

HDB Series Breakers

MOVING YOU FURTHER

HYUNDAI HEAVY INDUSTRIES



*Photo may include optional equipment

 **HYUNDAI**
CONSTRUCTION EQUIPMENT AMERICAS, INC.

The Best Selection for Your Job!

- ✓ Powerful Performance
- ✓ Advanced Technology
- ✓ Innovative Durability

Features for HDB Series Breakers

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

The HDB series offers a larger diameter tie bolt for high performance and optimum durability.

The hoses connecting the inlet/outlet ports have been upgraded from a split flange type to a new adapter type that avoids bolt breakage and oil leakage.

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

Hyundai breakers have a larger chisel diameter, which increases the strength of the chisel and therefore also improves durability.

The product range consists of 14 different models to fit multiple machine sizes and applications.

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

The Anti-Blank Firing system ensures long life for chisel pins, tie bolts, front heads, etc.



Tool & Option



*Photo may include optional equipment.

Choice of Options









Auto Grease Bracket Mounted System

This system has many advantages:

- Eliminates need to manually grease by operator
- Automatic greasing several times a day
- Contributes to longer tool life, especially for chisels
- No need for extra drive power
- Applicable breakers are from HDB140 to HDB800



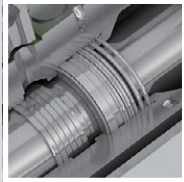
Shape of Chisel

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



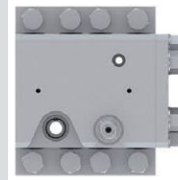
- By using only NOK seals on the HDB series, we have achieved longer seal life.

- 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 minimize piston vibration inside the housing.

Valve Case with TPC (Total Power Control) System



- We have shortened the height of the valve case, but increased the width 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.

ABF (Anti Blank Firing) System with Auto Control Valve



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

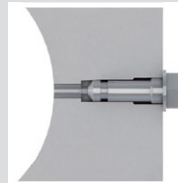
- This system helps protect the chisel pins, tie bolts and front heads

from blank firing, and it is suitable for all applications.

- When the auto control valve is turned on, the breaker operation will automatically start once there is a small amount of pressure from under the chisel. It will automatically stop when chisel is lifted after breaking or there is no material below chisel.

- Models from HDB600 to HDB800 do not have the option to turn off the auto control valve in order to protect the breaker.

2 Stroke Selector System



The 2 stroke selector is located on the side of the cylinder as a standard feature (HDB50~HDB180). The selector switches between long stroke to short stroke according to

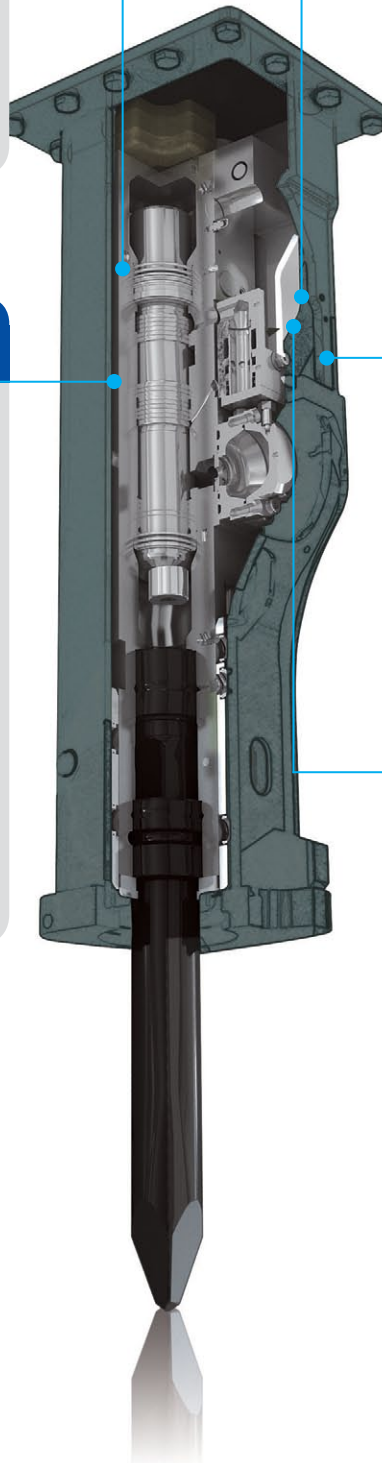
operator's need for optimal performance.

