

**OPERATING INSTRUCTION -24** 

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# **Operation Manual**

#### WARNING

Before operating your new magnetic drilling machine, please read all instructions first. There include the Operation Manual and Warning Label on the unit itself. With proper use, care and maintenance, your model will provide you with years of effective drilling performance. To reduce the risk of injury, User must read and understand all instructions.

#### THANKS TO THE BUYER

Congratulations on your purchase of the LOGO Permanent Magnetic Drilling Machine. You model is designed to the produce superior holes guickly and efficiently. Through years of experience, constant innovation and development, **LOGO** is committed to provide you magnetic drill machine to help you be more productive.

### **MANUAL**

Machine model included:

SCY: 35PM **50PM** 38WSPM 55WSPM Permanent magnetic drill

Confirm the machine model according to the nameplate.









### DESCRIPTIONS OF PRODUCTS

This device is destined to:

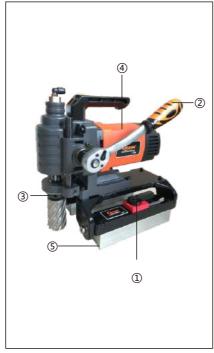
Cut material with magnetisable surface with core cutters in sheltered environment for commercial use industry and craft. The device is suitable for drilling vertical, horizontal and overhead.

## **CAUTIONS**

- 1.Do no use this power tool before you have thoroughly read and completely understood this instruction Manual and the "General Safety Instructions", including the figures, specifications, safety regulations and the signs indicationg DANGER, WARNING and CAUTION.
- 2.DO unplug machine while changing or adjusting cutting bits so as not to accidentally turn machine on.
- 3. Four hours of uninterrupted operation of the machine will cause the machine to fire, four hours of uninterrupted operation of the disk will lead to high Temperature. High temperature may cause fire. Do not touch the disk when the disk is hot, touch the disk will cause serious burns. No Stop using disk for more than four hours. When you do not use the machine, you should turn off the switch and unplug the power switch.
- 4. During machine operation, the fuselage must behind the cable, away from the drill bit.
- 5. Electric and magnetic switch must be in the off position in the seitching power supply.
- 6. During machine operations, the annular cutter must be cooled and lubricated with good quality cutting or lubrication oil.
- 7. Please make sure that the contacting surface for the magnets is level, clean and rust-free. Remove any varnish or primer.
- 8. The use of magnetic base drill, must wear a seat belt buckle.
- 9.DO NOT force the machine. It will do the job better and safer at the rate for which it was intended.
- 10.DO NOT use a magnetic drill on non-magnetic material.
- 11. Clean the ventilation openings on the power tool at regular intervals using non-metal tools. The blower of the motor draws dust into the housing, an excessive accumulation of metallic dust can cause an electrical hazard.
- 12.DO NOT use your magnetic drill on the same structure when ARC welding is in progress. D.C. current will earth back through the magnet and cause irreparable damage.

## **INTRODUCTION**





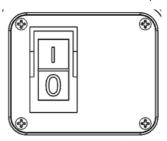
- Magnet Activation
  Locking feature prevent magnet
  dropping from work piece to
  ensure safety
- Peed Handles
  High positioning for optimum
  operation and maximum stroke
- Spindle
  Weldon shank spindle for annular
  cutters

- Motor
  Power motor with low noise
- Swivel Permanent Magnet
  Patented swivel magnet base
  work without electricity
  Angle can be changed suitable
  for different size pipe

## **TURNING MACHINE ON AND OFF**

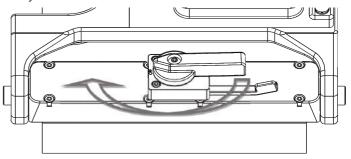
## 1- The Motor Switch:

This switch is used to switch the motor unit ON and OFF;



## 2-The Magswitch

The two handles on the Magswitch arrays need to be rotated the full 180 degrees to be considered fully ON or OFF



In order to operate properly, the machine MUST be turned ON following the procedure as described below.

