

STARKE

SonHa
Heavy services

SON HA MECHANIZATION CONSTRUCTION & TRANSPORT JSC

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INTRODUCTION TO STARKE

Founded in 1993, STARKE, a family-owned business, is honored to announce that we have become the leading manufacturer of piling hammers with the highest market share in China and expanding our presence globally

We aim to explore cutting-edge piling methods with customers enforced by our strong R&D capability, productivity and testing capacity, to deliver outstanding products worldwide.

1st
CHINA'S FIRST HYDRAULIC HAMMER MANUFACTURER

NO.1
HIGHEST IN MARKET SHARE

NO.1
NUMBERS OF PATENT IN INDUSTRY

30+ YEARS
INDUSTRY EXPERIENCE

300+
EMPLOYEES

2 LARGE
PRODUCTION PLANTS

3000+
GLOBAL CUSTOMERS

7+
PRODUCT SERIES



7 PRODUCT SERIES

-



01

HYDRAULIC IMPACT HAMMER



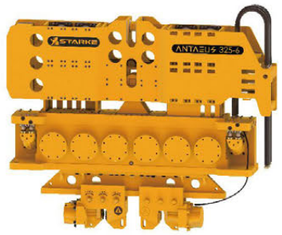
02

DIESEL HAMMER

03

HYDRAULIC PILE PRESSING MACHINE





04

HYDRAULIC VIBRATORY HAMMER



05

FOOT-STEP PILING RIG



06

CRAWLER PLIING RIG

07

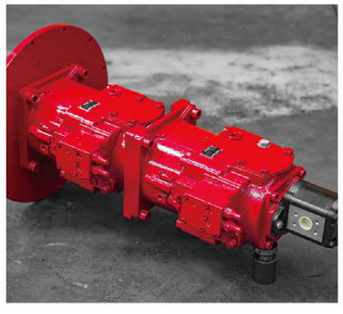
HIGH ENERGY ROCK BREAKER

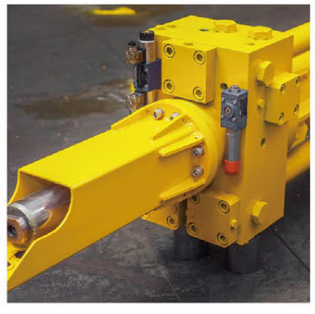


STARKE
FULL OF MIGHT









GO BEYOND THE ORDINARY

TWO TESTING PLATFORMS

In addition to following standard product quality inspection procedures, our company stands out as a unique manufacturer with two state-of-the-art testing platforms,possibly the only one in the world. Our commitment to product quality is unwavering; therefore, every product that leaves our factory has undergone rigorous testing and operation on our platforms to ensure the delivery of flawless goods.



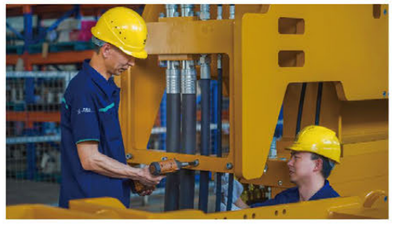
● Small and medium-sized hammer testing platform



