



OPERATING INSTRUCTION

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Operation Manual

WARNING

To prevent electric shock or fire, please strictly abide by the procedures in the operation manual.

The machine only for the specialized persons, please do not let other people to operate. If any violation of the instructions operation and cause personal injury or machine damage, our company disclaim all responsibility.

The machine can only maintain by the people who has the certification.

THANKS TO THE BUYER

Thank you very much for buying our company magnetic drill series products.

Please read operation manual and must pay attention to safety precaution.

The right operation, will make you fully feel our products superior performance.

Please put this manual in a safe place for future reference.

ABOUT THIS MANUAL

The machine model of the description in this manual:

KCY: 36/2WDO 48/2WDO 65/2WD 85/3WD

SCY: 32HD 42HD 68HD 98HD 126CD

KCY: 55QE 65QE 80QE

KCY: 28DM 38DM 55DM



Confirm the machine model according to the nameplate.



一、 DESCRIPTIONS OF PRODUCTS

Magnetic drill is a kind of electric tool for adhering and drilling on the horizontal level, side face and top face, and widely used in the building, bridge building, and ship building industries and so on. You can use the magnetic drill when you can not use drill press and electric hand drill to drill huge steel workpieces or in field operation. It's very convenient to use, flexible, can reduce labor intensity, improve the machining precision and work efficiency.

二、 CAUTIONS







1. Please read the manual carefully before use, to understand the magnetic base drill structure; electromagnetic sucker, electric drill and transmission functions.
2. Before installing or remove the drill must confirm the motor switch is closed and the plug.
3. Using a drill bit after clamping, key wrench must be removed, while the drill must be sharp, for Morse taper shank drill should pay attention to the flat iron tail at the cone sleeve waist groove insert cone sleeve. Remove the drill, the inclined flat iron is inserted on the oblique iron just bit dropping hammer sleeve waist groove.
4. And its operation must be put in the fuselage behind the cable, away from the drill bit
5. In the switching power supply, electric and magnetic switch must be in the off position
6. Drilling machine must be used when using engine coolant. The use of cooling liquid (soap) according to the ratio of watered, absolutely can not direct use water cooling. Otherwise very easy to damage, and the main internal rust on the drill bit can't get it out. No internal machine water, otherwise it will burn the circuit board.
7. Such as the use of the stepless speed regulation, models of constant power overload protection, the machine during use motor suddenly stop functioning, then in the function of overload protection device, the steps are as follows: A, turn off the power switch, paused for a few minutes; B, weight of the plug, then open the motor.
8. The use of magnetic base drill, must wear a seat belt buckle.
9. No rough operation personnel, feed can not handle in order to work fast and pressed down the machine feed, so lossy bit and machine
10. Non-magnetic materials can not drill with magnetic base, if the non-magnetic material punching need to choose the magnetic base drill with sucker.
11. Cannot use at the same time, electric welding machine and magnetic base drill on the same piece of steel plate, so that the operating from electric shock danger.



三、 ELECTRICAL SAFETY

Tool before connecting power, using the socket must be able to fit the plug machine. The 380V model to determine the fire and. Line the correct docking, power supply socket with the need of professionals to complete. Do not arbitrarily change the plug, adapter plugs can't pick. The electric tool wire used together.

四、 SAFETY INSTRUCTIONS

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

	<p>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.</p>
	<p>Climbing onto the machine is forbidden! Heavy injuries by falling down or by tilting of the machine are possible.</p>
	<p>The machine shall be used only by trained persons. Non authorized persons, especially children, shall be kept away from the work area.</p>
  	<p>Do not wear loose clothing, long hair openly or loose jewellery like neck-laces etc. when operating the machine They might be caught by rotating parts and cause serious injuries.</p>

	<p>Use proper safety clothing and devices when operating the machine (, safety goggles, ear protectors, safety shoes ...)! Do not wear safety gloves for oper-ating because they decrease the working accuracy and they might be pulled into the saw blade.</p>
	<p>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.</p>

