Karnasch®
PROFESSIONAL TOOLS

MAGNETIC HOLE CUTTING MACHINES

GENERAL SAFETY INSTRUCTIONS

MIT PATENTIERTEM SCHIENENFÜHRUNGSSYSTEM
PATENTIERT
PATENTED
WITH PATENTED TWIN RAIL SLIDE SYSTEM

GERMAN QUALITY PRODUCT

„ONLY THE BEST“

KA38 – KA40 – KAS40 – KA50 – KAS50
KATV55 – KATSV55 – KA100 – KAS100 – KATV100
KATSV100 – KALP45 – KATV140



FOR MORE INFORMATION PLEASE VISIT
WWW.KARNASCH.TOOLS

IMPORTANT SAFETY INSTRUCTIONS AND INFORMATION FOR POWER TOOLS

1. **KNOW YOUR POWER TOOL.** Read and understand the safety and operating instructions, learn its application and limitations.
2. **EARTH ALL TOOLS.** Ensure that (where applicable) suitable earthed cables/cords and plugs are used and correctly connected. Always check cable plug for any damage.
3. **KEEP GUARD IN PLACE.** Fit and keep guards in place (where applicable). Ensure correct adjustment and alignment.
4. **KEEP WORK AREA CLEAN.** The footprint oft he magnet must be clean (no chips, no rust, no dust).
5. **AVOID DANGER.** Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space. Keep the unit and the work place as clear of dirt and swarf as possible.
6. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties or jewellery (rings, wristwatches) to get caught in moving parts. NONSLIP footwear is recommended. Wear protective hair covering to contain long hair, roll long sleeves above the elbow.
7. **USE SAFTEY GOGGLES.** (Head Protection). Wear approved safety goggles at all times. Everyday eyeglasses only have impact resistant lens, they are NOT safety glasses. Also, use face or dust mask if cutting operation is dusty, and ear protectors during extended periods of operation.
8. **SECURE WORK.** Use clamps or a vice to hold work when practical. It's safer and frees both hands to operate tool. Secure the unit with safety chain/carabina when working overhead or vertical.
9. **DON'T OVERREACH.** Keep proper footing and balance at all times.
10. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories. Regular maintenance is essential. Check nuts, screws, bolts for tightness.
11. **DISCONNECT TOOLS.** Before servicing; when changing accessories such as cutters, etc.
12. **USE RECOMMENDED ACCESSORIES.** Never use blunt Cutters/ Drills.
13. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts mounting, and any other conditions that may affect operation. A guard or other part that is damaged should be properly repaired or replaced.
14. **NEVER LEAVE TOOL RUNNING UNATTENDED.** Turn power off. Don't leave tool until it comes to a complete stop.
15. **KEEP CHILDREN AWAY.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
16. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place out of reach of children.
17. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
18. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges quality, high-performance and reliable tools. Karnasch Professional Tools offers all that matters!
19. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of chekking to see that keys and adjusting wrenches are removed from tool before turning it on.
20. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
21. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for outdoors and so marked.
22. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
23. **AVOID USING A POWER TOOL FOR APPLICATIONS OTHER THAN THOSE SPECIFIED.** Never use a power tool for applications other than those specified in the instruction manual.
24. **ENSURE SAFE OPERATION THROUGH CORRECT HANDLING.** Secure safe operation through correct handling by observing the instructions described herein. Do not employ accessories other than those specified herein; otherwise, a hazardous condition may be created. Never allow a power tool to be used by persons not familiar with correct handling (such as children) or those who cannot handle the tool correctly.
25. **CONFIRM THAT NO ITEMS SUCH AS AN ELECTRIC CABLE OR CONDUIT ARE BURIED INSIDE.** In places where live wiring may be hidden behind a wall, floor, ceiling, etc. do not hold or contact any metal parts of the tool. In such cases metal parts could become electrically live and present a serious shock hazard.
26. **KEEP THE RIGHT PARTS IN THE RIGHT POSITIONS.** Do not remove covers and screws which have been factory-mounted. They perform important retrospective roles. Keep them in the right positions.
27. **SHOULD THE PLASTIC HOUSING OR HANDLE OF A POWER TOOL BE CRACKED OR DAMAGED, DO NOT USE IT.** Since cracked or deformed parts may lead to an operator receiving an electric shock, do not use such a power tool. Immediately have it repaired.
28. **SECURELY MOUNT ACCESSORIES AND BLADES TO THE TOOL MAIN BODY.** Extra care must be taken when using tools on elevated location (such as a roof, ladder, scaffold or the like) to prevent injury to someone on a lower level in the event of a dropping tool and / or an accessory. Secure unit with safety chain/carabina.
29. **ALWAYS KEEP THE MOTOR AIR VENT FULLY OPENED.** A constantly open motor air vent is necessary to allow air to come in and out for cooling the motor. Do not allow it to become clogged up, even if the dust is blown through it.
30. **OPERATE POWER TOOLS AT THE RATED VOLTAGE.** Operate power tools at voltages specified on their nameplates.
31. **NEVER TOUCH THE MOVING PARTS.** Never touch the moving parts such as bits, cutters, drills, taps, etc.
32. **STOP OPERATION IMMEDIATELY IF ANY ABNORMALITY IS DETECTED.** Should a power tool be detected as out of order or should other abnormalities be observed during operation, stop using the tool immediately.
33. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
34. **CAREFULLY HANDLE POWER TOOLS.** Should a power tool be dropped or struck against hard materials inadvertently, it may be deformed, cracked, or damaged.
35. **DO NOT WIPE PLASTIC PARTS WITH SOLVENT.** Solvents such as gasoline, thinners, benzene, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with solvents. Wipe plastic parts with a soft cloth lightly dampened with soapy water.
36. **REPAIRS TO MACHINE** are to be carried out by qualified agent and genuine spare parts are always to be used.
37. **WARNING:** Under no circumstances try to remove turnings or swarf from the cutter when machine is in operation. **NEVER** introduce any body parts to moving parts of the machine, when it is switched on. This document is issued for general information and instruction and as such does not constitute a specification of the equipment. Only use faultless and sharp drilling tools and avoid that the machine stops due to overload.
38. **ATTENTION:** When fitting drills or cutter arbors into morse taper drive shafts, ensure morse taper and cone are free of grease and dirt.
39. **REMOVING MORSE TAPER TOOLS FROM MACHINE DRIVE SHAFT.** Always ensure power is switched off or unplug mains cable. Put the drill drift in the opening of the gearbox collar. If you cannot insert the drill drift through the work spindle, turn the work spindle slightly. Remove the tool from the work spindle by a slight impact on the drill drift.

