



Bending and Forming

Chapter 6

Manual Pipe Bender





Product Description

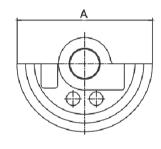
- HHW-25S is a portable pipe bending tool set with cold bending.
- Clean, smooth bending arc for use. Quick bending for U type.
- Strong plastic carry case and dies are included as standard accessories.
- Mounts easily to your workbench. Simple operation and fast setup.
- It is widely used in factories and mines, village ,construction , electrical circuit ,pipe setting.
- Suitable for mild steel tubes and stainless steel pipes, up to 180°

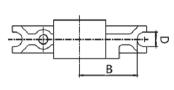
Ordering Information

(Catalog No.	Model No.	Bending Range	Description	N.W(kg)	Packing Size
	2551010	HHW-25S	Ф10-25mm	3/8",1/2",9/16", 5/8",3/4"7/8"1"	25	66×46×18cm



Bending Dies specification







Bending Shoe Size	А	В	D	Wall Th	ickness
Bonding Onco Olzo	(mm)	(mm)	(mm)	Steel/ SS pipe (mm)	Copper tubes (mm)
3/8"	100	42	11	0.8	1.0
1/2"	119	50.5	13	1.0	1.2
9/16"	139	55.5	15	1.0	1.2
5/8"	159	68.5	17	1.0	1.2
3/4"	179	77	20	1.0	1.2
7/8"	225	98.5	23	1.2	1.5
1"	225	97	26	2.0	1.6

Manual Pipe Bender









Product Description

- Designed to bend soft copper and coated soft copper of 6-22mm as well as multilayer pipes up to 26mm.
- For sanitary, heating, air conditioning, refrigerating and hydraulic field.
- Also for DIN EN 1057 and tubes of press fitting systems.
- No costs for fittings, storage, procurement. Savings in soldering joints, pressing joints and working hours.
- Suitable for cold bending of soft copper tubes, coated copper tubes, multi-layer composite tubes, up to 90°

Specifications

• Model: HHW-22

• Bending range: 6-22mm

• Bending dies: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8"

• Wall thickness of pipe: 1mm

• Dimension: 52×31×9cm

Specifications

• Model: HHW-22A

• Bending range: 6-22mm

• Bending dies: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8"

• Wall thickness of pipe: 1mm

• Dimension: 52×31×9cm

Ordering Information

Catalog No.	Description	N.W(kg)
2551110	HHW-22 complete set with all dies	4.1
2551210	HHW-22A complete set with all dies	5.1

Air Hydraulic Pipe Benders



Product Description

- Benders can be operated by air compressor or by hand.
- High efficiency working with air compressor.
- Cold bending pipes only in one turn, Hydraulic equipment makes more precise bending.
- Fast and easy setup, simple to use.
- Packing in a plywood case with a set of Bending Dies and service pack.
- \bullet Suitable for cold bending of thick-walled pipes(gas, water and steam pipes, non-heated black iron pipes, galvanized pipes), up to 90°



Catalog No.	Model No.	Description			
2531010	HHW-20	Air Hydraulic bender with all dies			
2531110	HHW-30	Air Hydraulic bender with all dies			
2531210	HHW-4Q	Air Hydraulic bender with all dies			
2531310	HHW-12Q	Air Hydraulic bender with all dies			
2531410	HHW-16Q	Air Hydraulic bender with all dies			





HHW-12Q & HHW-16Q

Model No.	Max pressure	Max stroke	Air pressure	Bending dies	G. W.	Dimension	Packing way
HHW-2Q	13T	250mm	8kg/120psi	1/2",3/4",1", 1 1/4",1 1/2",2"	106.1kg	73×32×20cm	
HHW-3Q	20T	290mm	8kg/120psi	1/2",3/4",1"1 1/4",1 1/2",2",2 1/2",3"	109kg	94×40×23cm	
HHW-4Q	20T	370mm	8kg/120psi	1/2",3/4",1",1 1/4",1 1/2",2",2 1/2",3",4"	158kg	118×46×25cm	Plywood
HHW-120	12T	210mm	8kg/120psi	1/2",3/4",1",1 1/4",1 1/2",2"	43.9kg	63×25×50cm	
HHW-16Q	16T	240mm	8kg/120psi	1/2",3/4",1",1 1/4",1 1/2",2",2 1/2",3"	70kg	70×63×21cm	

