

HIRADO

ROCK & CONCRETE SPLITTER



HYDRAULIC CRUSHERS & SPLITTERS



SPLITTING MACHINES



DRILLING MACHINES



DRILLING MACHINES



BIT & ROD



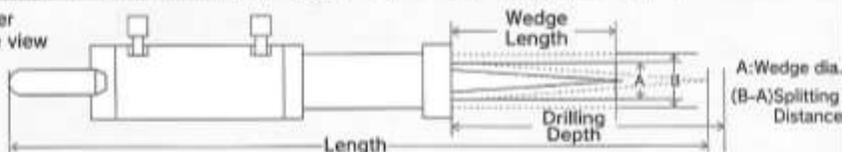
Hirado Kinzoku Kogyo Co., Ltd.

Rock Splitter

Standard Rock Splitter specifications

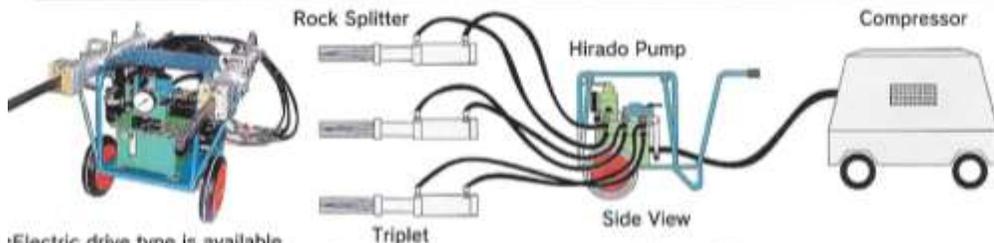
Model	Wedge			Length (mm)	Weight (kg)	Bit Dia. (mm)	Drilling Depth (mm)	Splitting Force (kN)	Applications
	Dia. (mm)	Length (mm)	Joining Distance (mm)						
C-15W28A200	28	200	7.5	940	30	30	360	5.3	Quarries, boulders, Landfill rocks
C-15W42A450	42	450	7.5	1,190	31	44	610		
C-15W30B200	30	200	9	940	30	32	360	4.4	Bedrocks, Boulders, Landfill rocks
C-15W42B400	42	400	9	1,140	31	44	560		
C-15W32D200	32	200	12	940	30	34	360	3.3	Concrete, Boulders
C-15W40D300	40	300	12	1,040	30	42	460		
C-15W42D300	42	300	12	1,040	30	44	460	2.6	Concrete
C-15W38F200	38	200	15	940	30	40	360		
C-15W47F300	47	300	15	1,040	30	50	460	6.5	Bedrocks, Boulders, Concrete, Benote pile
K-25W40A400	40	400	12.5	1,343	35	42	660		
K-25W42A440	42	440	12.5	1,395	36	44	700	6.5	
K-25W62A500	62	500	12.5	1,455	37	64	760	6.5	
K-25W58D370	58	370	20	1,325	36	60	630	4.1	

Rock Splitter
overall side view



Hydraulic Pump and Trolley specifications (Transport is easy with the wheels)

Model	Hydraulic Pump						Drive Source			Trolley size			Weight
	Pressure		Oil flow		Tank Volume	Capacity Splitter Number	Air Motor			Length	Width	Height	
	High	Low	High	Low			Model	Power	Air Cons.				
HA-103	85Mpa	-	0.33f	-	15f	4	TAM-1	1HP	1.1m³/min	1,010mm	790mm	755mm	112kg
HA-301	85Mpa	10Mpa	1.18f	10f	15f	4	LZL-25	3HP	3.9m³/min	1,010mm	790mm	755mm	140kg



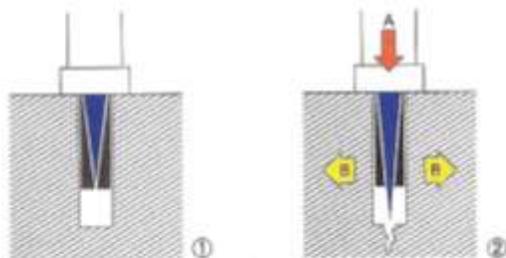
*Electric drive type is available

*Standard pump can connect up to three splitters.

■ Features High Productivity and Strong destructive power

- 1. ● Safety**
There is no danger because spalls do not fly, operation can be made from a distance.
- 2. ● No noise or vibration**
Hydraulic pressure move the cylinder and thrust the wedge. No need to hit and thus no noise or vibration. It is optimum at the work site where noise and vibrations are prohibited, such as hospital, telephone office.
- 3. ● Easy operation**
Decide breaking direction and insert the wedge into the drilled hole. The rest is only turning the lever. No skill is required.
- 4. ● Break at will**
Since breaking direction can be set, it is suitable for splitting desired size of stone materials.
- 5. ● Economical**
Only 15HP compressor can drive the power pack. Splitting task is speedy, it can save labor and reduce cost significantly.
- 6. ● Convenient for transportation**
Units are small and lightweight. It can be transported easily by a small van.