Energy Regeneration Valve



After the piston strikes the chisel and the piston retracts back up the cylinder, up to 15% of the flow energy is harnessed to be

reapplied on the next stroke down. (HDB600, HDB800)



Specification

HDB Series Breaker Specification

Item	Unit	HDB10	HDB20	HDB40	HDB50	HDB90	HDB140	HDB180	HDB210	HDB250	HDB300	HDB360	HDB450	HDB600	HDB800
Operating Weight (Top Box BKT.)	kg	123	155	199	333	614	929	1209	1738	2165	2832	2937	3713	4105	5625
	lb	271	342	439	734	1354	2048	2665	3832	4773	6243	6475	8186	9050	12401
Overall Length (w/STD. MTG.BKT.)	mm	1128	1250	1380	1603	1981	2225	2455	2764	2898	3200	3200	3595	3616	4059
	in	44.4	49.2	54.3	63.1	78.0	87.6	96.7	108.8	114.1	126.0	126.0	141.5	142.4	159.8
Overall Length (w.o/MTG. BKT)	mm	988	1110	1214	1419	1760	1962	2153	2395	2526	2790	2790	3173	3133	3505
	in	38.9	43.7	47.8	55.9	69.3	77.2	84.8	94.3	99.4	109.8	109.8	124.9	123.3	138.0
Chisel Out Diameter	mm	40	45	62	70	85	105	120	135	145	150	155	165	180	200
	in	1.6	1.8	2.4	2.8	3.3	4.1	4.7	5.3	5.7	5.9	6.1	6.5	7.1	7.9
Chisel Length	mm	425	500	625	730	850	975	1165	1250	1280	1400	1400	1650	1500	1700
	in	16.7	19.7	24.6	28.7	33.5	38.4	45.9	49.2	50.4	55.1	55.1	65.0	59.1	66.9
Setting Pressure	kgf/cm ²	150	150	150	170	190	190	210	210	210	210	210	210	240	250
	psi	2134	2134	2134	2418	2702	2702	2987	2987	2987	2987	2987	2987	3414	3556
Working Pressure	kgf/cm ²	80~	80~	90~	100~	100~	120~	120~	130~	140~	140~	140~	140~	150~	150~
		110	110	120	140	140	160	170	170	180	180	180	180	190	190
	psi	1138~	1138~	1208~	1422~	1422~	1707~	1707~	1849~	1991~	1991~	1991~	1991~	2134~	2134~
		1565	1565	1707	1991	1991	2276	2418	2418	2560	2560	2560	2560	2702	2702
Oil Flow	lpm	15~	20~	30~	30~	50~	90~	100~	110~	150~	180~	180~	200~	280~	322~
		2 5	30	50	55	100	110	140	160	210	250	250	280	398	454
	gpm	4.0~	5.3~	7.9~	7.9~	13.2~	24~	26.4~	29.1~	39.6~	47.6~	47.6~	52.8~	74.0~	85.1~
		6.6	7.9	13.2	14.5	26.4	29	37.0	42.3	55.5	66.0	66.0	74.0	105.1	119.9
Blow Rate (H/Speed)	BPM	800~	600~	400~	350~	300~	350~	350~	350~	250~	200~	200~	200~	294~	231~
		1200	1000	1000	900	700	550	550	500	350	350	350	300	480	374
					(450~	(550~	(500~	(500~	(450~	(300~	(300~	(300~	(300~	(368~	(298~
					1000)	950)	750)	850)	600)	450)	480)	480)	450)	600)	484)
Back Head N' Gas Pressure	kgf/cm ²	16.5	16.5	12	12	12	12	12	11	11	11	11	11	11	11
	psi	234.6	234.6	171	171	171	171	171	156	156	156	156	156	156	156
Suitable Excavator	ton	0.5~1.5	0.8~1.5	3~4.5	3~8	6~9	10~15	16~20	18~25	22~29	26~32	28~36	40~50	42~81	55~100
	lb	1102~	1763~	6612~	6612~	13228~	22046~	35274~	39683~	48502~	57320~	61729~	88185~	92594~	121254~
		3306	3306	9921	17637	19842	33069	44092	55116	63934	70548	79366	110231	178574	220462