^{*} See page113 For Bending Dies specification

Manual Hydraulic Pipe Bender



Product Description

- Hydraulic pipe benders provide easier bending than manual mechanical benders.
- Bending range up to 4", portable design for construction.
- Cold bending pipes only in one turn. Up to 90 degree, hydraulic equipment makes more precise bending.
- Fast setup and disassembly, convenient removing with bottom wheels.
- Friendly use for European Environmental Standard with CE.
- Suitable for cold bending of thick-walled pipes(gas, water and steam pipes, nonheated black iron pipes, galvanized pipes), up to 90°

Ordering Information

Catalog No.	Description
2511810	HHW-1A complete set with all dies
2511510	HHW-2 complete set with all dies
2511610	HHW-3 complete set with all dies
2511710	HHW-4 complete set with all dies



HHW-2/3/4 packing

Model No.	Max pressure	Max stroke	Bending dies	Pipe wall thickness	G. W.	Dimension	Packing way
HHW-1A	6T	150mm	3/8", 1/2", 3/4", 1"	1.5-3.5mm	17kg	43×38×13cm	Metal case
HHW-2	13T	250mm	1/2", 3/4", 1", 1 1/4", 1 1/2", 2"	2.75-4.5mm	49kg	73×32×20cm	
HHW-3	20T	290mm	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3"	2.75-5mm	98kg	93×40×21kg	Plywood
HHW-4	23T	370mm	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3", 4"	2.75-6mm	149kg	118×46×23cm	

^{*} See page113 For Bending Dies specification

Manual Hydraulic Pipe Bender





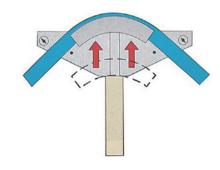
- Simple manual hydraulic operation for easy use.
- Completely manual hydraulic operation so external power is not needed.
- Heavy-duty hydraulic cylinder capable of bending schedule 40 pipe.
- Cold bending pipes only in one turn. Up to 90 degree, hydraulic equipment makes more precise bending.
- Pipe stands are also included for better bending experience.
- Suitable for cold bending of thick-walled pipes(gas,water and steam pipes, non-heated black iron pipes, galvanized pipes), up to 90°



Catalog No.	Description
2511010	HHW-2J complete set with all dies
2511110	HHW-3J complete set with all dies
2511210	HHW-4J complete set with all dies



operation display



Bending illustration

Model No.	Max	Max stroke	Bending dies	Pipe wall thickness	G. W.	Dimension	Packing way
HHW-2J	13T	250mm	1/2", 3/4", 1", 1 1/4", 1 1/2", 2"	2.75-4.5mm	53kg	73×32×20cm	
HHW-3J	20T	290mm	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3"	2.75-5mm	105kg	94×40×21cm	Plywood
HHW-4J	23T	370mm	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3", 4"	2.75-6mm	155kg	118×46×23cm	

^{*} See page113 For Bending Dies specification

Electric Hydraulic Pipe Bender





Product Description

- Electric hydraulic bender up to 4" pipe.
- Using range: applicable to general pipe, conductor pipe, gas pipe, the thick steel pipe, etc., bending angle up to 90 degree.
- All bending dies are made of cast iron than ordinary grey cast iron. With high strength, good toughness and plasticity, more resistant to use, not easy to break.
- Fast setup and disassembly, convenient removing with bottom wheels.
- Stands are optional instead of bottom wheels.
- Equipped with HL-630A one-way pumps for single-acting applications.
- Suitable for cold bending of thick-walled pipes(gas, water and steam pipes, nonheated black iron pipes, galvanized pipes), up to 90°