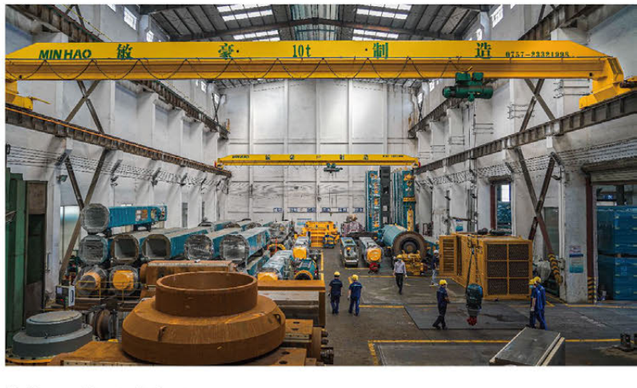
● World leading test center console







● Production workshop



● Assembly workshop

OUR JOURNEY

-

• 1993

STARKE Established in 1993



• 1994

The first diesel hammer



• 1997

Developed the pile pressing machine



• 1999

New factory



• 2001

Cooperation with ICE USA



• 2003

Branch factory



• 2008

First hydraulic hammer prototype in China



• 2013

Developed the biggest hydraulic hammer in china,HHP35



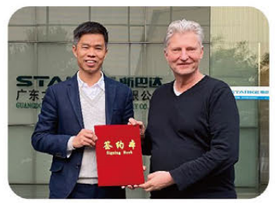
• 2016

3 sets of HHP50 work in Zhoushan–Daishan Bridge



• 2019

In partnership with John White, founder of APE



• 2022

HHD1000 equipped on China's biggest piling barge



• 2024

Tandem SV400 vibratory hammer commissioning success



1993-2024

MOVING FORWARD ALL THE WAY, NEVER STOPPED, WE'VE BEEN ON THE ROAD ALL ALONG

STARKE

HYDRAULC IMPACT HAMMER SERIES

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ENERGY TRANSFER RATE

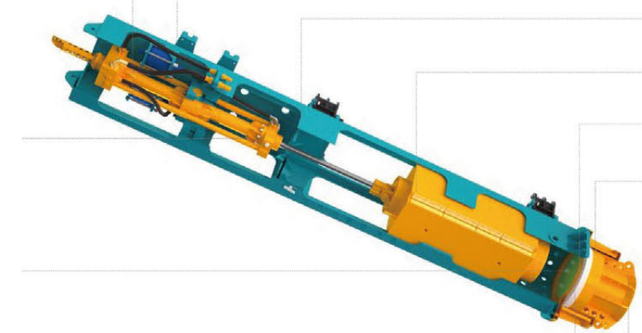
UP TO
94%

STRONG DURABILITY

UP TO
50%
Higher service life

ADJUSTABLE STRIKE ENERGY

Main Structure
HHP4-HHD1000



Hydraulic Impact hammer
Technical parameters

Model	Unit	HHP4	HHP5	HHP8	HHP10	HHP12	HHP14	HHP16	HHP18	HHP20	HHP25	HHP30	HHP35	HHP40	HHP50	HHD1000
Max. strike energy	kN.m	48	60	120	150	180	210	240	270	300	375	450	525	600	750	1040
Max. stroke of hammer	mm	1200	1200	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1600
Strike frequency (max./min)	bpm	80/36	80/36	80/30	80/36	80/36	80/32	80/34	80/32	80/30	80/36	80/32	60/32	60/30	60/28	60/28
Ram weight	kg	4000	5000	8000	10000	12000	14000	16000	18000	20000	25000	30000	35000	40000	50000	65000
Hammer weight (w/o pile cap)	kg	6595	7605	12255	16420	17600	20000	23760	25400	28500	41500	49025	56600	62600	74600	109000
Recommended diesel engine power pack			P260			P325		P550			P600/AP800		AP800		P1200	P1400
Recommended electric power pack		EP100				EP300			EP350			/				

Power pack
Technical parameters

		Diesel engine power pack							Electric power pack		
Model	**Unit**	**P260**	**P325**	**P550**	**P600**	**AP800**	**P1200**	**P1400**	**EP100**	**EP300**	**EP350**
Brand of engine		Cummins C260	Cummins C325	Cummins C550	U.S Cummins QSX15	WEICHAI 6M33	QSX15-C600×2	CAT-C18×2	/	/	/
Power of engine	kw	194 @2000 rpm	239 @1800 rpm	410 @1800 rpm	447 @2000 rpm / 403 @2000 rpm	670 @1800 rpm	894 @2000 rpm	1048 @1800 rpm	75 @1480 rpm	90+90 @1480 rpm	90+90+90 @1480 rpm
Rated pressure	MPa	26	26	26	26	26	26	26	26	26	26
Max. flow	L/min	260	380	530	760	828	1520	1872	203	493	493
Hydraulic oil tank	L	1850	1850	1725	1725	2700	5100	7986	850	1260	1530
Diesel oil tank	L	550	550	770	770	860	2250	2450	/	/	/
Overall size(L*W*H)	mm	4100*1750*2200	4100*1750*2200	4628*1876*2245	4628*1876*2245	5200*2030*2310	6200*3420*2635	7000*3550*2680	2460*1360*2030	3110*1570*1960	3580*1700*2140
Net weight	kg	5250	5250	7400	7400	10500	23300	26000	3000	3930	6920