#### **ACTIVATING THE MAGNETS**

Connect the machine to the mains/work piece. To activate the magnets rotate the ratcheting action handle the full 180 degree rotation.

#### TURNING THE MOTOR ON AND OFF

To turn the motor ON, press the motor switch, the spindle will start to rotate.

## **ELECTRICAL SAFETY**

Magnetic drilling machine plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs.

#### **SAFETYINSTRUCTIONS**

Warning labels and/or other labels on the machine must be replaced when they were removed.



 $Do \, not \, operate \, the \, machine \, at \, insufficient \, lighting \, conditions.$ 

Do not operate the machine outdoors.

Do not operate the machine when you are tired, when your concentration is impaired, and/or under the influence of drugs, medication or alcohol.



Climbing onto the machine is forbidden! Heavy injuries by falling down or by tilting of the machine are possible.



Keep by standers, children, and visitors away while operating a magnetic drilling machine. Distractions can cause you to lose control.





Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.





Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Do not wear safety gloves for oper-ating because they decrease the working accuracy and they might be pulled into the saw blade.



Before any maintenance you have to disconnect the panel saw from the power source. Never use the plugged cable for transporting or manipulating the machine.

## **INSTRUCTIONS**

- 1. Put the drill machine at proper position, and use the tip of the pilot pin to determine the center of the hole to be drilled. Make sure that the surface between permanent magnet and the work piece is level, clean and rust-free. Remove any varnish or primer. Turn on the magnet switch to make drill machine attracted on the steel piece. Check if the permanent magnet works properly. (Normally thickness of the steel material where magnet attracts on should be more than 3.5mm)
- 2. Pass the safety chain through the opening near the grip; Wrap the chain around the work piece; Securely close the chain using the lock.
- 3. If your machine is equipped with an auto coolant system, open the valve slightly to release the oil.
- 4.a pilot pin should be applied inside the annular cutter, and keep the tip of the pin 10-15mm out of the cutter.
- 5.Plug in, turn the motor on and allow it to run at full speed. Turn the arms to start drilling. Apply only a slight pressure when the Annular Cutter touches the metal. Do not push the Annular Cutter with force into the metal. Cutting rate is suggested to be around 0.05mm/r. The drilling performance does not improve by putting more pressure on the tool. Too much pressure will overload the motor and your Annular Cutter will wear quicker.
- 6. Turn the arms to put the motor in highest position and turn off the motor unit. Remove the burr, metal chips and clean the cutter and surface without getting injuries.

  Caution: The metal piece drilled out can be sharp and very hot!!
- 7. If the drill machine stops suddenly, power switch must be turned off immediately.
- 8.Do not touch the cutter or the parts close to the cutter immediately after operation, as they may be extremely hot and cause burns to the skin. Ensure nobody is in the work area. Do not touch the core inside the cutter. The core will be released automatically from the cutter shortly after motor stop.

9.Do not unload the cutter if it's still moving, or severe injury will happen. In case that the drill might cut any hidden electric wire inside the work piece, operator must keep hands wearing gloves and only touch the insulating handle to operate the machine.

## **GROUNDING DEVICE:**

This tool should be properly grounded to avoid the electric shock. Grounding device should include special wire and earthing plug. Do not connect ground wire with live wire or three-phase terminal by mistake. At the same time, make sure that the socket is in well earthing condition.

## **QUALITY ASSURANCE:**

Consumer can enjoy free maintenance and repair for the drill machine within six months after purchase of the drill. In normal operation, if the drill machine or parts breakdown due to manufacturing reason, please prepare original invoice, distributor's seal and filled maintenance form to get free service from our company or authorized maintenance station. Normal wearing, over-load or damages caused by improper operation will not get free repair from our company. After free-maintenance period, users can get maintenance and repair service still with payment. And the maintenance record will be valid only with repairing station's signature or seal.

