and more powerful

 Faster penetration and pulling up than other vibratory hammers thanks to bigger and centered eccentric weight.

## Low maintenance cost & Easy maintenance

- Concise structure of components

### **Rotational mounting**

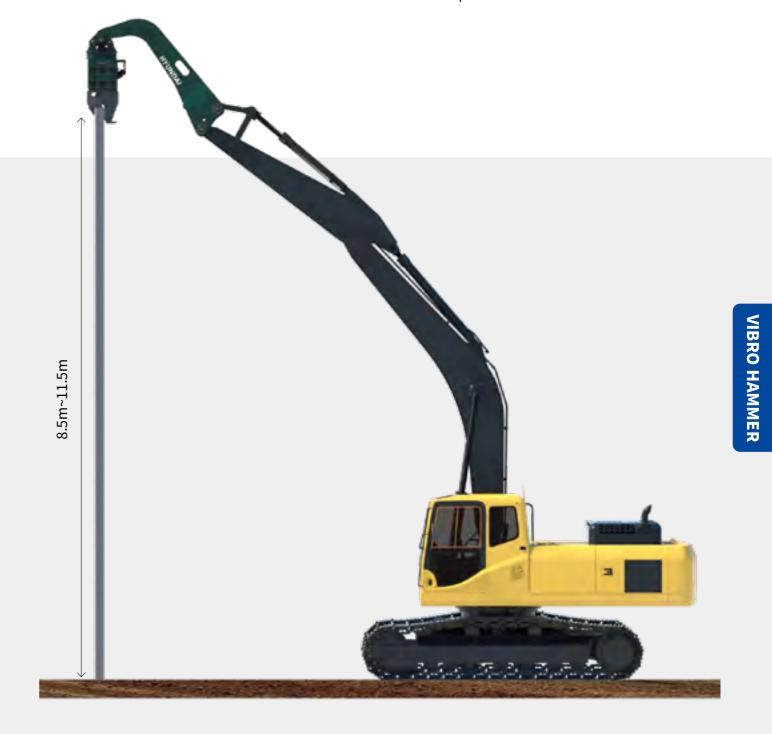
- 360 hydraulic rotation system

### Rigid and durability

- Double bearing structure and rigid rubber cushion

### Easy installation & operation

- Concise operation electric kits



### **VIBRO HAMMER - AUTO TILTING**

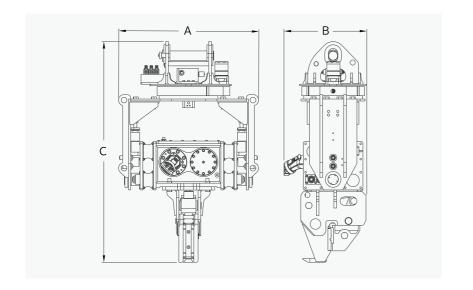




SEA SIDE RIVER SIDE



SAND FIELD



### • SPECIFICATION

Specification	Unit	HSH250T	HSH300T	HSH400T
Weight (Incl. Mounting Cap)	kg	1,620	1,910	2,250
Extension boom weight	kg	500	600	715
Setting Pressure	bar	250	250	280
Oil flow	lpm	170 ~ 200	180 ~ 220	240 ~ 260
Centrifugal Force	kN	400	520	550
Frequency	rpm	2,800 ~ 3,600	2,600 ~ 3,600	2,200 ~ 2,800
Rotation	degrees	360	360	360
Tilt angle	degrees	90	90	90
Jaw open	mm	65	65	65
Dimension (A x B x C)	mm	1,326 x 711 x 2,089	1,326 x 805 x 2,089	1,435 x 900 x 2,180
Max. Working height	m	8.5	10.5	11.5
Applicable Carrier Range	ton	20 ~ 30	30 ~ 40	40 ~ 55

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

### More efficient and safer works

- 90-degree tilt / 360° hydraulic rotation function enable more efficient and safer works

