DIRECTIONS FOR USE OF

3 IN 1 COMBINATION OF SHEAR,

BRAKE AND ROLL

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These directions are suitable for the 12, 24, 30, 40, 42 and 52 inch 3 in 1 combination shear, and brake and roll.

Uses

This machine is used for shearing and braking low carbon plates (mild steel) or the other metal materials which have similar density to the low carbon plate. The maximum material thickness is 1mm. It can also be used for rolling steel plate or the other metal materials that have similar density. The maximum thickness for rolling is also 1mm.

Uses and Maintenance

1- Before using this tool, you must read these directions to have an intimate understanding of the features and usage of the tool, and also the function of the handle, drive and lubrication systems.

2- According to different conditions, this machine tool must be either securely fixed to the ground or special machine seat, in order to keep the tool from sliding during use.

3- Please firmly follow the operating rules.

1) In the factory a rust preventative coating is put on the tool, use paint thinner to remove the yellow coating before use.

2) Keep the area near the machine clean and free of debris. A non slip floor mat is recommended around the machine.

3) When you move, install, clean and adjust the machine. you must

keep away from the shears.

4) Always put down the protecting cover when you do not use sliding roll of the roll machine.

5) Keep your hands away from the die when you are working on it.

6) Operators must be familiar with the structure and function of this machine. Safety goggles and the other safety devices should be worn when working on this machine. Do not wear loose fitting clothing.

7) Focus your complete attention on the machine and do not operate when other people are near by the machine.

8) Do not use material other than the intended 1mm thick low carbon steel plate.

4- Generally the operating handle is installed on the right side of the machine tool but left if also acceptable.

5- Back-measure plate (angle iron).

The back measure plate is used for shearing and braking. When it is in place of braking condition, please screw two long bars into the nut of the concave mould plate, ensure that the bars pass through the front part of the concave mould plate, tighten up the nut, and then back-measure plate and concave mould plate can move up and down together.

When it is in the place of shearing condition, before putting the bars

into the positioning plate, screw a (2—M16、2—M12、2—M10) nut into the positioning plate, and then followed the bar which was fixed by the nut in the end.

In these two positions, the circular adjustable knob is installed at the back of the angle iron.

6- Adjustment of the braking installation

1) Adjustment of the upper die:

Loosen the mounting bolts to remove the upper die from the machine. If you do not want the upper die to come off the machine or you are installing another new mould plate, you can put a piece of hard wood (25×25×160mm) or other similar material on the concave mould plate, turn the handle and raise the concave mould plate until the wooden piece touches the upper die (form plunger). After installing the new die, all the mounting bolts of the die should be tightened. In some cases, especially when using the narrow die, it is necessary to put a piece thin paper between the upper die and the lower die.

2) Adjustment of the cross girder:

To make the braking go smoothly and to separate the formed metal between the upper die and the lower die from being blocked. you must adjust the crossbeam.

First put a steel plate (of same quality thickness) on the concave

mould plate, then turn the handle carefully to raise the concave mould plate, loosen the fasten bolt of the crossbeam when the upper die (form plunger) meets with the processing metal.

Next in order to fix the crossbeam, adjust the screw on the crossbeam. Finally tighten up all the mounting screws. During this period, the handle is not fixed to turn an angle of 360 degrees. Brake a piece of metal plate with same width and thickness on both sides of the braking system, their angles should be similar, the job should be excessively braked when you turn the handle and fully brake the job.

7- Adjustment of the shearing assembly

You should adjust the zero-clearance of the upper cutter and the lower cutter.

Adjustment of the lower cutter:

Unload the pressing plate, loosen the mounting screw and the two adjustable screws of the working table, turn the handle until the upper cutter is near the cutter on the working table, retighten the mounting screw and the adjustable screw, in order to prevent the working table from moving back when the machine is used, install the pressing plate once again and ensure that it is parallel to the upper cutter.

Adjustment of the positioning plate:

While shearing, there will be a powerful force produced at the

middle of the cutter, in order to avoid the clearance between the upper and lower cutter, you should adjust the central screw behind the positioning plate. If the adjustment is not suitable, the metal plate will be folded in the middle of the two cutters when shearing is executed.

If the lower cutter and the upper cutter still press close together after the adjustment, two parts must be examined. First, fully tighten the mounting screw of the lower cutter then loosen the screw about 1/8 of a turn. Second, clean and lubricate the contact ace of the concave mould plate and the positioning plate.

8- Adjustment of the rolling installation.

This rolling installation can roll, straight roll and taper metal rings using the linear channel roller.

When a job is finished, turn the pin to right so the left side of the roller can be taken off the machine and the work piece can be removed easily.

When you operate the slide roller, you must give enough pressure to the upper roller.

Adjust the clearance of the upper roller and the lower roller properly; ensure that the tow sides of the roller have the same clearance.

9- After use, clean the machine and apply a coat oil to all exposed metal surfaces.