## **FAULT HANDING**

FAULTS	CAUSES	ELIMINATION METHODS
	Switch contact undesirable	Repair the switch
	Power supply is broken	Repair the power supply
Magnetic base	The fuse burn out	Replace the Fuses
without suction	Electromagnet short circuit or burn out	Repair or replace the magnetic bridge
	Adsorption not on the steel frame	Change the adsorption surface
	Circuit board burned.	Replacement of circuit boards
	Switch contact undesirable	Repair and change switch
Machine did not	Joint loose	Check the electric drill part connector
run after the jump	Brush and commutator poor contact	Repair or replace the electric brush
	Drill the armature or stator coil burn out	Changing the armature or stator
	Adsorption artifacts thin	Replace the adsorption surface or thickening adsorption surface (>10mm steel sheet)
Magnetic little	Adsorption on the surface is small	Replace the adsorption surface or temporary welding thick surface adsorption
suction	Support bar between the adsorption surface	Support bar top tight
	Diode may be virtual welding	Re Welding
Turn the handle gu	Shaft key cut	Replace the shaft key
ide does not work	Wheel and rack misplace	Unscrew the rack bottom screw, remove guide to repair
Drill out the	For a drill and a fastener is loose	Correction of verticality tighten the fasteners
elliptical hole	Bit unilateral cutting	Grind anew
empticarnole	Adsorption surface have sundry	Eliminate clutter
Spindle shake	Frame adjusting screw loose	Tighten adjusting screws
	The spark turns orange.	Slow down.
Electric ignition	Sparks flying out.	Change the brush, please.
	Sparks into a ring of fire	Please check if the motor is burned.

MARNING: Always use the safety chain when using machine vertically and/or up-side-down.

## MACHINE MODEL PARAMETER LIST

Specifications	;	SCY-35PM	SCY-50PM	SCY-38WSPM	SCY-55WSPM
Annular Cutter	mm	35	50	38	55
Voltage	v	110/220~	110/220~	110/220~	110/220~
Magnet Adhesion	N	16000	16500	14500	15500
Input Power	w	1600	1700	1650	1900
No-load Speed	rpm	810	280/510	650	570
Net Weight	Kg	11.5	11.7	11.5	11.7
Gross Weight	kg	18	18.2	18	18.2
Packing Size	cm	34*25*43	34*25*43	34*25*43	34*25*43

Attention: Our company won't take any responsibility for damages which is caused by un-secured machine.

## FEATURES OF PERMANENT MAGNETIC DRILL

The machine is with patented magnetic technology that offers incredibly strong grip, even on steel as thin as 4mm. The magnets do not require electricity, so all the power goes to the motor. This also offers increased safety as the tool will not release from the target material in the event of an unintentional power loss. The angle of magnet can be changed to suitable for working on different sizes pipe.

## **SWITCHING THE GEAR SETTING**

- With the gear switch, you can select the speed and thus the torque.
- Adjust the gear setting only when the machine is at a complete stop or when the motor is running down.
- Turning on the motor, if the spindle is not working, or there is noise, means the shift is not in the right position. Turn off the motor immediately, then rotate the spindle while turning the shift knob.

Do not shift the gear when the machine is running at full speed, loaded or stuck.

- 1.Set the switch to "L" to work at low speed with high torque. This setting is suitable for drilling with large drill bit diameters and for tapping.
- 2.Set the switch to "High" to work at high speed and high torque. This setting is suitable for drilling with small drill bit diameters.