五、 INSTRUCTIONS

1. Plug the power plug, the drill bit aim at processing position, make the magnetic switch is opened, so that the magnetic is adsorbed on the surface of steel plate magnetic materials. No impurities on the surface, and check whether the attractive force is normal or not. (general plate thickness should be more than 10mm)
2. Please placed the magnetic base drill required from the drilling near site and select the appropriate adsorption material. And will handle hole safety rope penetrates into the frame, the other one is in fastening frame after the penetration of the buckle, and then close the safety rope buckle. Hand and pull off, should not loose and mobile.
3. For a support screw, regulating the support screw that the bottom touches the workpiece surface.
4. For the magnetic base is provided with the angle of the drill, the use of angle wrench movement angle disk in the annex to the belt rack makes bit central alignment processing position, tighten the angle wrench.
5. Open the electric drill switch, check whether the drill bit beat, sound is normal, if everything is normal can turn the handle to feed.
6. Start feeding should be slow, gives the quantity of about 0.05mm/r in general, not too much force, to prevent overload.
7. If the drill suddenly stopped, you must turn off the power switch immediately, (Must close the magnetic control switch)
8. Please shut down for a period of time machine in continuous use for 2-3 hours, in case magnetic base is overheated and leakage or burned.
9. Should be filled with cooling water or cooling liquid using hollow drill, turn on the tap, and let it flow out slowly.

10. The company factory hollow drill are equipped with cooling kettle, please put the kettle arranged on the corresponding position before operating the machine, and tighten the two round head screw. The kettle is connected after please figure two (035), fittings is screwed on the hydrosphere, tighten the end can be on the frame by.

六、GROUNDING DEVICE :

This tool should be properly grounded, in order to avoid the shock. Grounding device should have the lead standard, and a grounding plug with earthing special line. Do not be ground false joint in the line of fire or three-phase line. Grounded power receptacle should be connected with the earthing device is connected to the eternal, so that it can work with yellow green wire connected to the plug hole and connection piece at the same time and ground connection.

七、QUALITY ASSURANCE :

Consumers buy our machines produced within six months, enjoy free maintenance and warranty service. During normal use of the whole or parts of any manufacturing process or product failures caused by components, please present the original invoice, the dealer stamped and filled properly warranty certificate to the Company or the Company's designated repair station to receive free services. machine consumable normal wear and tear, overload, do not operate according to operating specifications, disassemble, damage caused as a result of use of parts other than the Company and damage, are not covered by warranty. warranty expires, provided by the designated repair station maintenance service. maintenance records must be sealed or signed by the repair station to take effect.

八、FAULT HANDING

FAULTS	CAUSES	ELIMINATION METHODS
Magnetic base without suction	Switch contact undesirable	Repair the switch
	Power supply is broken	Repair the power supply
	The fuse burn out	Replace the Fuses
	Electromagnet short circuit or burn out	Repair or replace the magnetic bridge
	Adsorption not on the steel frame	Change the adsorption surface
Machine did not run after the jump	Circuit board burn out	Change the circuit board
	Switch contact undesirable	Repair and change switch
	Joint loose	Check the electric drill part connector
	Brush and commutator poor contact	Repair or replace the electric brush
Magnetic little suction	Drill the armature or stator coil burn out	Changing the armature or stator
	Adsorption artifacts thin	Replace the adsorption surface or thickening adsorption surface
	Adsorption on the surface is small	Replace the adsorption surface or temporary welding thick surface adsorption
	Support bar between the adsorption surface	Support bar top tight
Turn the handle guide does not work	Diode may be virtual welding	Re Welding
	Shaft key cut	Replace the shaft key
Drill out the elliptical hole	Wheel and rack misplace	Unscrew the rack bottom screw, remove guide to repair
	For a drill and a fastener is loose	Correction of verticality tighten the fasteners
	Bit unilateral cutting	Grind anew
	Adsorption surface have sundry	Eliminate clutter

Warning: magnetic drill equipped with a safety rope, when operating, make sure the magnetic drill and the object is fastened by the rope. In case of power failure suddenly, causing the machine fall off or thrown objects and cause accidents.

