

- **DE Bedienungsanleitung**
- EN Instructions for use
- FR Instruction d'utilisation
- ES Instrucciones de uso
- IT Istruzioni d'uso

- NL Gebruiksaanwijzing
- PT Instruções de serviço
- CZ Návod k používání
- **RU Инструкция по использованию**



ROBULL 2"



www.rothenberger.com

1. General characteristics

With the rothenberger pipe bender you can cold bend galvanized or black steel pipes of the following types, without filling, and without reamers on the inside:

Steel Pipe EN 10255 Medium and heavy series

The angles we can effect with these benders range from 0° to 180°. A right angle can be made directly, while others can be effected with several curves.

These angles can be in different planes. The equipment could be hand operated or electrically, with automatic, piston return.

Its main features are:

Nominal power:	8 Tn
Maximum travel:	270 mm.
Piston diameter:	34 mm.
Pump piston diameter:	16 mm (hand operated)
	10 mm (electric).
Volume of top-up oil:	850 cc.
Oil to be used:	ISO 32 or similar.

2. Starting up and using the two-plate pipe bender

- 1. Fit the guide plates to the front flange and secure them with pins.
- 2. Fit the diabolos to the lower plate, in the position corresponding to the size of the pipe to be bent. At the same time fit the diabolo in position in accordance with the size of the pipe.
- 3. At the end of the piston, fit the former corresponding to the size of the pipe that it is desired to bend. Place the pipe in position and put down the upper plate.
- 4. In the event that the pipe to be bent is welded, the weld beam should be placed either in the upper or lower side position.
- 5. Before starting to use the pipe bender, release any pressure there may be in the valve system of the hydraulic circuit. Do this by opening the return cock and pumping several times with the lever or switch on the motor.
- 6. Make sure the return valve is well closed, and the tank plug open
- 7. You can then begin to operate the pump lever or switch on the motor.
- 8. When the bend has been finished, return the piston by loosening the return valve on the side of the distributor

3. Training and maintenance

Check oil level at regular intervals. When topping up, be especially sure to filter the oil so that it is free of extraneous matter. Check its level by lifting the front part of the unit about 45° and looking in. The oil should reach the level of the hole used for loading it in.

When the oil has been topped up, fit the unit in inclined position, i.e. almost vertical, and with the piston upward. Open the return valve and work the pump with the lever until suction is as it should be. After a short space of time with the position unchanged, and when suction is satisfactory, fit in horizontal working position.

In the event that it is necessary to top up, use a high-quality hydraulic oil. Never use brake fluid. Bear in mind that excess of oil will render the equipment inoperative. Accordingly fill to about 70% of tank capacity (1250 cc), first removing the cap.

Close the tank plug for transportation



4. Troubleshooting

Cause	Solution	
The piston fails to advance		
Insufficient oil	Check oil level	
Return valve not closed	Close return valve	
Air in the system (pump)	Open the return valve and operate the pump lever until the air is released. To do this, position the unit with the piston upward, so that the oil will descend to the distributor	
The piston advances only in the absence of load		
Return valve is poorly closed	Close the return valve	
There is a foreign body in the intake valve	Disassemble the intake valve and clean it thoroughly, first having made the piston return	
The piston stops before reaching the end of its stroke		
Very low oil level	Top up the oil	
Tank plug closed	Open the tank plug	
The piston advances and returns with each pump stroke		
Foreign body in the output valve, or air in the pipes	Position the cylinder vertically, first having made the cylinder return. Take apart the output valve and clean it.	
Foreign body in the intake valve	Take apart the intake valve and clean it, first having made the piston return.	
The piston advances well under load but the lever returns suddenly		
Foreign body in the check valve	Remove the check valve, disassemble it, and clean it, first having made the piston return.	



When its useful life is over, do not dispose of th machine into the domestic waste, please send it to authorised places for recycling.