### "Auto Hold" function on 90-degree tilting position

### **Rigid and durability**

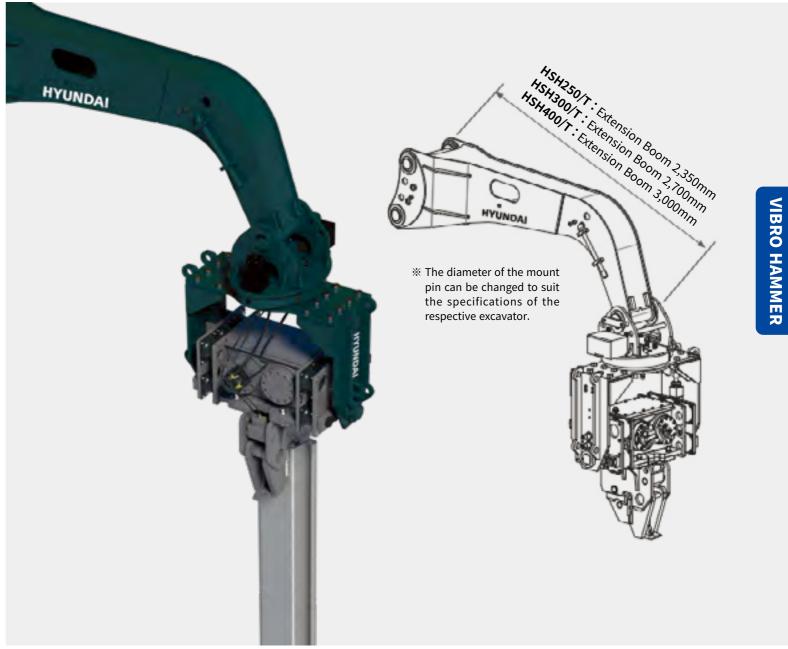
- Double bearing structure and rigid rubber cushion

### Low maintenance cost & easy maintenance

- Concise structure of components

### Easy installation & operation

- Concise operation electric kits
- Compact design without tilting cylinders, which is prone to break down and high maintenance costs



### **VIBRO HAMMER - SIDE GRIP**







SEA SIDE

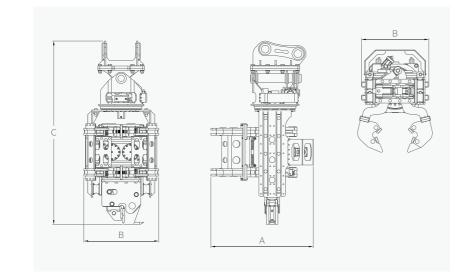
RIVER SIDE





HEAD ROOM CONSTRUCTION

CONFINED SPACE JOB SITE



### • SPECIFICATION

Specification	Unit	HSH250SG	HSH300SG
Weight (Incl. Mounting Cap)	kg	2,820	3,300
Setting Pressure	bar	250	250
Oil flow	lpm	170 ~ 200	180 ~ 220
Centrifugal Force	kN	400	520
Frequency	rpm	2,800 ~ 3,600	2,800 ~ 3,600
Rotation	degrees	360	360
Tilt angle	degrees	±30	±30
Jaw open	mm	65	65
Dimension (A x B x C)	mm	1,515 x 1,040 x 2,833	1,515 x 1,040 x 2,833
Applicable Carrier Range	ton	20 ~ 30	30 ~ 45

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

### Available for a wide ranges of piles

- Sheet piles, H beams, I-H beams, and round-piles

### Versatile piling at headroom job site

### Versatile piling at a confined space job site

### Precise and accurate side clamping

- 360-degree Swivel rotatable jaws enable precisely and accurately clamping

### Quicker and more powerful piling

- Faster penetration and extraction than other side grip pile drivers thanks to bigger and double eccentric weight

### Low maintenance cost & easy maintenance

- Concise structure of components

### **Rigid and durability**

- Double bearings, balanced counter weighs and rigid rubber cushion



### **SIDE GRIP SELECTION GUIDE**

Мо	del	30~45 ton	28~30 ton	20~26 ton	17~20 ton				
	6m/2800kg								
	12m/1900kg	HSH300SG							
	16m/1300kg								
	8m/2300kg								
Pile size (length/weight)	12m/1800kg		HSH300SG HSH250SG	HSH250SG					
(101.601)	16m/1200kg								
	6m/1200kg								
	8m/1000kg				HSH250SG				
	10m/900kg								
Suitable piles	Sheet piles		Width 400 ~1,200mm / depth 265mm						
Suitable piles	Suitable piles H-beams/Round-piles		Max 500X300 / Max dia 500mm						

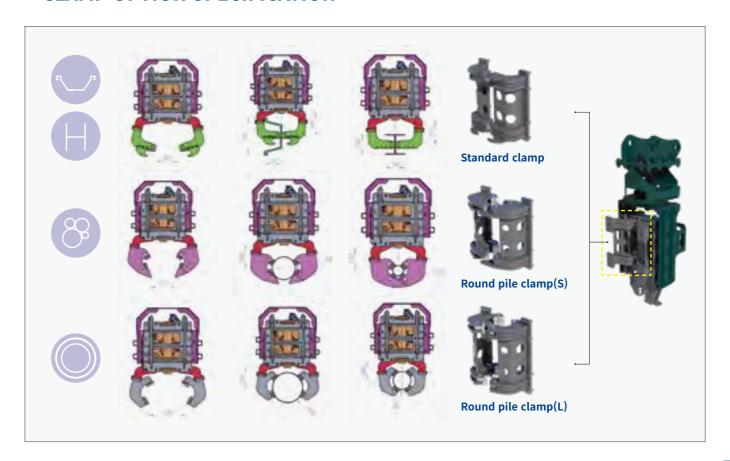
<sup>\*</sup> When making the final selection, excavator engine size and hydraulic system design (oil pump arrangement, oil flow rate/pressure, etc.), excavator lifting capacity and stability as well as soil and site conditions shall be taken into account

Мо	Unit	HSH250SG	HSH300SG		
Suitable pile grip dia	Round pile clamp(S)	mm	150 ~ 350		
	Round pile clamp(L)	mm	300 ~ 500		

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.

