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CE ISO9001 CERTIFIED ISO14001 CERTIFIED

Company History

Dec. 2000	Corporation Establishment (Subcontractor with Doosan)
Aug. 2006	Plant Complete (Dohwa , Inchon)
Nov. 2006	Certification of Quality Management System (Korea Foundation for Quality)
Jul. 2007	Certification of Clean Factory (Korea Occupational Safety Agency)
Oct. 2007	Organization of Factory Automation Business Team.
Nov. 2007	Technical Coordination Contract for Impregnation Facility with Japanese Inventory R & D Center.
Jan. 2009	Certification of Venture Corporation (Korea Technology Finance Corporation)
Mar. 2010	Plant Complete for FA Industries and Plant Team.
Apr. 2011	Pzzatent of Correction Equipment for Welding Distortion of Steel Plate.
Apr. 2011	Chosen as INNO-BIZ Corporation (Small and Medium Business Administration)
Dec. 2012	Chosen as VISION Corporation (Inchon City)
Apr. 2013	Initiate the development of construction machine attachments.

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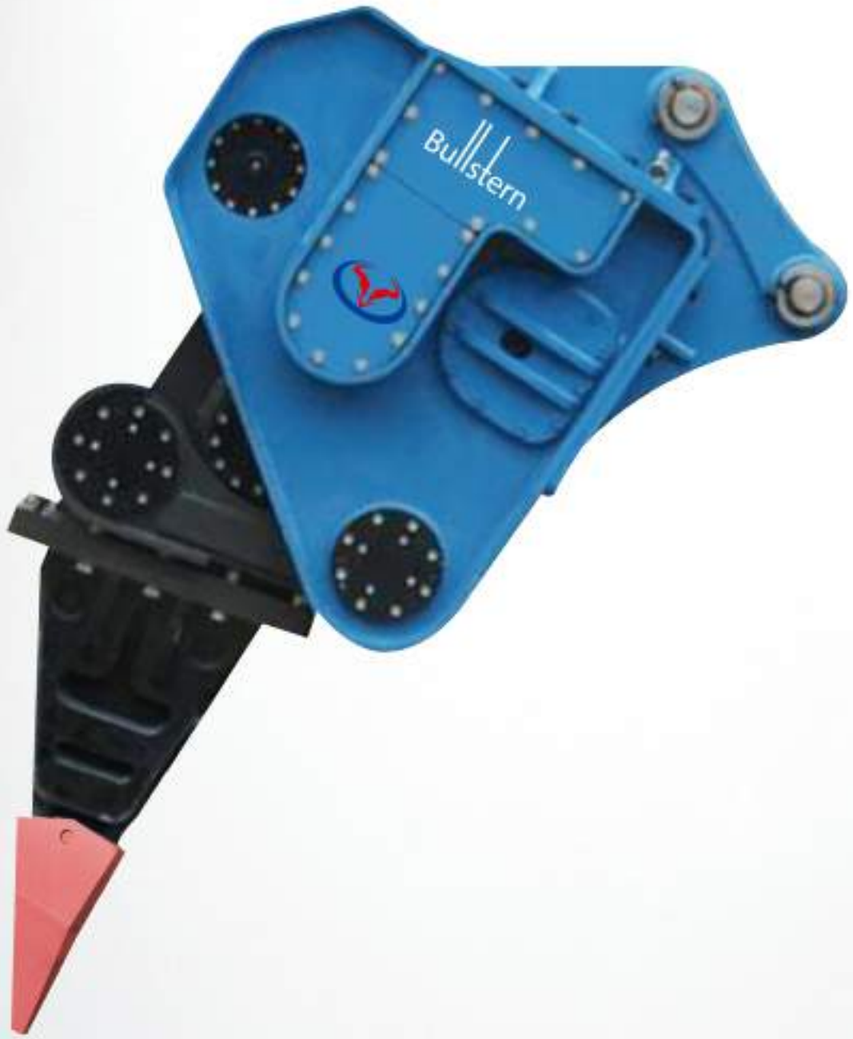
Auto Ripper



- Reduce noise more than 10dB against hydraulic breaker and secure 2 to 5 times higher performance covering 70% of all different types of working sites compared to hydraulic breaker.
- Most of field works such as breaking, ripping and crushed rubble handling can be simultaneously available.
- Carry out construction work even in city zone as sensitive place to machine noise.
- Minimize operator's vibration fatigue compared to other ripper machines, the operator's preference for this fatigue relief can contribute to high job efficiency.
- Construction work in river and ocean can be available without extra optional devices.
- Machine protection design from ripper's high vibration.
- Lower maintenance cost than the existing hydraulic breaker's.
- With additional option devices, the ripper can be used as compactor or pile-driving hammer.