CONSTRUCTION CASES





HHP14 with LH86 In Malaysia

HHP14 for raked pile In Indonesia

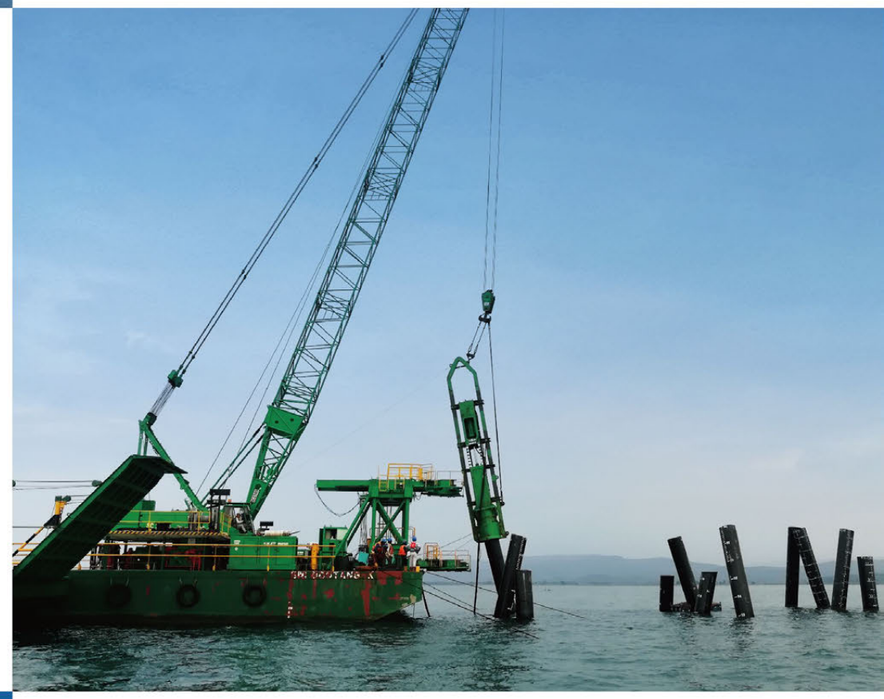


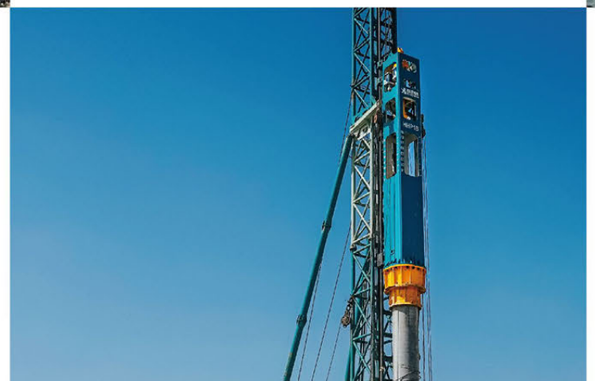
HHD1000 with China's biggest piling barge
Bridge project in Ningbo, China

