

14-11-12

# P064

MPB-2SH ½" to 2"

SWG series



HYDRAULIC PIPE BENDER

USER'S GUIDE



Thank you for choosing Hafco Hydraulic Pipe Bender!

1 、 When you received the Bender

- A Firstly, checking the type No. is correct as what you ordered;
- B Counting and check the parts in the package according to the packing list
- C Check all of the parts are in good condition;

### Packing List

Type		SWG-2A		SWG-3B		SWG-4D	
No.	Name	Size	QTY	Size	QTY	Size	QTY
1	Body	2"	1	3"	1	4"	1
2	Upper swing plate & Bottom swing plate	2"	2	3"	2	4"	2
3	Bending die	1/2"-2"	6	1/2"-3"	8	1/2"-4"	9
4	Return wheel	2"	2	3"	2	4"	2
5	Bolt	M12x25	4	M14x30	4	M16x40	4
6	Handle	2"	1	3"	1	4"	1
7	User's guide	2"	1	3"	1	4"	1
8	Seal bag	2"	1	3"	1	4"	1

### Packing List of Seal Bag

Type		SWG-2A		SWG-3B		SWG-4D	
No.	Name	Size	QTY	Size	QTY	Size	QTY
1	YX seal	D16	2	D16	2	D16	2
2	YX seal	D28	1	D28	1	D40	1
3	O seal	D16	1	D16	1	D16	1
4	O seal	D28	1	D28	1	-	-

D Reading this user's guide carefully before use the Bender.

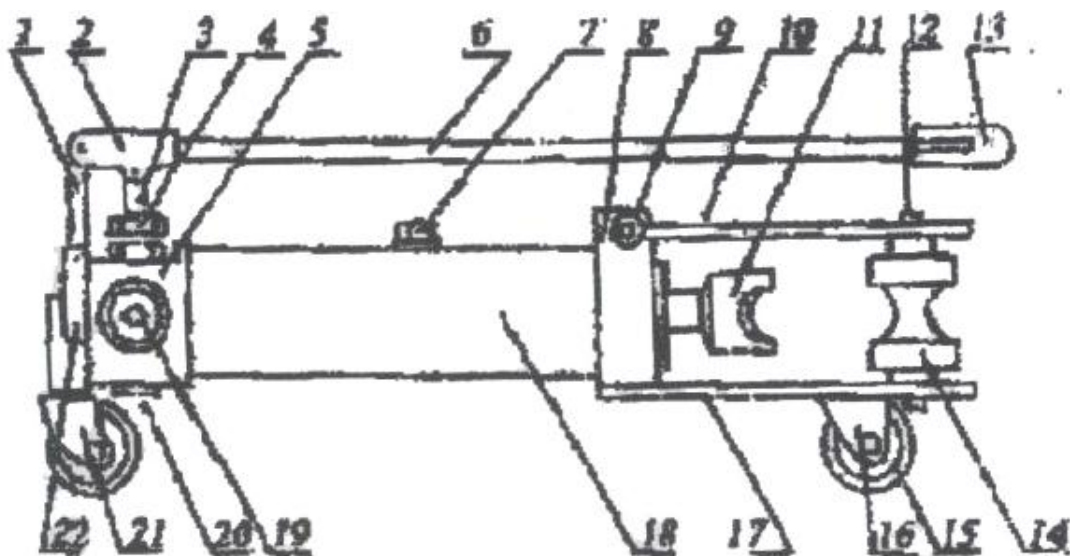
2、 SWG series hydraulic Pipe Bender can be used to bend welded steel pipe, low pressure - liquid transportation welded steel pipe and general-purpose steel pipe under normal temperature, It cannot be used for bending thin thickness wall pipe, nonferrous metal pipe and those steel pipes that their outside diameters are unmeet to the dies of the bender .

### 3、 Specification

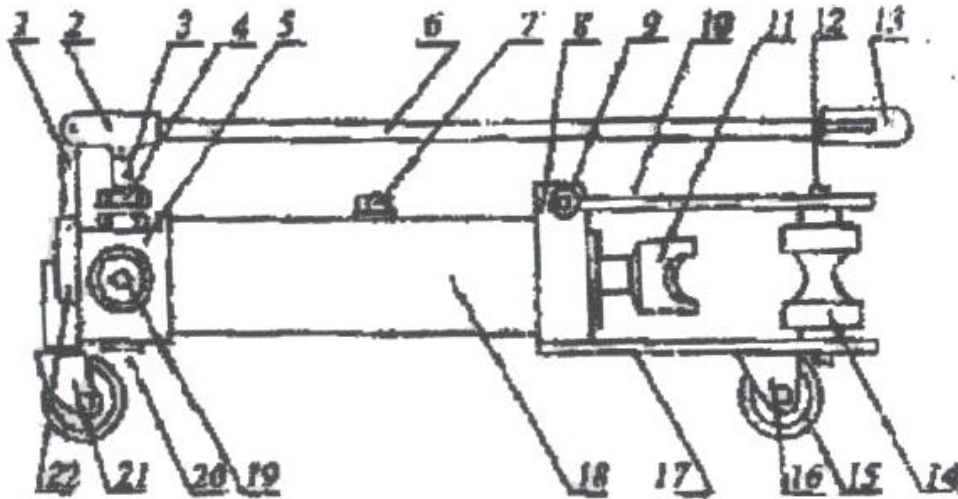
ITEM		TYPE	UNIT	SWG-2A	SWG-3B	SWG-4D
MAX. Working pressure			Mpa	44	59	62
Unloading Pressure			Mpa	48	73	73
Max. Working Load			KN	88	195	206
Max. Operating Stroke			mm	250	320	420
Bending Capacity	Pipe O. D.		mm	Φ21.3-Φ60.0	Φ21.3-Φ88.5	Φ21.3-Φ
	Pipe Wall Thickness		mm	2.75-5.00	2.75-6.00	3.50-7.00
Oil Tank			L	1	1.8	2.5
Weight			Kg	58	120	193
Angle of Bending			rad	$\pi/2 \leq a < \pi$	$\pi/2 \leq a < \pi$	$\pi/2 \leq a < \pi$
Oil No.			No.	N15	N15	N15
Max. Operation Force			W	≤490	≤490	≤490
Curvature Radius			mm	4D	4D	4D
Series of O. D.	Low Pressure liquid Transportation Welding Steel Pipe		mm	Φ21.3 Φ26.8 Φ33.5 Φ42.3 Φ48.0 Φ60.0	Φ21.3 Φ26.8 Φ33.5 Φ42.3 Φ48.0 Φ60.0 Φ75.5 Φ88.5	Φ21.3 Φ26.8 Φ33.5 Φ42.3 Φ48.0 Φ60.0 Φ75.5 Φ88.5
	Steel Pipe		mm			Φ108.0