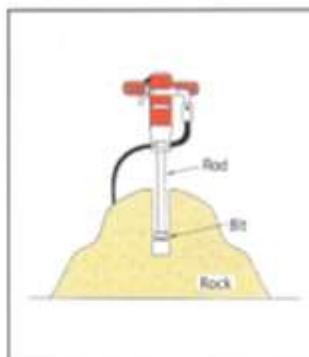
■ Principle of Rock Splitters



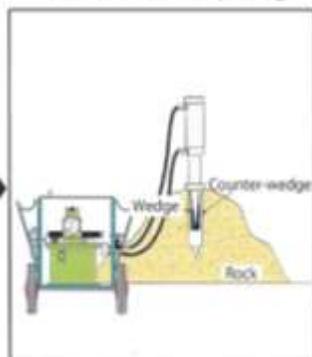
Principle of wedge has been used widely for a long time in various ways. Adding power to A direction gives dozens times of larger power to B direction. B direction power and splitting distance are decided by wedge angle. With this principle, Rock Splitter push A direction by hydraulic pressure and make 200 to 2000t of power to B direction.

■ Rock Splitter Operating

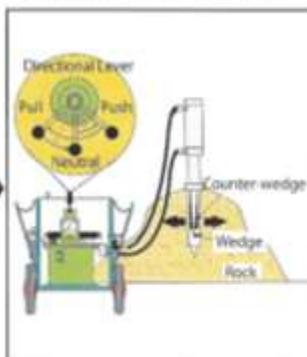
① Make a hole by a drill



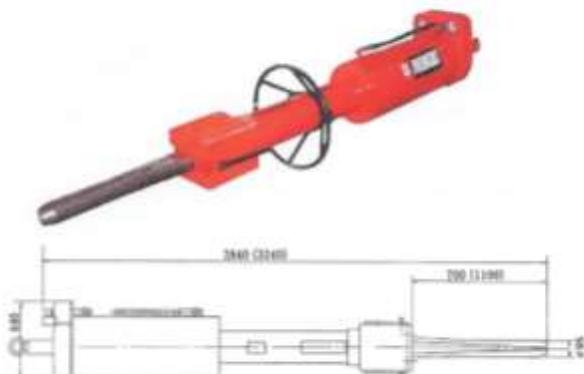
② Insert a Rock Splitter in the direction of splitting.



③ Turn the pump lever to push side, and break the rock.



Powerful Rock Splitter



■ Features

- Compact design and high destruction power
- Over on all our technologies and experience of Standard Rock Splitters, we accomplished number one light weight and destruction power.



■ Specifications

Splitter Model	Model	Wedge			Weight (kg)	Bit dia. (mm)	Drilling Depth (mm)	Spining Force (kN)
		Dia. (mm)	Length (mm)	Spining Distance (mm)				
N-50	50W95A700	95	700	25	700	102	1,300	26
N-50	50W95A1.100	95	1,100	25	720	102	1,700	26

- * Bracket mount model is also available.



■ Powerful Rock Splitter

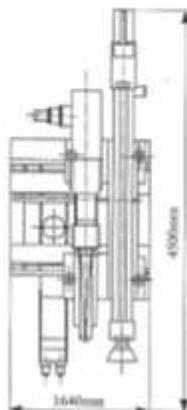
■ Powerful Rock Splitter



■ Splitter with bracket

Splitter with Driller

Large Splitter with Driller



Features

- All drilling and splitting operations can be done from the cabin.
- A driller and a splitter are mounted on one bracket. Operations can be conducted continuously. This system machine makes the hard and dangerous work easy and effective.
- Using with hydraulic breakers, construction period becomes even shorter.
- Unlike non-explosive demolition agents, waiting time is not necessary. Accident while curing is not an issue.
- No blasting, no need to flee for safety. Can plan the work easily.

Specifications

Model	Mounted Drill	Wedge				Bit Dia. (mm)	Drilling Depth (mm)	Splitting Force (kN)	Weight (kg)
		Model	Dia. (mm)	Length (mm)	Splitting Distance (mm)				
PD-7	TH-501 (Hydraulic)	N-50W95A700	95	700	25	102	1,300	26	App.3,900

Small Splitter with Driller



- Some functions with Large Splitter with Driller and size is smaller and lighter. It can be mounted on smaller excavator and can be used for wider applications.

Specifications

Model	Mounted Drill	Wedge				Bit Dia. (mm)	Drilling Depth (mm)	Splitting Force (kN)	Weight (kg)
		Model	Dia. (mm)	Length (mm)	Splitting Distance (mm)				
PD-1	TY-24	E26W46A300	46	300	13	48-50	600	8	800

Rock Splitter Option

Hydraulic hoses, and couplers



- Hydraulic Hose for Standard Rock Splitters
MAWP: 100MPa, NOP: 85MPa
Inner dia.: 6.3mm, Outer dia.: 15.7mm, Weight: 10kg for 2 pcs
- Couplers for Standard Rock Splitters
MAWP: 100MPa, Connection: NPTF

Wedge Grease Spray for Rock Splitter



- Molybdenum disulfide grease
- The wedge grease is supposed to be applied on sliding part of Splitter's wedge. This grease was specially developed for extreme pressure resistance to increase splitter's performance.

Wedge Grease for Rock Splitter

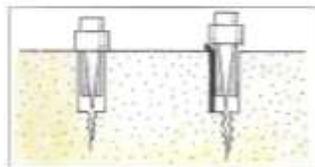


- Wedge grease for Rock Splitters (16kg, 3kg)

Enlarging Feather for Standard Rock Splitter



- Enlarging Feather is for enlarging the crack of the cracked hole which a Rock Splitter split, like the right figure, for easier task.