40. **THE MAXIMUM MAGNETIC HOLDING FORCE OF THE MACHINE IS OBTAINED FROM A MATERIAL THICKNESS OF 15 MM.** Reduce feed at thicknesses below 15mm. Below 10mm material thickness magnetic hole cutting machines should not be used.



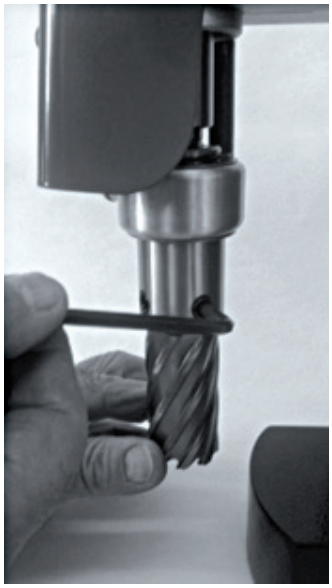
FITTING THE SAFETY GUARD

The guard is fitted with parts supplied. The guard is fitted to the front face of motor gear box support bracket by a single M6 Bolt supplied with guard fixing plate.



FITTING CUTTERS INTO MACHINE ARBOR

Always unplug the power source to the machine before fitting or removing cutters or drills into the arbour. To fit cutters loosen both screws to permit the cutter shank to fit fully into the arbor ensuring the flats of the cutters are in line with the set screws.



SECURING THE CUTTER IN ARBOR

When cutter is fully in position with flats lined to the screws tighten screws evenly to secure cutter in place ready for operation.



OPERATING THE MACHINE

Plug the power cable into suitable power supply (using an extension lead of the correct rating if necessary). The use of an RCD is also highly recommended.

Select the required speed. Do NOT attempt to change speed while the machine is in operation.



MAG-TEC SENSOR

The sensor detects how well the magnet keeps the machine on the ground. It is directly connected to the engine.

If the sensor is illuminating „RED", the ground is dirty (rust, varnish residues, chips), the material is thinner than 6mm or the feed rate is to high. The machine does not have a safe stand. The engine does not start or turns off.

If the sensor is illuminating „GREEN", the magnetic holding force is optimal and the use of the machine is safe.