HHP20 for port construction
In Malaysia



HHP14 for real estate In China

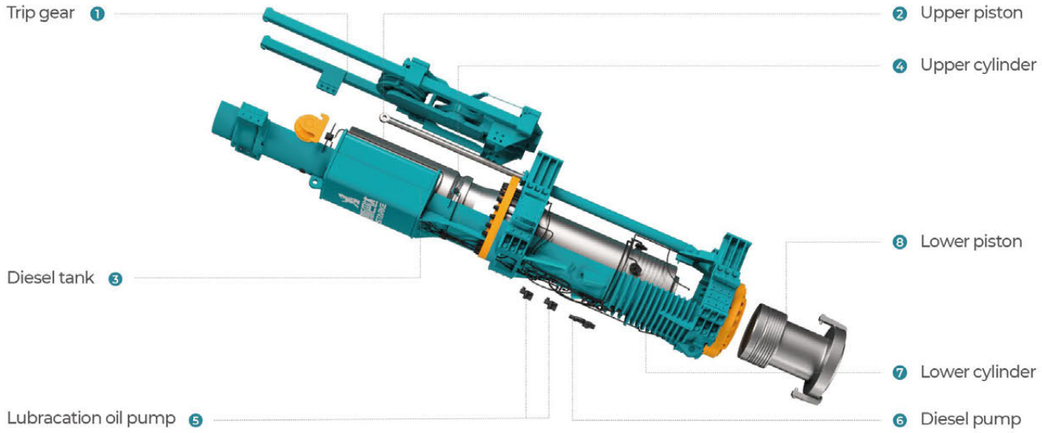




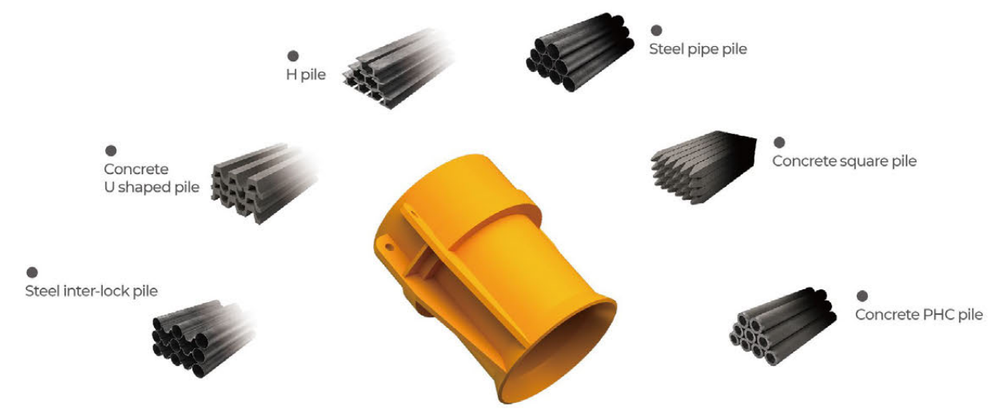
HHP18 for real estate In Guangdong, China



Main Structure
HD8-HD220



Customizable pile cap



Diesel hammer
Technical parameters

Model	Unit	HD8	HD12	HD19	HD25	HD30	HD36	HD46	HD50	HD62	HD72	HD80	HD100	HD125	HD138	HD160	HD180	HD220
Impact weight (upper piston)	kg	800	1280	1820	2500	3000	3600	4600	5000	6200	7200	8000	10000	12500	13800	16000	18000	22000
Power per stroke	kN-m	27.2~12.8	43.52~20.48	61.88~29.43	85~39.2	103.32~48.51	112.9~56.5	156.4~72.13	180~80	217~108.5	244.8~122.4	272~176	340~220	425~275	445~300	516.8~348.8	630~450	770~550
Number of strokes	bpm	35~52	35~52	35~52	35~52	35~52	35~52	35~52	35~52	35~50	35~50	36~45	36~45	36~45	36~45	37~45	37~45	37~45
Max. weight for suitable pile	kg	3000	5000	6000	7000	8000	10000	15000	20000	25000	27000	30000	40000	50000	55000	70000	80000	85000
Hammer weight	kg	2050	3110	3750	5550	6050	8200	9200	11400	12300	13100	16900	20560	25500	27000	32800	38000	47000

CONSTRUCTION CASES



HD36 In China



HD19 with LH40 In Russia



HD50 suspending piling
in Estonia



HD160 for port construction
In Nansha port, China

HD36 with drilling rig In Thailand

HD100 In Hunan province, China

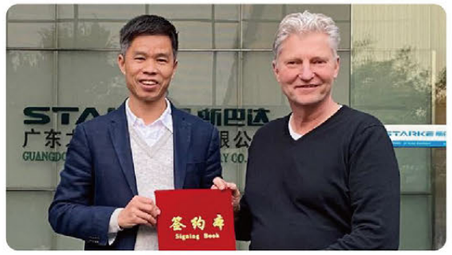




HD180 for port construction In Egypt







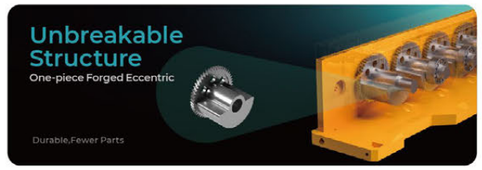
Collaboration with the best

Mr. John White, Ex-founder of APE, has a legacy of innovation with numerous of groundbreaking patents in pile driving. His forward-thinking approach has consistently pushed the boundaries of engineering excellence.

In 2019, ANTEAUS, the company he leads, embarked on a collaborative journey with us, focusing on advancing the capabilities of hydraulic piling equipment through in-depth development.

We are inspired by his visionary expertise and excited about the transformative products we are poised to create, shaping a brighter future for the industry.