Attention: Our company does not assume any responsibility because the machine is not solid or fixed safety facilities are not in appropriate place cause accident.

VERSATILE MAGNETIC DRILL

1>VERSATILE MAGNETIC DRILL SPECIFICATIONS(OIL IMMERSED)

Specifications	KCY-36/2WDO	KCY-48/2WDO	KCY-65/2WD	KCY-85/3WD
Core Cutter mm	36	48	65	85
Twist Drill mm	18	22	25	28
Tapping mm	M15	M18	M20	M24
Voltage V	110/220~	110/220~	110/220~	110/220~
Magnetic Adhesion N	14200	14500	15800	16800
Input W	1550	1700	1890	2280
Position speed rpm	100-300/560	95-235/180-480	100-180/500	100-210/330/500
Tool Holder Tool Holder	2#	2#	3#	3#

You can choose following cutters:



Notice: In order to constantly improve products, our company reserves the right to change technical data without prior inform.

2>VERSATILE MAGNETIC DRILL ADVANTAGE

The features of machine: small size, light weight, high efficiency, multi-gear mechanical gear speed control device, it can be used for many purposes. The feature of motor: constant power, soft start, electronic stepless speed control, overload protection. Etc. Multifunctional magnetic drill can be used in construction sites or workshop, can be used for twist drill, hollow drill, and reaming, bearinging, tapping, or cutter. Also in the implementation of tough job, as in the pipe, anti-magnetic surface or on the complex structure of the material drilling, choosing a good model can also be maintained in good working condition and the efficient and economical way of working.

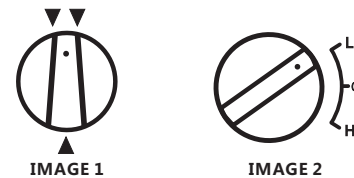
3>APPLICATION

While drilling on horizontal level, move the machine to the workpiece, then plug in. Turn on the magnetic control switch, fit on the bit after the magnetic base fixed firmly, and then rotate the handle to move the bit to the workpiece. Turn on the motor switch to drill. Keep the load around 0.05mm/r. Do not overexert in case of overload.

While drilling on the side face, we need two operators, and one guardian as well. Move the machine to the workpiece, then plug in. Turn on the magnetic control switch until the magnetic base fixed firmly(the operator need to hold the machine during this period), and then fasten the safe belt in case of sudden dropping. Fit on the bit, rotate the handle to move the bit to the workpiece and then turn on the motor switch to drill. Keep the load around 0.05mm/r. Do not overexert in case of overload.

While drilling on top surface, we also need two operators, and one guardian as well. Try not to drill on this way. While choosing this way, take some corresponding protection consider the fastness and the scrap iron. As to other ways, operators can use flexibly according to the situation. But do consider the safety.

4>POSITION DESCRIPT



- Shift when the machine stops or will stop.
- Shift in place. If the spindle doesn't rotate or there is some noise after starting up, the gear may not shift in place. Turn off the machine immediately, and then shift the gear to proper place, rotate the spindle back and forth (easy to shift) at the same time till shift in place
- Do not shift when the machine is full-speed operated, over load or stuck.

IMAGE 1

1.Low-speed gear: ▼▼, high-speed gear: ▲, medium-speed gear. The drawing is for low speed. Low speed to high speed, turn the knob clockwise, otherwise anti-clockwise.