Ordering Information

Catalog No.	Description
2521010	HHW-2D complete set with all dies, wheels, 110V/60Hz
2521110	HHW-3D complete set with all dies, wheels , 110V/60Hz
2521210	HHW-4D complete set with all dies, wheels , 110V/60Hz
2521011	HHW-2D complete set with all dies, wheels, 220V/50Hz
2521111	HHW-3D complete set with all dies, wheels, 220V/50Hz
2521211	HHW-4D complete set with all dies, wheels, 220V/50Hz



optional tripod stand

Model No.	Max pressure	Max stroke	Pump	Bending dies	Pipe wall thickness	G. W.	Dimension	Packing way
HHW-2D	13T	250mm	750W	1/2", 3/4", 1", 1 1/4", 1 1/2", 2"	2.75-4.5mm	74kg	96×35×27cm	
HHW-3D	20T	290mm	750W	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3"	2.75-5mm	126kg	118×46×27cm	Plywood
HHW-4D	23T	370mm	750W	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3", 4"	2.75-6mm	174kg	118×46×32cm	

^{*} See page113 For Bending Dies specification

Separable Hydraulic Pipe Bender





Product Description

- Can precisely bend diameter 1/2"-4" pipes.
- Includes standard bending dies, tripod stands and 1.8m high pressure oil hose hand pump.
- Separable type, more flexible to operate.
- All parts and machine will be put in a plywood case.
- Suitable for cold bending of thick-walled pipes(gas,water and steam pipes, non-heated black iron pipes, galvanized pipes), up to 90°

Ordering Information

Catalog No.	Description
2541010	HHW-2F complete set with all dies
2541110	HHW-3F complete set with all dies
2541210	HHW-4F complete set with all dies

Model No.	Max	Max stroke	Bending dies	Pipe wall thickness	G. W.	Dimension	Packing way
HHW-2F	13T	250mm	1/2", 3/4", 1", 11/4", 1 1/2", 2"	2.75-4.5mm	50kg	73×32×20cm	
HHW-3F	20T	320mm	1/2", 3/4", 1", 11/4", 11/2", 2", 21/2", 3"	2.75-5mm	112kg	94×40×21cm	Plywood
HHW-4F	23T	370mm	1/2", 3/4", 1", 11/4", 11/2", 2", 21/2", 3", 4"	2.75-6mm	157kg	118×46×23cm	

^{*} See page113 For Bending Dies specification

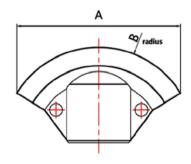
Bending Dies

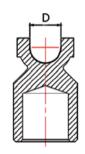


Product Description

• Following GB/T 3091, DIN 2440,EN 10255 Made of nodular cast iron.

Bending Dies specification







Bending Shoe Size (Inch)	A (mm)	B (mm)	Minimum Bend Radius(mm)	D (mm)	Pipe Schedule	Wall thickness (mm)
1/01	115	07.5	F0.0	22	40	2.8
1/2	1/2" 115 67.5 50.2 22		80	3.7		
2/4"	101	045	00	20	40	2.9
3/4"	131	84.5	66	28	80	3.9
1"	147 96.5	75.4	34	40	3.4	
		90.5	75.4	34	80	4.5
1 1/4"	195	134	108.7	43	40	3.6
1 1/2"	242	162	133.5	50	40	3.7
2"	297	238	199.2	62	40	3.9
2 1/2"	380	257	209	79	40	5.2
3"	436	390	335	90	40	5.5
4"	555	450	400	110	40	6

Rolling Pipe Bender

Product Description

- If you want to bend pipes into a circular or arc shape, the diameter of the circle or arc should be more than twenty times of the pipe diameter.
- We can supply bending dies in other Specifications according to your requirements.
- Suitable for cold bending of stainless steel round/square pipe, mild steel round/ square pipe, up to 360°
- The machine is suitable to bend pipes which length is not less than 2m