## 7. OPERATING INSTRUCTIONS

- A. Tighten the Valve ( part 19 ) clockwise.
  - B. Loosen the Oil breather on the ram assembly ( part 7 )
  - C. Lift up the upper swing plate ( part 10 ).
  - D. Install selected bending die ( part 11 ), and both return wheels ( part 14 ) with pins ( part 12 )
  - E. Oil the selected die ( part 11), return wheels ( part 14) and bending area of pipe to be bent (workpiece) with Lubrication.
  - F. Load the workpiece and turn around both return wheels ( part 14 ) to get their correct groove to face the workpiece
  - G. Lower the upper swing plate ( part 10 ). Ensuring it locates on pins ( part 12 )
  - H. With the handle ( part 6 ) in the Left Pump assemble (Low pressure) Lift and lower handle ( part 6 ) and pump until ram starts to bend workpiece.
  - I. Relocate the handle ( part 6 ) into the Right Pump assembly and continue bending until bend required.
  - F. Loosen the valve ( part 19 ) counter-clockwise.
- The main ram will be return.
- G. Lift up upper swing plate (part 10).
  - H. Remove workpiece

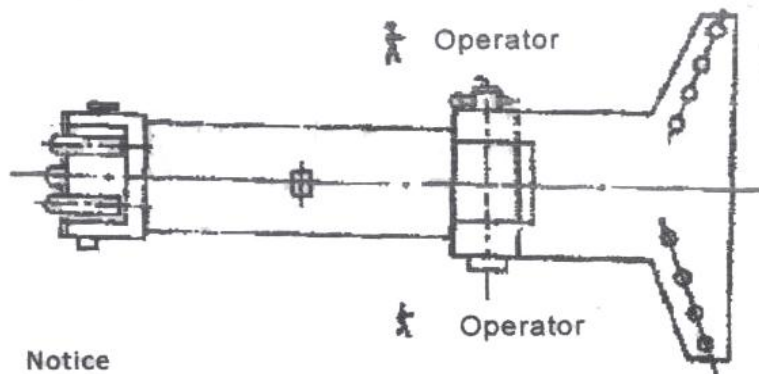


## Parts



- |                         |                             |
|-------------------------|-----------------------------|
| 1. Pulling plate        | 2. handle connecting sheath |
| 3. piston pump          | 4. pump cap                 |
| 5. pump body            | 6. handle bar               |
| 7. oil filling port     | 8. oil tank bottom          |
| 9. swing plate pin      | 10. upper swing plate       |
| 11. bending die         | 12. return wheel pin        |
| 13. handle cover        | 14. return wheel            |
| 15. caster              | 16. rear caster holder      |
| 17. bottom swing plate  | 18. oil tank                |
| 19. on-off              | 20. oil filter cap          |
| 21. front caster holder | 22. bottom plate            |

## 5、 Operator position



## 6、 Notice

### A. O.D. of pipe and relevant wall thickness

Φ21.3	Φ26.8	Φ33.5	Φ42.3	Φ48.0	Φ60.0	Φ75.5	Φ88.5	Φ108.0
2.75	2.75	3.25	3.25	3.5	3.5	3.75	4	4.5

# Pipe with wall thickness thinner than the above chart pipe are called thin-thickness wall pipe

If their wall thickness is less than above mentioned relevant wall thickness and you may have trouble bending these.

# Choose correct bending die according to outside diameter of bended pipe.

# The contact area between bended pipe and both return wheel must be slippery and oiled with lubrication.

# Welding line of welding pipe should not be situated the position of outside or inside of bended area but on top or bottom.

# The position must be correct and symmetric when installing two pcs of return wheels ( part 14 )

# Use clean oil .Clean oil filter cap regularly.

# Don't use the Bender in the place where acid and other corrosive substances are stored .

# The overload pressure has been adjusted before delivery , don't adjust it.

# Tighten the plug on the oil filling port ( part 7 )after use.

NOTES