Low Vibration, Low Noise, Low Dust, High Efficiency Concrete Crusher, Splitter Series

HIRADO HYDRAULIC CRUSHERS & SPLITTERS

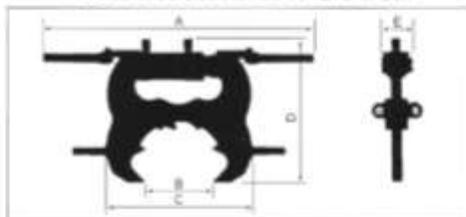
Wall Crusher

Compact and wide crushing



Features

- Crush it into small pieces with strong edges.
- Compact and light body is suitable for narrow work site.
- Low noise low dust and comfortable work.
- Bracket is available to mount on an excavator.



Specification

Model	HPC-15	HPC-15L	HPC-25	HPC-2	HPC-2L	HPC-3L	HPC-4
Cylinder Output (kN)	154	260	309	348	376	438	563
Max Pressure (MPa)	85	85	85	85	85	85	85
Installable Thickness	150	180	200	230	310	330	430
Max. (mm)	170	200	220	250	330	350	450
Opening Size							
Min. (mm)	12	17	25	35	40	50	60
Weight (kg)	19	25	45	52	60	78	167

Dimensions

Model / Size	A	B	C	D	E
HPC-15	690	170	330	407	83
HPC-15L	720	200	390	448	95
HPC-25	960	220	470	497	106
HPC-2	1000	250	520	530	114
HPC-2L	1063	330	620	563	118
HPC-3L	1068	350	680	615	125
HPC-4	1207	450	670	758	174

Compact & Light Hand Crusher



Attachable to excavator



▲We are not selling excavators

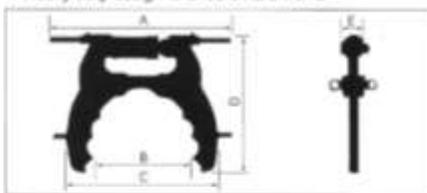
Pile, Pole Crusher

Crush piles and poles by strong force.



Features

- Compact and light body, Easy to carry.
- Compact and light body, Easy to handle
- Break poles at work site and carry out easily.
- Heavy duty design to endure hard works



Specifications

Model	HPC-2	HPC-4B	HPC-4
Cylinder Output (kN)	205	340	482
Max Pressure (MPa)	85	85	85
Breakable Dia(mm)	170-350	200-400	250-400
Weight (kg)	43	70	120

Dimensions

Model / Size	A	B	C	D	E
HPC-2	380	300	532	547	104
HPC-4B	1025	410	800	848	131
HPC-4	1182	415	670	733	148

Attachable to the excavator. Speedy work



Hand Type



Wall Cutter



Rebar can be cut together



Features

- Effective for partial wall cutting. It can cut concrete walls without making cracks.

Specifications

Model	HWC-2	HWC-3
Out Put (kW)	492	492
Max Pressure (MPa)	95	95
Cutting Thickness (mm)	253	300
Resealed Core Dia. (mm)	300	300
Weight (kg)	72	88



Floor Splitter

Environmentally friendly low non-pollution method. Optimum for breaking concrete floor.



Features

- It can break concrete floor or dirt floor, which waterproof sheet is sandwiched between concretes, with low vibration, low noise, and low dust. It is a hydraulic tool which can conduct the work effectively and quietly with its stronger destructive power than breaker.
- Unlike breaker, Floor Splitter is pollution free method of low vibration, low noise, and low dust. Even in a school, hospital, or computer room, you can conduct the work at any time.

Specifications

Model	Cylinder Out Put	Working Pressure	Wedge Dia.	Core Dia. for hole	Opening Width	Length	Wedge Length	Weight
HFO-4	38 Puts	95 MPa	98mm	100mm	90mm	733mm	179mm	42kg



Low Pollution Method

Cracker HBB-300

Break concrete with low vibration, low noise, and low dust. Environmentally friendly demolition work of column, joist, wall, girder, floor, or foundation etc.



Features

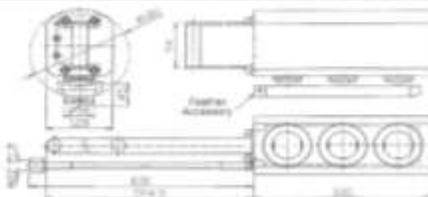
- Powerful, compact, and great operability. Labor efficiency is increased.
- Useful hydraulic cracker for breaking thick concrete.
- Large amount of concrete can be broken.
- Low vibration, low noise, low dust, low pollution hydraulic work machine.

Specifications

Model	Cylinder Out Put	Working Pressure	Body Dia.	Core Dia. for hole	Opening Width	Length	Weight
HBB-300	100MPa x 3	200 MPa	152mm	180mm	45mm	322mm	25 kg



Insert entire body into the hole and break.



Rebar Cutter



Features

- Cut the rest rebars after breaking the concrete wall with Hirado Wall Crusher,
- Rebar Cutter can be used at any worksite, even where you cannot use grinder or gas because of its spark,
- Cutting speed is faster than electric cutter.
- Up to 16mm rebar can be cut.
- It can be used with the same pump as Wall Crusher.

Specifications

Model	Cylinder Out Put	Working Pressure	Cuttable Dia.	Weight
TUC-18	75AN	85MPa	16mm	8.5kg

Mortar Splitter, Concrete Splitter

Mortar Splitter and Concrete Splitter are more powerful than breakers. Low vibration, low noise, and also low dust work tools.