Start motor by pressing the green button, at the end of drilling / cutting operation press red button to stop motor.



MAINTANANCE AND ADJUSTMENTS

By using 2.5mm allen key and 8mm spanner fine adjustments can be made to the twin rail slide system when and if required. Holding the adjustment screw in position, loosen the lock nut with 8mm spanner, finger tighten the screw hold and relock with lock nut, always make adjustments with slide in position with adjustment screws.

GUIDE RAIL AND GUIDE CARRIAGE REQUIRE LIGHT GREASE APPLYING PERIODICALLY



STARTING THE CUT

Always lower the safety guard into position, start the motor by pressing green on the motor start button, wind the cutter gently down to the surface of work piece and apply light pressure until the cutter has made the initial cut in the surface to a depth of around 2mm. Apply coolant, increase the pressure until the motor is loaded.

Keep work area clean. The footprint oft he magnet must be clean (no chips, no rust, no dust).



DURING THE CUT

Maintain steady pressure throughout the rest of the cut, always apply coolant during cutting operations.

Too much pressure will not speed up the cut, it will reduce the life of cutters and may cause damage to the motor, if swarf / shaving becomes blue, add more coolant.



COMPLETION OF CUT

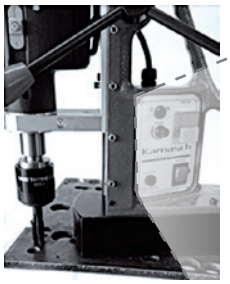
At the end of the cut the slug will be ejected.

Withdraw the cutter from the hole in work piece and stop the motor by pressing the red motor stop button. To de-energise the magnet switch of the magnet switch. There will be a 3/5 second delay before the magnet disengages from work piece.

OPERATING INSTRUCTIONS FOR

KATV55 / KATSV55 / KATV100 KATSV100 / KATV140

SWITCH PANEL





SPEED CONTROL ON SWITCH PANEL

Motor gear selector on left side of gear box.

Check if work surface is clean.

Down
for low gear



Up
for high gear





NOTE:
Electronic torque control is fitted on motor side above switch panel

TAPPING



1

Fig 1

- Fit tapping arbor with suitable collet and tap into 2/3 MT socket on machine.
- Position machine switch on magnet.
- Select required speed/ gear/and torque.
- Select forward on for ward/reverse switch.
- Switch. Press start button. Turn handles to lower tap into pre-drilled holes gently.



2

Fig 2

- Tap will start to cut and screw itself into the hole.
- No pressure is required from the operator.
- When tap reaches required depth, switch machine to reverse.
- Machine will stop automatically.



3

Fig 3

- Press restart button, machine will start in reverse after a short time and will screw the tap out.
- When completely out, stop machine and select forward.
- Ready for next operation.

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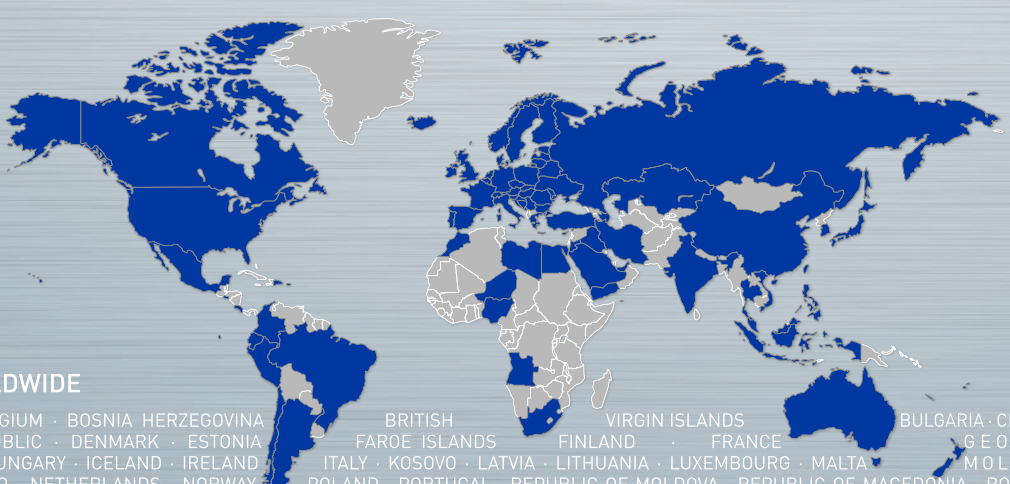
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