Chief Technical Specifications

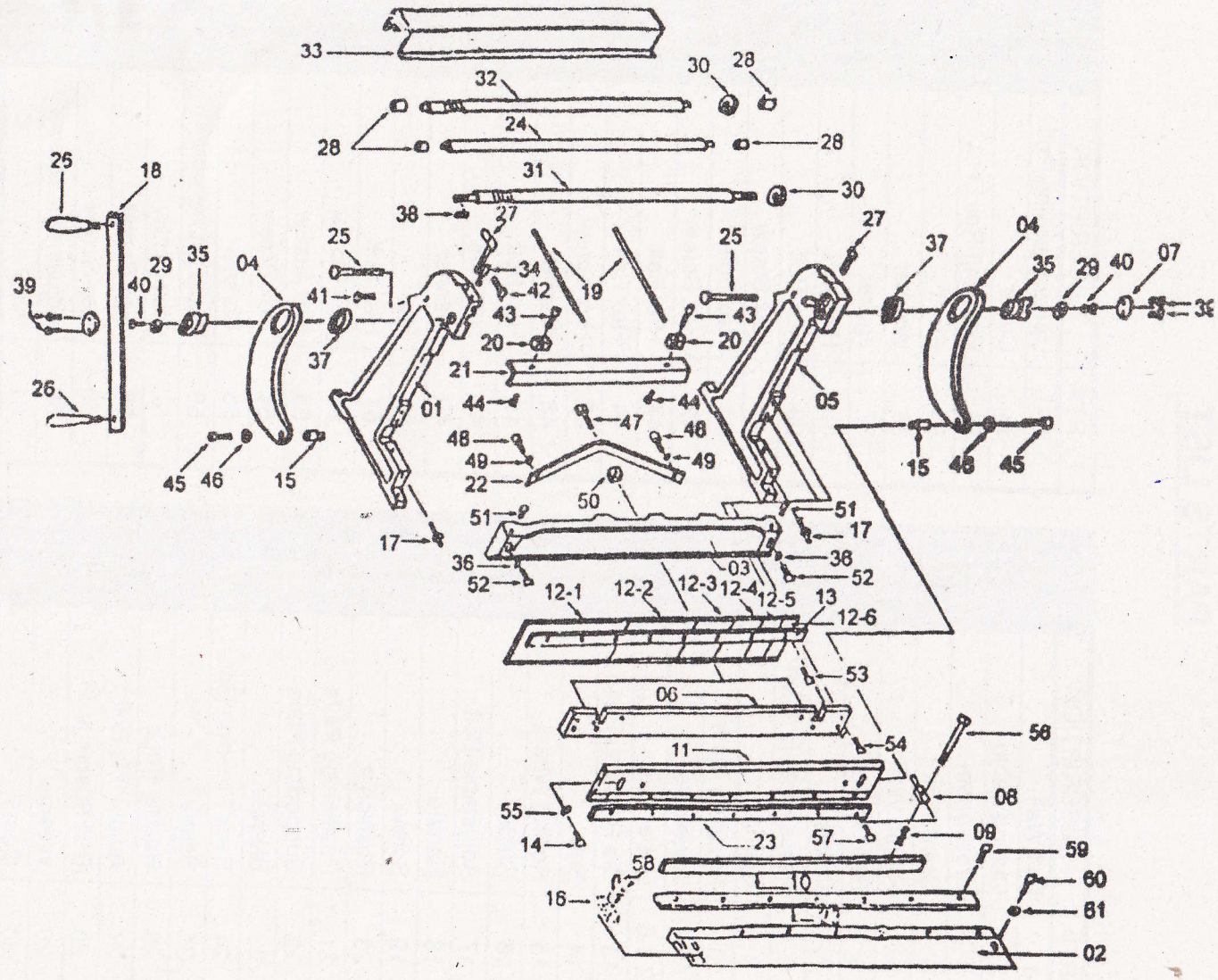
Effective width	Maximum shearing braking rolling thickness	Minimum internal diameter of the roll	Measurement of machine tool (L×w×h)	Net weight
12 " (305mm)	1mm low Carbon plate	Φ39mm	64×45×50cm	45kg
24 " (610mm)		Φ39mm	87×47×69cm	125kg
30 " (760mm)		Φ39mm	98×47×69cm	140kg
40 " (1016mm)		Φ43mm	135×50×73cm	220kg
42 " (1067mm)		Φ43mm	140×50×73cm	250kg
52 " (1320mm)		Φ51mm	162×56×75cm	440kg

Lubrication of the tool

Apply machine oil to all moving parts and all exposed metal surfaces regularly.

Accessories of the machine tool

Includes 5, 6 and 8 mm hex keys.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PARTS LIST

PART#	DESCRIPTION
1	Left Wall
2	Cutting Table
3	Crossbeam
4	Crank Arm
5	Ringht Wall
6	Bear Frame
7	Cover
8	Press Plate Bracket
9	Spring
10	Pressing Plate
11	Lower Die
12 1-6	Upper Die
13	Die Pressing Plate
14	Bolt
15	Rolling Wheel
16	Guide
17	Adjustable Bolt
18	Handle
19	Screw
20	Positioner
21	Positioning Plate
22	Supporting Plate
23	Blades
24	Back Pressing Roll
25	Screw
26	Handle Knob
27	Adjustable Bolt
28	Roll Bushings
29	Washer
30	Cear
31	Lower Pressing Roll

PART#	DESCRIPTION
32	Upper Pressing Roll
33	Cover
34	Pressing Roll Lock
35	Shaft
36	Washer
37	Jacket
38	Roll Key
39	Hex Bolt
40	Hex Screw
41	Hex Bolt
42	Hex Screw
43	Hex Bolt
44	Hex Bolt
45	Hex Screw
46	Washer
47	Hex Bolt
48	Hex Bolt
49	Washer
50	Nut
51	Hex Bolt
52	Hex Screw
53	Hex Screw
54	Hex Screw
55	Washer
56	Hex Bolt
57	Hex Screw
58	Hex Screw
59	Hex Screw
60	Adjustment Screws
61	Washer