Mortar Splitter

Features

- Low vibration, low noise, and low dust hydraulic tool is optimum for indoor work.
- High destruction power and easy handling.
- Optimum tool for shaving mortar at wall restore or reinforce work.
- Special designed wedge tip prevent cracking deeper than the tip.
- Different wedge size can be made for various applications.

Specifications

Model	Cylinder Out Put	Working Pressure	Destruction power	Wedge Dia.	Opening Width	Length	Wedge Length	Weight
MSM-10	106AN	85MPa	1410N	*34 or 39 mm	15 mm	485 mm	*40 mm	12 kg
MSM-20	210AN	95MPa	2820N	*34mm	27.5mm	555 mm	*40 mm	37 kg

*Wedge dia, wedge length can be modified depending on the application.



Concrete Splitter

Features

- Concrete Splitter is more powerful than Mortar Splitter
- For restore and reinforcement of concrete wall, it is optimum to ripping concrete surface with pollution free work.
- Special designed wedge tip prevent cracking deeper than the tip.
- Low vibration, low noise, low dust and more powerful than breaker, effective and environment-friendly shaving tool.

Electric Motor Hydraulic Pump

Wheels attached for easy carriage!



Specifications

Model	Pump Type		Pressure		Motor	Tank Capacity Liter	Dimensions W x L x H mm		Weight kg
			MPa	Low rate L/min 50Hz					
HM-506 3phase	High	Plunger	85	3.3	3.7kW4P	25	610 x 570 x 685		150
	Mid	Plunger	45	7.0					
HM-1030 1phase	High	Trochoid	85	0.8	750W	10	490 x 450 x 630		70
	Low	Plunger	5	5.0					

Attachable Drill Series

Features

- Easily attached and detached to any excavator small size or large size.
- Labors are free from vibration, dust, and noise.
- Drilling tasks can be remotely operated safely and quickly in the cabin with the lever controller.
- It is developed based on the well-reputed Ultra Drill's technology. Compact, low-cost, and durable drill specialized for excavators.

Applications

- Secondary breaking tasks at civil engineering, construction, and quarries.
- Drilling holes for Rock Splitter, non-explosive demolition agent, and guardrails.
- Drilling inside pit, anchoring, drilling underwater (riverbed, caisson method).
- Reinforcing slopes, breaking boulders, and primary and secondary breaking at quarries.
- Breaking mountain ground for residential land development.

*Drill unit can be chosen upon your request.

Attachable Drills UDR

Simple and light weight models. Feeder cylinder extend out.

■ Specifications *Rod size, drilling depth, and weight may change depending on the mounted drill.

Model	Total Length (mm)	Drilling Depth (mm)	Bit Diameter (mm)	Rod Size (Length base)	Weight App.	Air Cons. (m ³ /min)
UDR-1.5	3017 - 1817	1100	26 - 50	22H-1.5m	90kg	2.3 - 2.9
UDR-1.8	3506 - 2106	1400		22H-1.8m	120kg	
UDR-2.1	3995 - 2395	1700		22H-2.1m	150kg	2.9 - 3.5
UDR-2.4	4485 - 2685	2000		22H-2.4m	190kg	

Attachable Drills UDRW

Feeder cylinder does not extend. Fixed length is effective for narrow working sites.

■ Specifications *Rod size, drilling depth, and weight may change depending on the mounted drill.

Model	Total Length (mm)	Drilling Depth (mm)	Bit Diameter (mm)	Rod Size (Length base)	Weight App.	Air Cons. (m ³ /min)
UDRW-1.5	2200	1100	26 - 50	22H-1.5m	110kg	2.3 - 2.9
UDRW-1.8	2500	1400		22H-1.8m	130kg	
UDRW-2.1	2800	1700		22H-2.1m	150kg	2.9 - 3.5
UDRW-2.4	3100	2000		22H-2.4m	160kg	
UDRW-3.0	3600	2600		22H-3.0m	170kg	

Attachable Drills UDR120

Large drill mounted Attachable Drill. It is to be attached to the excavator with a special bracket.

■ Specifications

Model	Total Length (mm)	Drilling Depth (mm)	Bit Diameter (mm)	Rod Size	Weight incl. bracket App.	Air Cons. (m ³ /min)
UDR120-3.0	4519	2700up	65 - 102	3.05-38R-T38	950kg	13.5

Attachable Drill photos at worksite

[Bucket side attachment examples]



UDR



UDR



UDRW

[Original bracket attachment examples]



UDRW



UDRW120

Rotary bracket for Attachable Drill UDRW

Special bracket to attach Attachable Drill to excavators and drill at any preferred angles.

[Downward drilling]



[Upward drilling]



Ultra Drill Series

Labor Saving, Low-Pollution Automatic Drilling Machines

Features

1. Labor Saving

Once the drill is set on the rock, it drills automatically. The operator can do different tasks.

2. Low Pollution

It is automatic after setting, it is helpful to prevent vibration disease and silicosis.

3. Easy operation

Set up and operation is easy. You can make precise holes without any special skills.

4. Economical

All the power source is only air compressor. No new facilities are required.

*Drill unit can be chosen upon your request.

Large Ultra Drill UDS (full automatic)

Medium size drill mounted full automatic Ultra Drill, mainly used for rough cutting. It is effective especially when it split the rock in the hard break direction. The drilling pitch can be adjusted from 0 to 150mm steplessly, depending on the rock type. It makes precise straight holes.