Product features







Hydraulic vibratory hammer
Technical parameters

Standard Model							Special Model					
MODEL	Unit	SV325-2	SV325-4	SV325-6	SV400	SV600	Apex 520	SV325-2T	SV325-4T	SV325-6T	SV400x2	SV600x2
Eccentric moment	Kg-m	26	51	77	135	202	62	30	60	90	270	404
Max. Centrifugal force	kN	950	1800	2350	3200	4115	2000	1100	2000	2850	6400	8230
Max. Frequency	rpm	1800	1650	1650	1450	1350	1650	1800	1650	1650	1450	1350
Max. Pile pulling force	kN	1250	1183	1646	2082	3123	1250	1250	1183	1646	4164	6246
Weight(without clamp)	kg	4576	6708	8749	18665	22000	7000	4576	6708	8749	37330	44000
Recommended power pack model		P550	AP800	AP800	AP1200	AP1200	AP800	P550	AP800	AP800	AP1200x2	AP1200x2
Recommended crane tonnage	t	≥50	≥80	≥100	≥175	≥200	≥90	≥50	≥80	≥100	≥350	≥400

Power pack
Technical parameters

Power pack model	Unit	P550	AP800	AP1200
Engine		Cummins C550	Weichai 6M33	Weichai 12M33
Engine power	kW	410	670	900
Rated pressure	MPa	26	30	30
Max. flow	L/min	530	828	1278
Hydraulic oil tank	L	1725	2700	4100
Diesel oil tank	L	770	860	1400
Dimension(L*W*H)	mm	4628*1876*2245	5200*2030*2310	6400*2800*2630
Weight	kg	7400	10500	14500

CONSTRUCTION CASES

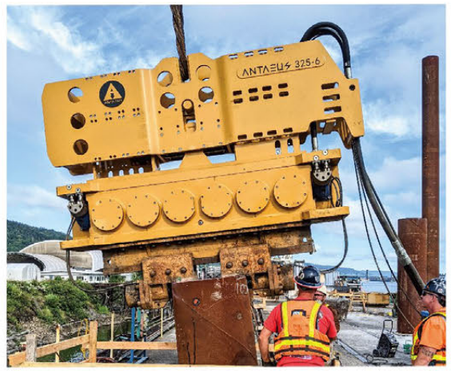


SV325-6 for bridge construction
In China

SV325-6 in UAE For casing



SV325-6
In Fujian Airport, China



SV325-6 in USA For raked pile

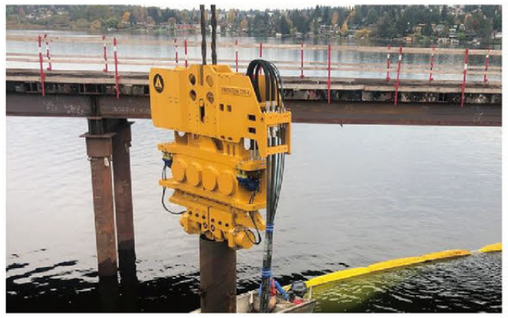




SV600 In Zhanjiang, China



SV400 for under water compaction
In Shenzhen, China



SV325-4 in Canada
For bridge foundation

Tandem SV400 for offshore oil platform
In China





Crawler piling rig
Technical parameters

Model		Unit	LH50	LH65	LH86
Applicable with hydraulic hammer			≤HHP5	≤HHP8	≤HHP14
Applicable with diesel hammer			≤HD36	≤HD62	≤HD80
Engine power		kW	133 @2100rpm	186.5 @2200rpm	240 @2100rpm
Leader length		m	21	24.5/19.5	21
Winch	Main winch capacity	kN	70	150 ×2sets	70
	Aux winch capacity	kN	60	40	50
Track chassis	Track width	mm	3200~4200	3400~4400	3450~4350
	Track gauge		4283	4330	4575
	Track shoe width	mm	800	900	800
Dimension	Operation state	mm	7965×4200×22705	8360×4400×26175	8840×4350×21833
	Transportation state	mm	16042×3200x3192	19225×3400×3830	15115×3450×3500
Net weight w/o counter weight		t	41	55	51
Counter weight		t	/	9	11
Total working weight		t	≤50	≤88	≤90