Item	Unit	V140	V250	V300	V400
Excavator class	ton	11-16	18-26	27-33	33-40
Ripper weight	kg	1500	2200	2700	4000
Frequency	bpm	2000-2500	2000-2500	2000-2500	2000-2500
Dimension (LxWxH)	mm	2000 x 1024 x 607	2328 x 1200 x 710	2833 x 1463 x 867	3150 x 1625 x 963
Hydraulic oil flow	lpm	80-140	130-180	170-200	200-260
Hydraulic working pressure	bar	150-200	180-200	200-250	200-250
Hydraulic return pressure	bar	6	6	6	6
Case drain maximum pressure	bar	4	4	4	4
Accumulator pressure	bar	6	6	6	6

Vibro Hammer

- Lower cost of maintenance than crane hammer.
- Outstanding workability and mobility.
- Easier operate in critical regions such as chaotic section of city, bridge area and the vicinity of high-voltage wires than crane hammer does.
- Equipped with high-powered hydraulic piston motor and suitable bearing for high frequency vibration.
- Install vibro isolating rubber for high frequency purpose.
- Easy connect and disconnect the hammer by the use of excavator's breaker hydraulic lines.
- The clamping lug can handle and move construction objects easily.
- Pile driving power 20% up compared to the existing equipments.
- Sufficient wear-resistant design and 360-degree revolution.

Item	Unit	W250	W300	W400
Excavator class	ton	20-28	28-34	33-40
Hammer weight	kg	1600	1800	1900
Extension boom weight	kg	600	700	700
Clamping jaw	mm	65	65	65
Frequency	bpm	2000-2500	2000-2500	2000-2500
Slewing degree	degree	360	360	360
Dimension (LxWxH)	mm	1857 x 1042 x 650	1959 x 1103 x 792	2016 x 1196 x 830
Hydraulic oil flow	lpm	130-180	170-200	200-260
Hydraulic working pressure	bar	180-200	200-250	200-250

Shears

- The world's first hydraulic gap adjuster.
  (For the jaw-blade life extension and the durability improvement of the body and pin.)
- Increase working speed with speed-up valve.
- Sufficient wear-resistant design.
- Easy detachable protection cover for the cylinders.
- Bullstern's unique cutter array develops outstanding cutting force and productivity.
- Cutter guide blades prevent scrap jam outbreak.
- 360 degree revolution.

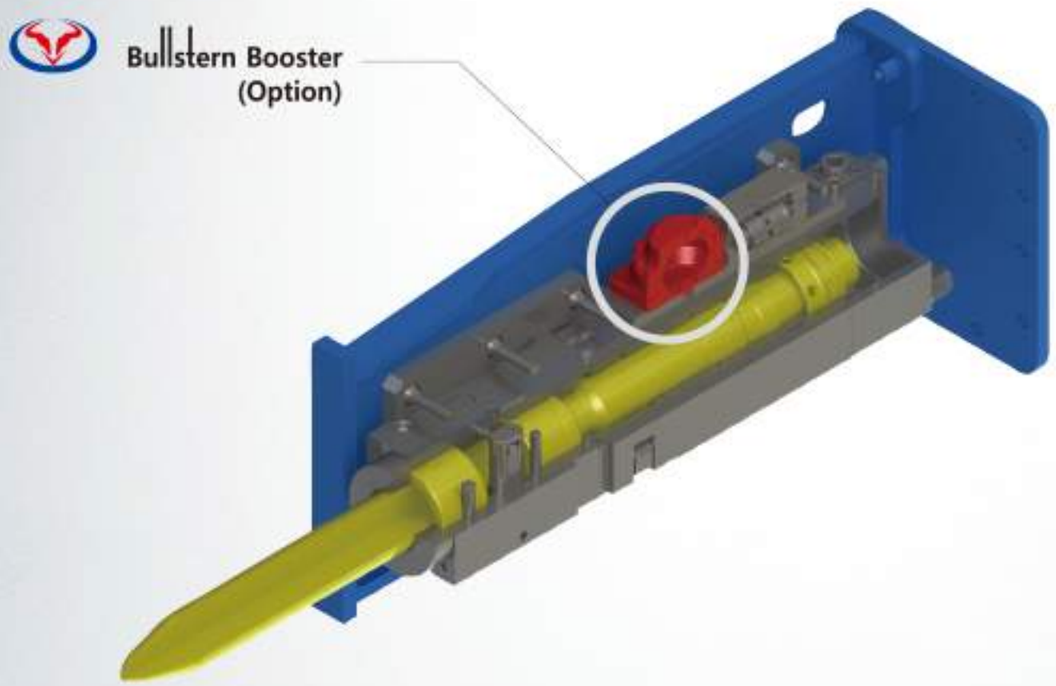
Item	Unit	C250	C300	C400
Excavator class	ton	20-28	28-36	36-47
Shears weight	kg	1920	2980	4450
Overall length	mm	2130	2765	3150
Max. opening width (Jaw)	mm	495	572	695
Cutting force (Max)	ton	320	500	730
Cutting force (Mid)	ton	150	210	295
Cutting force (End)	ton	85	105	215
Oil flow rate	lpm	150-250	180-270	280-360