■Specifications

Model	Total Length (mm)	Bit Dia. (mm)	Drilling Depth (mm)	Cylinder Stroke (mm)	Width (mm)	Drilling Pitch (mm)	Rod Size	Weight App.	Air cons. (m ³ /min)
UDS-300B	3000	24 - 48	1050	1200	360	0 - 150	19/22H-1.5m	250kg	1.6 - 2.3

Small Ultra Drill UDAS (full automatic)

Super small and small size drill mounted full automatic Ultra Drill, mainly used for drilling holes for One Body Wedges, or wedges. This light weight model is easy to set on stones. Operation is also easy. It has same functions as Large Ultra Drill UDS.

■Specifications

Model	Total Length (mm)	Bit Dia. (mm)	Drilling Depth (mm)	Cylinder Stroke (mm)	Width (mm)	Drilling Pitch (mm)	Rod Size	Weight App.	Air cons. (m ³ /min)
UDAS-300	3000	20 - 26	150	600	410	0 - 150	TH-Rod	65kg	1.6 - 2.3

Medium Ultra Drill UDK (semi-automatic)

Small size drill mounted semi-automatic Ultra Drill, mainly used for cutting out stone slabs, or cutting off unnecessary part from the stone material. Suitable for drilling small and deep holes.

■Specifications

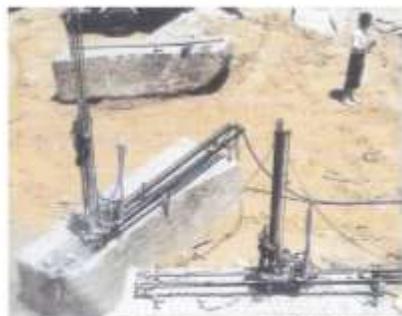
Model	Total Length (mm)	Bit Dia. (mm)	Drilling Depth (mm)	Cylinder Stroke (mm)	Width (mm)	Drilling Pitch (mm)	Rod Size	Weight App.	Air cons. (m ³ /min)
UDK-300B	3000	20 - 26	650	700	360	Free	TH-Rod	60kg	1.6 - 2.3

Tilting and Rotating Ultra Drill UDM-R (Semi-automatic)

Small size drill mounted semi-automatic Ultra Drill. This machine can adjust the angle freely, and is useful especially at narrow places or unstable places.

■Specifications

Model	Total Length (mm)	Bit Dia. (mm)	Drilling Depth (mm)	Cylinder Stroke (mm)	Width (mm)	Drilling Pitch (mm)	Rod Size	Weight App.	Air cons. (m ³ /min)
UDMR-300B	3000	24 - 48	1100	1200	456	Free	19/22H-1.5m	190kg	2.3 - 2.9



UDS



UDK



UDMR

Ultra Drill with Bracket (Single, Double Head)

Excavator mounted type Ultra Drill is even more labor saving to set onto the stones.

■ Specifications

Bracket motion range	Bit Dia. (mm)	Drilling Depth (mm)	Cylinder Stroke (mm)	Side Stroke (mm)	Straight Stroke (mm)	Rod Size	Weight Incl. bracket app.	Air cons. (m ³ /min)
Turn: ±30° Tilt: ±15°	24 - 48	1050	1200	2500	Free	19/22H-1.5m	1700kg	3.2 - 4.6



Double Head Model



Ultra Drill for Bridge Pier Constructions

Drilling anchor holes effectively for bridge pier reinforcement work

*Drill unit can be chosen upon your request.

UDR-VS (for vertical drilling)

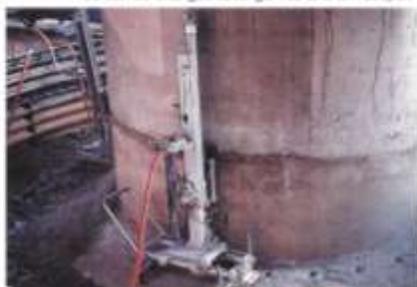
Features

- It can drill holes for anchor effectively for bridge pier reinforcing work.
- It slide on the rail. Once it is set, you can drill anywhere between the rail without adjusting drilling angle. It increases work efficiency.
- It drills vertical straight holes. No need to worry about hole curving.
- Because of the simple structure, anyone can operate the machine.
- Because of its compact design, it can be moved easily.

Specifications

Model	Rail Effective Length (mm)	Max. Drilling Depth (mm)	Bit Dia. (mm)	Rod Size	Weight App.	Air consumption (m ³ /min)
UDR-1.5VS	1000	1050	26 - 50	22H-1.5m	170kg	2.3 - 2.9

*Rod can be changed to longer rod and drill deeper.



UDRW-HS (for horizontal drilling)

Features

- By adopting new system of cutting edge technologies, it achieved long effective drilling length and compact feeding cell body.
- This is suitable for horizontal drilling works at high and narrow spaces such as bridge pier construction sites for train rails, bullet train rails, and highway roads.
- It easily moves horizontally and drills without damaging reinforcing bars.

Specifications

Model	Max. Drilling Depth (mm)	Bit Dia. (mm)	Rod Size	Weight App.	Air consumption (m ³ /min)
UDRW-HS (1.2)	600	26 - 50	22H-1.2m	145kg	2.3 - 2.9



Sectional Drill Machine

Carrying and drilling effectively at limited narrow place such as slope reinforcement site

UDRR (Sectional Drill Feeder)

Features ● To be carried by humans, we make it lightweight and easily disassemble and assemble quickly.