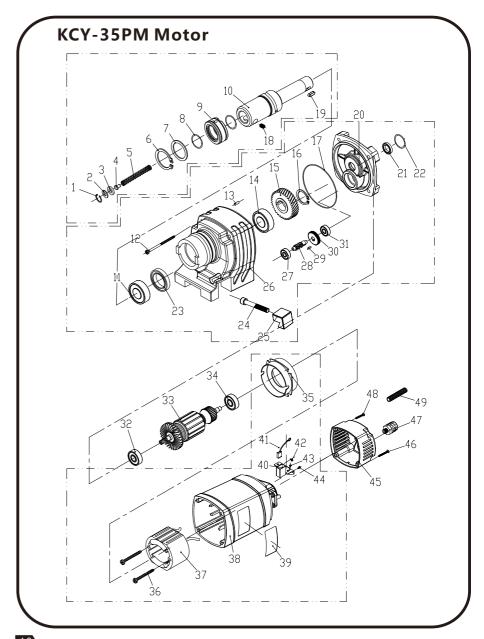


Low-speed



High-speed

NO.	Parts name	QTY
1	Neka 19	1
2	Pad 2 #	1
3	PU gasket B	1
4	Bullet Top 35WO	1
5	Spring 35WO	1
6	Wild card 33	1
7	Padding φ 33 * 48 * 1	1
8	O-ring φ 40 * 3.1	2
9	Water Circle 35WO	1
10	Spindle 35WO	1
11	Bearing 6904	1
12	Round head cross self-propelled screw M5 * 70(half tooth)	4
13	Cylinder pin 4 * 12	1
14	Bearing 6904	1
15	Spindle gear 35WO-3	1
	Card 20	1
16		
17	O-ring φ 73 * 2	1
18	Inner hexagonal top wire M10 * 10	1
19	Marketing 6 * 10	1
20	Middle cover 35WO	1
21	Oil seal 10 * 16 * 4	1
22	O-ring φ 25.8 * 1.8	1
23	Oil seal 20 * 32 * 7	1
24	Hegonal screw M8 * 50(half tooth) in stainless steel	1
25	Swallowtail slot iron block 40 #	1
26	Gear box, 35WO.	1
27	Bearing 608	1
28	Class I tooth axis 13-2	1
29	Crescent pin 9 * 3	1
30	Class I gear 13-1(8)	1
31	Bearing 608	1
32	Bearing 6000	1
33	Rotor KCY-35PM	1
34	Bearing 608	1
35	Windscreen, 35WO.	1
36	Round head cross self-propelled screw M4 * 65	2
37	Stator KCY-35PM	1
38	Stator shell 35WO	1
39	Trademark Post 35 QE	1
40	Brush frame 40 #	2
41	Carbon Brush 40	2
42	Bypass 19/40	2
43	Round Head Cross Screw M4 * 8 Copper	2
44	Round Head Cross Screw M4 * 10 Copper	4
45	Top 40	1
46	Round head cross self-propelled screw M5 * 45	2
47	Hose connector M12 * 1.5	1
48	Round head cross self-propelled screw M5 * 40	2
49	PE tube AD10 * 460	1



NO.	Parts name	QTY
1	Left bar 11-13	1
2	Guide plate 11-13ZC	1
3	Right bar 11-13	1
4	Teeth 10 * 16 * 180(M1)	1
5	Bottle screw M5 * 12	2
6	Frame 13-ZC	1
7	E-card 15	1
8	Roller pads 17 * 30 * 0.5	1
9	Bearing 6903	1
10	Card 18	1
11	Lift gear 11-13	1
12	Composite bearings 26 * 30	1
13	Lift shaft 11-13	1
14	Marketing 5 * 14	1
15	Knife handle 11-19	3
16	Outer hexagonal screw M10 * 110	3
17	Button head SKT-20	3
18	Inner hexagonal top wire M4 * 10	5
19	Hose connector M12 * 1.5	1
20	Power cord 3 * 0.75 * 2.5 M	1
21	Fold proof connector M12 * 1.5	1
22	Round Cross Screw M4 * 8	1
23	Copper nose OT 1.25 -4	1
24	Waveform gasket M4	1
25	Pad M4	2
26	Panel Box 13	1
27	Governor CX-16435	1
28	Button Panel 13PM	1
29	Rust-free large flat head steel screw M3 * 6	8
30	Electromagnetic switch KJD17	1
31	Knob KN-8L	1
32	Hegonal screw M4 * 10	4
33	Disk KCY 35-55 PM	1
34	Hegonal screw M6 * 20	4
35	Parameter Panel SCY-13	1
36	Stainless steel large flat head screw M5 * 8	2
37	Hegonal screw M4 * 20	6
38	Hegonal screw M6 * 16	2