▼▼—LOW SPEED: For hard materials, large drill bit (cutter tools), tapping

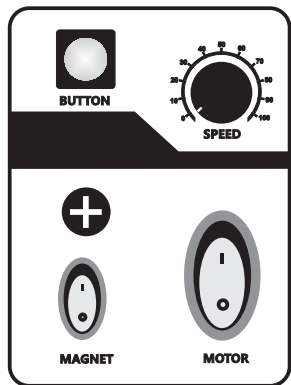
▲ —HIGH SPEED: For soft material, small drill bit holder. (cutter tools)

IMAGE 2

1.L is for low speed, H is for high speed and, M is for medium speed(3 speed models). The drawing is for low speed. Low speed to high speed, turn the knob clockwise, otherwise,anti-clockwise.

- L —LOW SPEED: For hard materials, large drill bit (cutter tools), tapping
- M—MID SPEED: For the appropriate size, hollow drill, twist drill
- H —HIGH SPEED: For soft material, small drill bit holder. (cutter tools)

5>OIL IMMERSED TYPE OPERATING INSTRUCTIONS



Positive instructions:
Oil immersed type machine, please open the MAGNET switch operation machine, then open the Rev MOTOR switch. When the motor is running (in a forward direction), such as reversed, can Press the BOTTON button, the machine will stop after pressing the button, press the long time.Five seconds later, the host will be reversed, can be used according to the time of pressing a button, release the press.Button (BUTTON) inversion can be stopped. To release (BUTTON) button for 15 seconds.Time, the MOTOR switch is not closed, the host will automatically turn up. In the machine .The process is in operation, the MOTOR switch if no close, so close.MAGNET switch machine is not going to stop, we must first turn off the MOTOR switch.

And then close the MAGNET switch to stop the machine.

If the switches are not turned on in order, the motor can't work. In that case, turn all off,return on switches in order,then the machine can run normally.

6>THE FUNCTION OF MULTIFUNCTIONAL MAGNETIC HOLLOW DRILL

The features of machine: small size, light weight, high efficiency, multi-gear mechanical gear speed control device, it can be used for many purposes. The feature of motor: constant power, soft start, electronic stepless speed control, overload protection. Etc.

Multifunctional magnetic hollow drill, can be used for twist drill, hollow drill, reamer ,milling cutter. etc. Hollow drill holes is very economical way. Multi-gear change gear transmission, based on the size of the drill bit and the drilling material the user can operate the machines to select the appropriate gear.you can change the speed by different gear, so multifunctional magnetic hollow drill can improve efficiency.

MAGNETIC CORE DRILL SPECIFICATIONS

1>MAGNETIC CORE DRILL SPECIFICATIONS

Specifications	★SCY-32HD	★SCY-42HD	※SCY-68HD	※SCY-98HD	※SCY-126CD
Core Cutter mm	32	42	68	98	126
Twist Drill mm	16	19	23	32	38
Voltage V	110/220~	110/220~	110/220~	110/220~	110/220~
Magnetic Adhesion N	14800	15600	16000	17000	19800
Input W	1550	1700	1890	2180	2580
Load rpm	100-520	100-450	100-420	100-385	50-330
Tool Holder Tool Holder			3#	3#	3#

Built in cooling system with ★.Split type with ※.

2>MAGNETIC CORE DRILL ADVANTAGE

Magnetic base drill has the advantages of small volume, light weight, high efficiency, easy to carry, host frame material for magnesium alloy die casting machine,The host is fixed to the gear box, the advantages of the built-in cooling system. Motor with constant power, soft start, electronic stepless speed regulation, overload protection and other functions.

Magnetic base drill hole hollow drill is very economic. Control models can not change the bit torque state change .Variable speed, with Morse conversion set of models can be clamped Hemp flowers drill, can be used for many purposes in order to achieve one machine multipurpose high.Greatly improve the working efficiency.

3>MAGNETIC CORE DRILL APPLICATION

While drilling on horizontal level, move the machine to the workpiece, then plug in. Turn on the magnetic control switch, fit on the bit after the magnetic base fixed firmly, and then rotate the handle to move the bit to the workpiece. Turn on the motor switch to drill. Keep the load around 0.05mm/r. Do not overexert in case of overload.