Specifications

Model	UDRR-2.0
Cylinders Output	628N×2pcs
Cylinder Stroke	2100mm
Working Pressure	0.5MPa

Disassembled (assembling 5 min)



Cylinder dia is $\phi 48$.
Scaffolding clamps can be used to fix.

Unit Weight

Air Cylinder	12.5kg×2pcs
Joint Plate(F)	6kg
Joint Plate(R)	1kg
Joint Bar	14kg
Cyl. Clamp	1.5kg×3pcs
Feeder Total	50.5kg
Drill	Any

* Drill unit is selectable.



Assembled

(HRD90R mounted sample)



* When you move the feeder to the next hole, drill unit can be easily detached.

Rotary Drill

Percussion and rotation separate driven type, in small drill class

HRD90R (Rotary Drill)

Features

- We developed percussion and rotary separate driven type which can adjust to each working site ground.
- Thanks to the small and light size, it can be mounted to various drilling machines (UDR, UDRW, UDRR) and help increasing work efficiency.

Specifications

Model	Percussion	Percussion Energy	Torque	Rotation Speed	Weight	Air Cons.	Swivel Air Cons.
HRD90 (1way)	3300b/min	71Nm	113Nm	0-182rpm	39kg	7.8m ³ /min	1.5m ³ /min
HRD90R (2ways)	3300b/min	71Nm	78Nm	0-182rpm	39kg	8.4m ³ /min	



HRD90R
(2 ways type)



UDRR(Sectional feeder) mount



UDRW(UDRW feeder) mount

Upward Drill

Effective driller for upward drilling at ceiling etc.

Features

- Effective upward drill for aseismic reinforcement works etc.
- Manpower is not required after setting up, operators can easily drill upward that is usually hardtask.
- Moves easily on casters, it can dill precisely without complex operation or high skill.

*Drill unit can be chosen upon your request.

UDH

Specifications

Model	Height (mm)	Width (mm)	Length (mm)	Drilling Depth (mm)	Rod Size	Weight	Air Cons. (m ³ /min)
UDH	1500-2000	350	600	450	22H-0.6mup	App.98kg	1.6 - 2.4

*Extension stay can be attached



Feeder, rail, and controller parts are separable.



Aseismic reinforce, Brace install, Anchor holes.

Triple-headed Tube Drill

Features

- Revolving three drill units bore large diameter holes. This new method drilling machine drills speedily and effectively.

Specifications

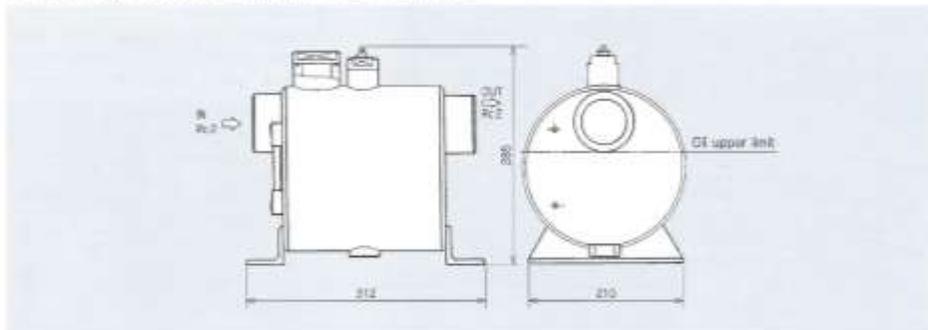
Length	Drills	Bit Dia.	Bore Dia.	Drilling Depth	Weight
3860mm	3 units	50mm	200mm	600mm	App. 1700kg



Accessories

3 liters Oiler

Oil feeding device for all kind of drill units.



Consumable Products

Drill Bits (Straight, Cross)

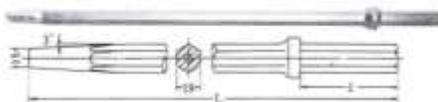


O. B. W

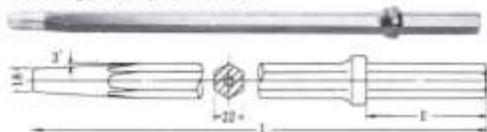


Rods

●19H type (Tapered Rod)



●22H type (Tapered Rod)