Compactor

- Quick compact through high frequency and power.
- Air vibration absorber relieves operator's fatigue.
- Dual performance of steel pile drive and soil compact is available.
- Install the piston pump for high efficiency performance.
- Various ground compaction.
- Building ground work.
- Slope compact.
- Compact for the construction of drain pipe and trench.
- Backfill construction.

Item	Unit	D50	D80	D140	D250	D300
Excavator class	ton	4-6	6-10	11-17	17-26	26-40
Compactor weight	kg	240	420	720	1050	1200
Vibration power	ton	3.0	4.0	6.5	11.5	18.0
Frequency	bpm	2000	2000	2000	2000	2000
Bottom size	mm	300 x 800	650 x 900	750 x 1000	850 x 1200	1000 x 1305
Hydraulic oil flow	lpm	45-65	50-80	80-120	110-170	160-230
Hydraulic working pressure	bar	100-150	100-150	100-150	100-150	100-150

Hydraulic Breaker



Bullstern Booster : self-developed unique technology
which enhance efficiency compare to traditional hydraulic breaker

Moil

All demoiltion work, Road Construction, Bridge foundation

Wedge

All demoiltion work, Trenching rocks, Cutting concrete

Blunt

Mining, Quarrying, Crushing rocks

Cone

Quarrying rocks, Cracking concrete

Hydraulic Breaker Specification

Description / Model		Unit	B10	B20	B30	B40	B50	B60	B80	B140	B170	B200	B250	B270	B300	B350	B400	B500
Suitable Excavator		Ton	0.8~2.5	1.2~3.0	2.5~4.5	3.0~5.5	4~7	6~9	7~14	11~16	15~18	16~21	18~26	25~30	28~35	29~36	35~45	40~55
Operating Weight	Top Type	kg	110	135	150	210	335	410	600	920	1350	1700	2150	2250	3000	3150	3400	4150
		lb	243	297	330	462	737	902	1320	2024	2970	3740	4730	4950	6600	6930	7480	9130
	Box Type	kg	115	145	180	250	340	415	590	890	1300	1660	2000	2250	2850	2950	3350	4300
		lb	253	319	396	550	748	913	1298	1958	2860	3652	4400	4950	6270	6490	7370	9460
Operating Pressure		bar	90~120	90~120	90~120	100~130	110~140	120~150	130~160	150~170	150~170	160~180	160~180	160~180	160~180	160~180	160~180	160~180
		psi	1280~1707	1280~1707	1280~1707	1422~1849	1565~1991	1707~2134	1849~2276	2134~2418	2134~2418	2276~2560	2276~2560	2276~2560	2276~2560	2276~2560	2276~2560	2276~2560
Required Oil Flow		l/min	15~30	20~40	25~50	30~60	40~70	50~90	60~100	80~110	90~120	100~150	120~180	150~210	180~240	180~250	200~260	210~290
		gal/min	4.0~8.0	5.3~10.6	6.6~13.2	7.9~16.0	10.6~18.5	13.2~23.8	15.9~26.4	21.1~29.1	23.8~31.7	26.4~39.6	31.7~47.6	39.6~55.5	47.6~63.4	47.5~66.1	50.8~68.7	55.5~76.6
Impact Rate		bpm	800~1400	700~1200	600~1100	500~1000	500~900	400~800	400~800	350~700	350~650	350~600	350~500	300~450	300~450	250~400	250~350	250~350