Model		Unit	LH90	LH130	LH145
Applicable with hydraulic hammer			≤HHP14	≤HHP20	≤HHP25
Applicable with diesel hammer			≤HD80	≤HD138	≤HD160
Engine power		kW	194kw @2200rpm	298kw @2100rpm	298kw @2100rpm
Leader length		m	21/24/27/30	20/23/26/29	20/23/26/29
Winch	Main winch capacity	kN	80 ×2sets	80 ×2sets	80 ×2sets
	Aux winch capacity	kN	48	48 ×2sets	48 ×2sets
Track chassis	Track width	mm	3298/4098	3610/4410	3730/4610
	Track gauge	mm	4486	4950	5068
	Track shoe width	mm	762	810	880
Dimension	Operation state	mm	9600×5500×26500	9580×5200×28950	9770×5200×29482
	Transportation state	mm	7600×3298×3600	10840×3610×3268	10840×3730×3290
Net weight w/o counter weight		t	52 @21m	58 @20m	63 @20m
Counter weight		t	12	15	15
Total working weight		t	≤95	≤130	≤145

Foot-step piling rig
Technical parameters

Model		Unit	JB120B	JB138B	JB160F
Leader height		m	25 Truss	25 Truss	38.5 Column
Track center distance		mm	600xΦ102	600xΦ102	600xΦ102
Winch	Main winch Capacity	kN	80	100	91.5 ×2sets
	Aux winch① capacity ×2sets	kN	30	50	50
	Aux winch② capacity ×2sets	kN	30	50	50
Platform rotating angle		°	13	10	10
Net weight		t	58	65	162
Dimension	Overall size (LxWxH)	mm	13.4x9.1x25.8	14.2x9.5x27.9	14.8x9.5x41
	Transportation size (LxWxH)	mm	12.4x3.58x2.8	13.1x3.9x2.6	11.4x2.6x3.5
Applicable diesel hammer model			≤HD100	≤HD125	≤HD80+ZKD100-3
Applicable hydraulic hammer model			≤HHP16	≤HHP20	≤HHP14+ZKD100-3

CONSTRUCTION CASES



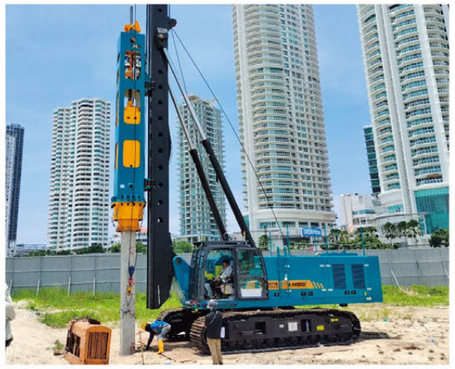
JB120B + HHP14
For real estate construction in Foshan

LH130 + HHP14
Commissiong in Hongkong





JB62H+HHP8 Port project in Tianjin



LH86+HHP14
Real estate project in Malaysia



JB80E + HD80
For factory construction in Henan



LH40 + HHP4
Commissiong in Etorofu, Russia

LH86 + HHP12
Testing in STARKE's branch factory



STARKE

HIGH ENERGY ROCK BREAKER SERIES

WIDE APPLICATION

CONVENIENT MAINTENANCE

LOW FUEL CONSUMPTION

HIGH STRIKE ENERGY



01 DRILLING



The distance between holes depends on the type of stone

High hardness granite
1.2~1.5 m

Medium hardness limestone
1.5~2 m



Hole depth
1.5 meters

Bore diameter
Φ130~160mm

02 BREAKING

Ensure that the hammer is at a 90° angle to the ground for maximum energy efficiency





Φ290~350mm

2150mm

03 LOADING



If the rock is too large during loading, a small breaking hammer can be used to further break it.

High energy rock breaker
Technical parameter

Model		Unit	HHR100	HHR160
Max. strike energy		kN-m	100	160
Max. stroke of hammer		mm	1000	1000
Strike frequency (max/min)		bpm	45~130	45~130
Ram weight		kg	5000	8000
Hammer weight		kg	15000	19000
Chisel diameter		mm	290	350
Penetrating depth		mm	1200	1200
Mounted excavator size	With short arm	t	≥55	≥65
	With original arm	t	≥70	≥80

CONSTRUCTION CASES



HHR100
Commissiong at jobsite



ZC80
Diesel rock breaker



HHR100
Rock breaking on the mountain



HHR100
Mounted on KOMATSU PC750



ZC50
Diese rock breaker with HITACHI EX550

HHR100
Mass rock is broken by high strike energy