●19T, 15T type Tapered Rod

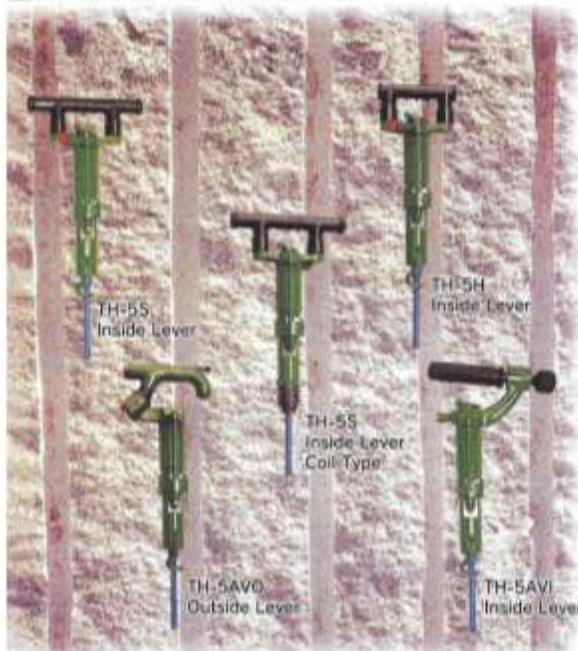


●Insertbit



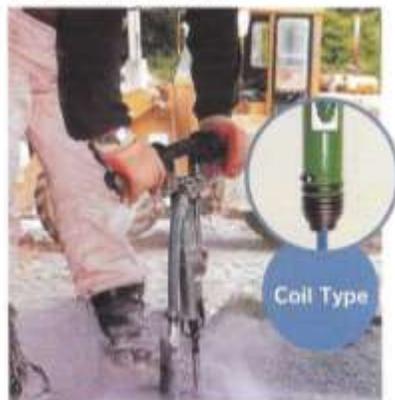
TH-5 Root

TH-5 Root Hammer Series



Applications

Outstanding performance at cutting out stone material, Anchor, slope reinforcing, boulder, bed rock, mining, tunnel etc.



Tapered Shank Adaptor

*Concrete drill bit can be attached using this adaptor.



Vibration proof Handle

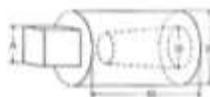
*Vibration proof handles are attachable to TH-5H.



Chemical Anchor Attachment

*On 19T rod, attach this attachment and socket, then various size of nut can be fasten.

*Available in size 12.7mm, 19.0mm, 25.0mm



Model	Length	Weight	Air cons	Hose bore	Max bit
TH-5S	424mm	5.8kg	0.85m ³ /min	13mm	40mm
TH-5H	424mm	5.8kg	0.85m ³ /min	13mm	40mm
TH-5AVO	437mm	6.0kg	0.85m ³ /min	13mm	40mm
TH-5AVI	458mm	7.3kg	0.85m ³ /min	13mm	40mm
TH-5S(H-C) <small>Coil Type</small>	424mm	5.8kg	0.85m ³ /min	13mm	40mm

TH-5 Root Hammer Series

Features

- Model TH-800 is improved and power upped!! High drilling force notably improves work efficiency.
- As the drilling force increase, components are improved and the durability increased even more. This is a tough and long lasting economical Root Hammer.
- The reputable butterfly valve is further improved and employed, and nasty jams no longer occur.
- The direction of rotation is changed from left rotation to right rotation, and it can be used for screwing chemical anchors and anchor bolts.

ability. Work efficiency become substantially higher

t Hammer

■ Anchoring at slope reinforcing work.



■ Cutting out stone material



■ Insertbit



■ 19T, 15T Type Tapered Rod



■ Bit



● TC15 type tapered bit ● TC19 type tapered bit ● TX15 type tapered bit ● TX19 type tapered bit

Bit, Rod, Insertbit

■ Features

Hirado Bit, Rod, and Insertbit has been developed over the long experience of the company, and become high quality. Its excessive durability against hard percussion and rotation is indispensable for drilling stone and rock.



■ One Body Wedge (O.B.W)



(For breaker)(For rock, concrete)(For rock, stone material)



One Body Wedge Utility Model Patent

■ Features

- Integrated parts are easy to set, all parts do not go apart. The parts won't be lost, and work efficiency increase.
- Friction on the slide surfaces is small, large hammer is not necessary. It can split stones with a small hammer.
- Made of special alloy steel, outstandingly durable comparing to conventional Wedge & Feathers.

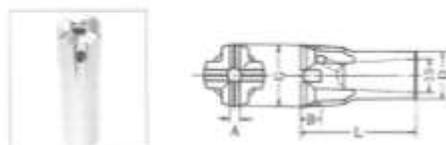
15 type, 19 type tapered bit and rod



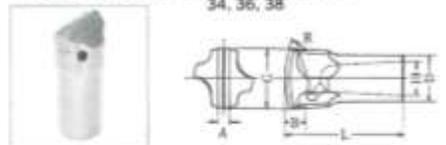
● TC15 type (Straight Bit) G:20, 21, 22



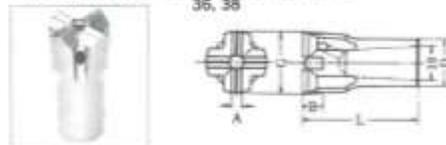
● TX15 type (Cross Bit) G:20, 21, 22, 24, 25



● TC19 type (Straight Bit) G:24, 26, 28, 30, 32, 34, 36, 38



● TX19 type (Cross Bit) G:24, 26, 28, 30, 32, 34, 36, 38



(Tapered Rod for Root Hammer)

● 15T type (Tapered Rod)



Model	L (mm)
15 T	0.25 0.28 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.2

(Tapered Rod for Root Hammer)

● 19T type (Tapered Rod)



Model	L (mm)
19 T	0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.2

● 19H type (Tapered Rod)



Model	φ(mm)	L (mm)
19HS	65	0.4 0.5 0.6 0.9 1.0 1.2 1.5 1.8 2.0
		2.1 2.4 2.5 3.0 3.5 4.0 5.0

*S: Short Shank

● TC15 type

Type	G	L	D	A	B	R	Cutting Angle
TC15-20	20	65	18	6	10	110	110°
TC15-21	21	65	18	6	10	110	110°
TC15-22	22	65	18	6	10	110	110°