Suitable Model

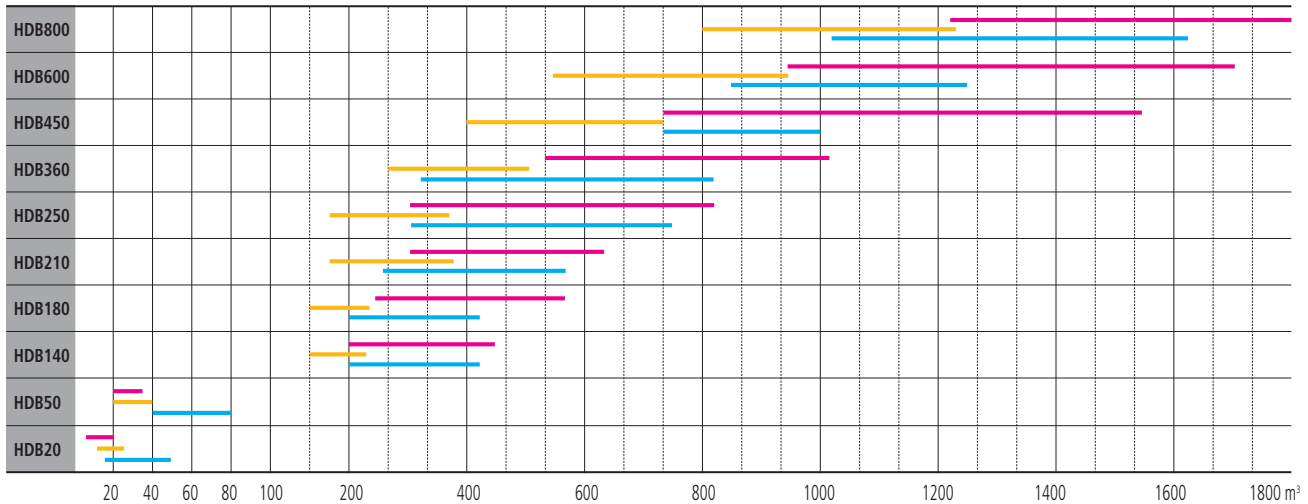
Item	HDB10	HDB20	HDB40	HDB50	HDB90	HDB140	HDB180	HDB210	HDB250	HDB300 / HDB360	HDB450	HDB600	HDB800
Model	R16-9	R27Z-9 R25Z-9A	R35Z-9	R55-9 R55W-9 R60CR-9	R80CR-9	R140LC-9 R140W-9 R140W-9A R145LCR-9 R145LCR-9A	R160LC-9 R170W-9 R180LC-9 R180W-9A	R210LC-9 R210NLC-9 R210W-9 R220LC-9A R235LCR-9 R235LCR-9A	R250LC-9 R260LC-9A	R290LC-9 R300LC-9A R320LC-9 R330LC-9A R380LC-9 R380LC-9A R430LC-9 R430LC-9A	R480LC-9 R480LC-9A	R520LC-9 R520LC-9A	R800LC-9

HDB Application

Contents	HDB10	HDB20	HDB40	HDB50	HDB90	HDB140	HDB180	HDB210	HDB250	HDB300	HDB360	HDB450	HDB600	HDB800
Underwater works	-	-	●	●	●	●	●	●	●	●	●	●	●	●
Auto Greasing System Hole	-	-	-	●	●	●	●	●	●	●	●	●	●	●
TPC (Total Power Control) System Selector Type	-	-	-	●	●	●	●	●	●	●	●	●	-	-
ABF (Anti Blank Firing) System	-	-	-	●	●	●	●	●	●	●	●	●	●	●
Energy Regeneration Valve	-	-	-	-	-	-	-	-	-	-	-	-	●	●
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

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