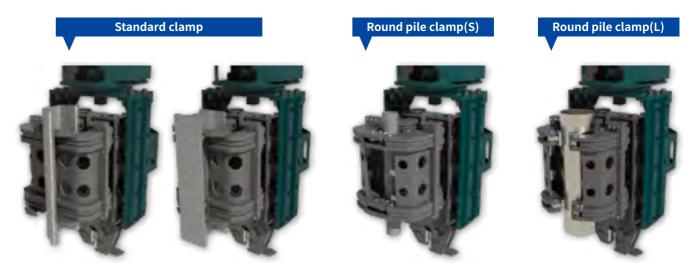
### **SIDE GRIP CLAMP SELECTION GUIDE**

### • CLAMP OPTION SPECIFICATION



### • INTERCHANGEABLE CLAMP OPTION

Thanks to its interchangeable side clamp system, the Vibro Hammer – Side Grip can handle all types of piles with its multiple clamps, and it offers quick transfer capability between various applications Round pile clamp(S) and Round pile clamp(L) are an option



For sheet piles and H beams

For round shape piles sized from dia 150mm to 350mm

For round shape piles sized from dia 300mm to 500mm

# VIBRO RIPPER



### **VIBRO RIPPER**





DOWNTOWN CONSTRUCTION

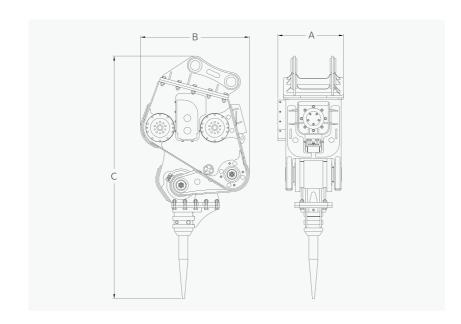




**TUNNEL CONSTRUCTION** 

MINING

UNDER WATER OPERATION



### Tip(tooth) type







Compactor type(Option for model HSR250/300)



### Higher productivity than hydraulic breaker

- 2-8 times better productivity than hyd. breaker depending on type of rocks

### More powerful than other vibratory rippers

-Unique structure and design specially bigger and centered eccentric weight enable - most powerful Ripper in the same class

### **Selective tool options - Three tools for** one Ripper

- Chisel type for hard rock, Tip(Tooth) type for Soft & mid hard rock and Compactor type for compacting ground
- Three optional tools enable to offer wider selections of application at rock breaking job sites

### Minimum vibration to excavator and operator at hard-rock

- Unique Cartilage-link allows more powerful striking force but less vibration transmitted to excavator and
- Less impact to excavator and less fatigue to operator

### Minimum noise

- Unique Cartilage-link structure minimizes the noise (max. 90dB in 10m) and it allows the construction in noise-regulated area

### Easy on-site maintenance & low maintenance cost

- Concise structure of components and double bearing structure
- Most parts can be replaced at job site
- No need to return it to repair shop
- Less number of parts enable low maintenance cost
- Maximum productivity can be achieved by reducing down time by on site parts replacement and fast tip(tooth) replacement

### **Under water operation without special** devices

- All kinds of work under water can be done without any expensive and complicated preparations

### SPECIFICATION

Specification	Unit	HSR250	HSR300	HSR400	HSR500	HSR800
Weight (Incl. Mounting Cap)	kg	2,620	3,450	4,440	5,600	10,500
Setting pressure	bar	250	250	280	280	300
Operating Pressure	bar	180 ~ 220	180 ~ 220	210 ~ 250	210 ~ 250	240 ~ 270
Oil Flow	lpm	170 ~ 200	180 ~ 220	240 ~ 280	250 ~ 310	500 ~ 560
Frequency	bpm	2,500 ~ 3,500	2,500 ~ 3,200	2,000 ~ 2,800	2,000 ~ 2,800	2,200 ~ 2,500
Dimension (A x B x C)	mm	787 x 1,148 x 2,870	863 x 1,321 x 3,231	915 x 1,401 x 3,385	1,060 x 1,554 x 3,665	1,404 x 1,600 x 4,100
Tool Diameter	mm	110	120	130	140	180
Applicable Carrier Range	ton	20 ~ 25	28 ~ 34	36 ~ 43	46 ~ 60	70 ~ 90

<sup>\*</sup> Specifications above are subject to change without notice for quality improvement.