● TX15 type

Type	G	L	D	A	B	Cutting Angle
TX15-20	20	65	18	4	8	110°
TX15-21	21	65	18	4	8	110°
TX15-22	22	65	18	4	8	110°
TX15-24	24	65	22	5	8	110°
TX15-25	25	65	22	5	8	110°

● TC19 type

Type	G	L	D	A	B	R	Cutting Angle
TC19-24	24	65	22	6	11	110	110°
TC19-26	26	65	24	6	11	110	110°
TC19-28	28	65	25	6	11	110	110°
TC19-30	30	65	25	6	11	110	110°
TC19-32	32	65	27	6	11	110	110°
TC19-34	34	65	28	6	11	110	110°
TC19-36	36	65	28	6	11	110	110°
TC19-38	38	65	30	7	11	110	110°

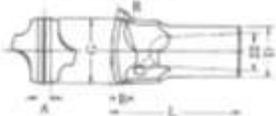
● TX19 type

Type	G	L	D	A	B	Cutting Angle
TX19-24	24	65	22	5	8	110°
TX19-26	26	65	24	5	8	110°
TX19-28	28	65	25	5	8	110°
TX19-30	30	65	25	5	8	110°
TX19-32	32	65	27	5	8	110°
TX19-34	34	65	28	5	8	110°
TX19-36	36	65	28	5	8	110°
TX19-38	38	65	29	5	11	110°

22 type tapered bit and rod



- TC22 type (Straight Bit) G: 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48



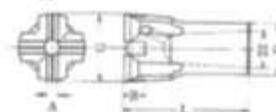
- 22H type (Tapered Rod)



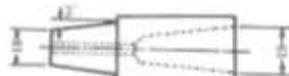
Model	Φ(mm)	L (mm)
22 H0	83	0.3 0.4 0.5 0.6 0.9 1.0 1.1 1.2 1.5 1.6 1.8 2.0
22 HL	108	2.1 2.4 2.5 2.7 3.0 3.5 4.0 4.5 5.0 5.5

*S: Short Shank
*L: Long Shank

- TX22 type (Cross Bit) G: 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 55, 60, 65



- 19x22 Adaptor



*With this adaptor, 22 type tapered bit can be attached on 19H or 19T tapered rod.

- TC22 type (mm)

Type	G	L	D	A	B	R	Cutting Angle
TC22-28	28	70	25	7	11	110	110°
TC22-30	30	70	27	7	11	110	110°
TC22-32	32	70	27	8	11	110	110°
TC22-34	34	70	29	8	11	110	110°
TC22-36	36	70	29	8	11	110	110°
TC22-38	38	73	29	8	11	110	110°
TC22-40	40	73	33	8	11	110	110°
TC22-42	42	73	33	8	11	110	110°
TC22-44	44	76	33	8	11	110	110°
TC22-46	46	76	33	8	11	110	110°
TC22-48	48	76	33	8	11	110	110°

- TX22 type (mm)

Type	G	L	D	A	B	Cutting Angle
TX22-28	28	70	25	5	11	110°
TX22-30	30	70	27	6	11	110°
TX22-32	30	70	27	6	11	110°
TX22-34	34	70	29	6	11	110°
TX22-36	36	70	29	6	11	110°
TX22-38	38	73	29	6	11	110°
TX22-40	40	73	33	6	11	110°
TX22-42	42	73	33	6	11	110°

- TX22 type (mm)

Type	G	L	D	A	B	Cutting Angle
TX22-44	44	76	33	6	11	110°
TX22-46	46	76	33	6	11	110°
TX22-48	48	76	33	6	11	110°
TX22-50	50	85	37	7	12	110°
TX22-55	55	85	37	7	12	110°
TX22-60	60	85	44	7	12	110°
TX22-65	65	85	44	7	12	110°

Insertbit (Integrated bit for Root Hammer)

Hirado Insertbit works well on drilling small dia. holes to stone materials, concrete, and bed rocks.



(mm)				(mm)				(mm)			
Model	G	L	Ø	Model	G	L	Ø	Model	G	L	Ø
12-250	12	350	250	18-600	18	600	500	20-280	20	380	180
13-250	13	250	150	700	18	700	600	400	20	400	300
350	13	350	250	17.5-300	17.5	300	200	500	20	500	400
14-230	14	230	130	18-280	18	280	180	600	20	600	500
250	14	250	150	400	18	400	300	700	20	700	600
280	14	280	180	500	18	500	400	21.5-300	21.5	300	200
400	14	400	300	600	18	600	500	22-280	22	280	180
14.5-250	14.5	250	150	700	18	700	600	400	22	400	300
300	14.5	300	200	19-300	19	300	200	500	22	500	400
350	14.5	300	250	400	19	400	300	600	22	600	500
15-300	15	300	200	500	19	500	400	700	22	700	600
16-250	16	250	150	600	19	600	500				
280	16	280	180	700	19	700	600				
400	16	400	300								
500	16	500	400								

One Body Wedge OBW (Utility Model Patent)

Small hammering power makes large splitting power. Integrated handy and durable special wedge & feathers.



Size G	For Rock	For CB20
16mm	○	
20mm	○	
32mm		○

Bit Removal Tool

It removes 19H, or 22H tapered bit from the rod.



Others

- Air connector,
- Hose mender
- Hose coupling
- Hose band





* Specifications may change without any notice for product improvement.

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