While drilling on the side face, we need two operators, and one guardian as well. Move the machine to the workpiece, then plug in. Turn on the magnetic control switch until the magnetic base fixed firmly(the operator need to hold the machine during this period), and then fasten the safe belt in case of sudden dropping. Fit on the bit, rotate the handle to move the bit to the workpiece and then turn on the motor switch to drill. Keep the load around 0.05mm/r. Do not overexert in case of overload.

All drill must add the corresponding diameter thimble, thimble, thimble penetrates into the bit must be sharp, long out of more than 12 mm, and the thimble after a period of time must be replaced.

AUTOMATIC FEED MAGNETIC

1>AUTOMATIC FEED MAGNETIC SPECIFICATIONS

Specifications	KCY-55QE	KCY-65QE	KCY-80QE
Core Cutter mm	55	65	80
Twist Drill mm	23	25	31
Voltage V	110/220~	110/220~	110/220~
Magnetic Adhesion N	16800	17200	17800
Input W	1780	1980	2080
Load rpm	550	520	500
Tool Holder Tool Holder	3#	3#	3#

Notice: In order to constantly improve products, our company reserves the right to change technical data without prior inform.

2>AUTOMATIC FEED MAGNETIC ADVANTAGE

Automatic feed has the function of automatic feeding and manual feed the magnetic base drill, and high efficiency, without operation feed. The feed speed with stepless speed regulation, force uniform can realize motor protection tool.

3>AUTOMATIC FEED MAGNETIC APPLICATION

Automatic feed magnetic base drill handle to the machine direction pushing this time for the automatic feed state, as the manual feed state vice handle to launch angle. A speed control function on the side panel of the machine, you can feed speed adjusted according to the size and nature of the hard and soft bit. The amount of feed in general is about 0.005mm/. All drill must add the corresponding diameter thimble, thimble, thimble penetrates into the bit must be sharp, long out of more than 12 mm, and the thimble after a period of time must be replaced.

While drilling on the side face, we need two operators, and one guardian as well. Move the machine to the workpiece, then plug in. Turn on the magnetic control switch until the magnetic base fixed firmly(the operator need to hold the machine during this period), and then fasten the safe belt in case of sudden dropping. Fit on the bit, rotate the handle to move the bit to the workpiece and then turn on the motor switch to drill. Keep the load around 0.05mm/r. Do not overexert in case of overload.

MINI HORIZONTAL TYPE

1>MINI HORIZONTAL TYPE SPECIFICATIONS

Specifications	KCY-28DM	KCY-38DM	KCY-55DM
Core Cutter mm	25	38	55
Voltage V	110/220~	110/220~	110/220~
Magnetic Adhesion N	10000	11000	11500
Input W	1400	1650	1900
Load rpm	650	600	550

Split type with ※.

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2>MINI HORIZONTAL TYPE ADVANTAGE

Mini horizontal magnetic base drill has the body short, small volume, light weight and so on. Can the transverse and longitudinal operation in narrow space.

3>MINI HORIZONTAL TYPE APPLICATION

Mini horizontal type while drilling on horizontal level, move the machine to the workpiece, then plug in. Turn on the magnetic control switch, fit on the bit after the magnetic base fixed firmly, and then rotate the handle to move the bit to the workpiece. Turn on the motor switch to drill. Keep the load around 0.05mm/r. Do not overexert in case of overload.

While drilling on the side face, we need two operators, and one guardian as well. Move the machine to the workpiece, then plug in. Turn on the magnetic control switch until the magnetic base fixed firmly(the operator need to hold the machine during this period), and then fasten the safe belt in case of sudden dropping. Fit on the bit, rotate the handle to move the bit to the workpiece and then turn on the motor switch to drill. Keep the load around 0.05mm/r. Do not overexert in case of overload.

All drill must add the corresponding diameter thimble, thimble, thimble penetrates into the bit must be sharp, long out of more than 12 mm, and the thimble after a period of time must be replaced.