• Model: HHW-G76

• Standard round dies: 16, 19, 22, 25, 32, 38, 51, 63, 76mm

• Standard square dies: 16, 19, 22, 25, 30, 38, 40, 50mm

• Pipe wall thickness: 0.5-2mm

Motor: 1500WG. W: 250kg

• Dimension: 73×63×103cm

Specifications

• Model: HHW-76B

• Standard round dies: 16, 19, 22, 25, 32, 38, 51, 63, 76mm

• Standard square dies: 16, 19, 22, 25, 30, 38, 40, 50mm

• Pipe wall thickness: 0.5-2mm

• Motor: 1500W

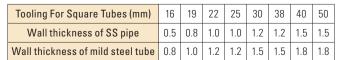
• **G. W**: 260kg

• Dimension: 73×63×103cm

Ordering Information

Catalog No.	Description
2561110	HHW-G76 complete set with all dies, 220V-50Hz
2551022	HHW-G76 complete set with all dies, 110V-60Hz
2561010	HHW-76B complete set with all dies, 220V-50Hz
2551131	HHW-76B complete set with all dies, 110V-60Hz
2561111	HHW-G76 complete set with all dies, 380V-50Hz
2561011	HHW-76B complete set with all dies, 380V-50Hz
2561112	HHW-G76 complete set with all dies, 240V-50Hz
2561012	HHW-76B complete set with all dies, 240V-50Hz

Tooling For Round Tubes (mm)	16	19	22	25	32	38	51	63	76
Wall thickness of SS pipe	0.5	0.8	1.0	1.0	1.2	1.2	1.5	1.6	2.0
Wall thickness of mild steel tube	0.8	1.0	1.2	1.2	1.5	1.5	1.8	1.8	2.3











All In One Hydraulic Knockout Punchers











Product Description

• Hydraulic Knockout Punchers is the ideal tools for on-site hole punching in power distribution box and metal plates Simple and guite operation.

Features

- · Made of aluminum.
- HHK-8A head is right-angled and rotating 360°, which. allows greater versatility in tight spaces.
- HHK-8E is perfect for fast, straight-on panel punching.
- Can be quiet and fast operated by single person.
- Lightweight, packed in metal carry case.

Specifications

• Wall Thickness: Stainless steel plate: up to 1.6mm

Mild steel plate: up to 3.2mm

- Capacity: Φ16-60mm
- Standard with option C Die set

Ordering Information

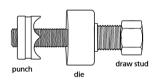
Catalog No.	Model No.	Description All In One Hydraulic Knockout Punchers			
1591310	HHK-8A	All In One Hydraulic Knockout Punchers			
1591311	HHK-8E	All In One Hydraulic Knockout Punchers			

Punch Kit includes punches, dies and draw studs









Optional punches and dies

Die set A (mm)	Die set B (mm)	Die set C (mm)	Die set D (mm)
Ф16,Ф20,Ф26, Ф32,Ф39,Ф51	Ф22,Ф27,Ф34, Ф43,Ф49,Ф60	Ф63,Ф76,Ф80, Ф89,Ф100,Ф114	32*32,46.5*46.5, 76.5*76.5,80.5*80.5, 90.5*90.5,113*113,151*151
/	701		

Separable Hydraulic Knockout Punchers





Product Description

 Hydraulic Knockout Punchers is the ideal tools for on-site hole punching in power distribution box and metal plates Simple and quite operation.

Features

- Can be quiet and fast operated by single person.
- Compact design for field use on construction sites and maintenance jobs
- HHK-8 consists of hand pump, high pressure hose 0.8 meter
- HHK-15 consists of hand pump, high pressure hose 1.5 meter
- Lightweight, packed in carry case



Catalog No. Model No.		Description
1591312 HHK-8		Separable Hydraulic Knockout Punchers
1591410	HHK-15	Separable Hydraulic Knockout Punchers



Model No.	Output force	Ram stroke	Max. thick	ness (mm)	Punch range	Punch dies	G.W. (KG)	Packing size(cm)
wodel No.	(ton)	(mm)	Stainless steel	Mild steel	(mm)	(mm)	G.VV. (KG)	
HHK-8	9	16	1.6	3.2	16-60	Ф22,Ф27,Ф34,Ф43,Ф49,Ф60	10.3	45×39×16.5
HHK-15	13	22	2	4	16-114	Φ63Φ76Φ80Φ89Φ100Φ114	26.2	49×25.5×13