# DEWALT®

**DWE1622** 

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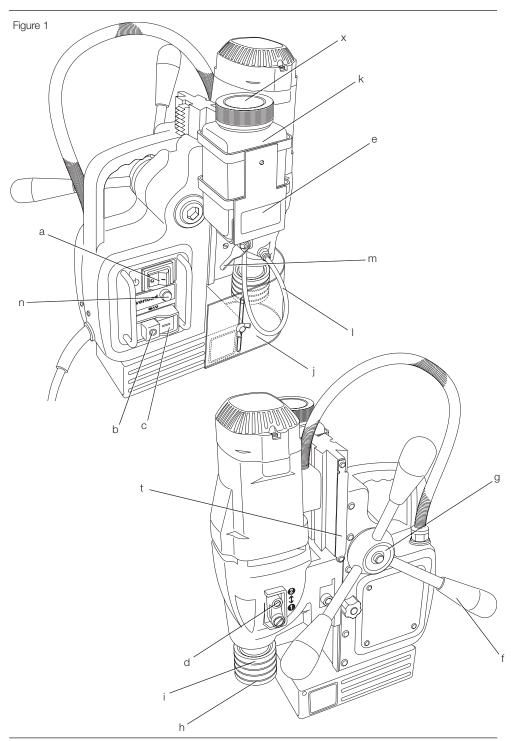


Figure 2

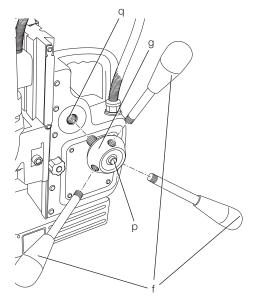


Figure 3

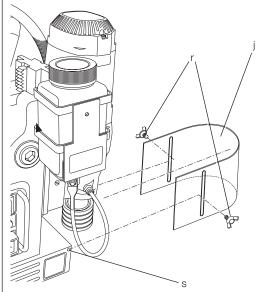


Figure 4

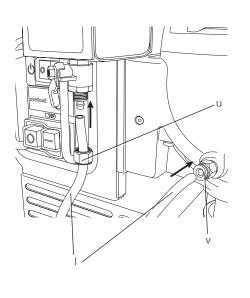


Figure 5

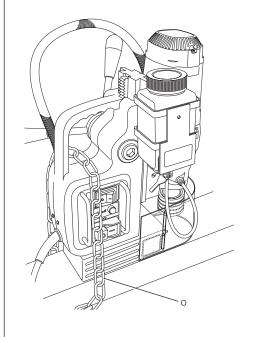


Figure 6

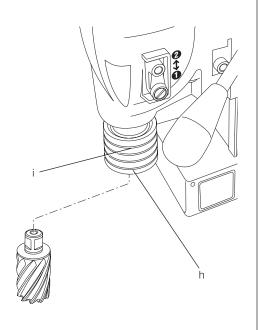


Figure 7

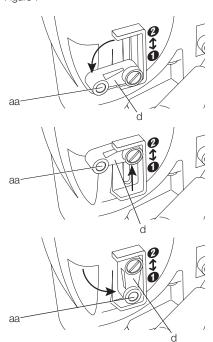


Figure 8

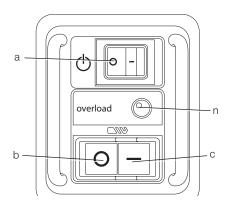


Figure 9

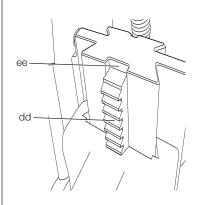
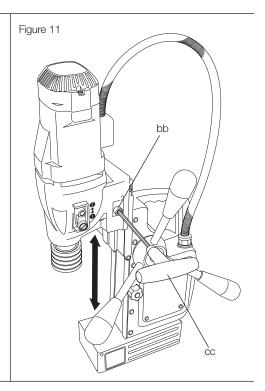


Figure 10



# MAGNETIC DRILL PRESS DWE1622

# **Congratulations!**

You have chosen a DEWALT tool. Years of experience, thorough product development and innovation make DEWALT one of the most reliable partners for professional power tool users.

### **Technical Data**

		DWE1622
Voltage	V	220-240
Power input	W	1200
No-load speed		
Speed 1	min <sup>-1</sup>	300
Speed 2	min <sup>-1</sup>	450
Maximum drilling range in steel		
with annular cutter	mm	50
Tool holder (flat shank)	mm	19
Weight	kg	14.55

# **Definitions: Safety Guidelines**

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.



**DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.

NOTICE: Indicates a practice not related to personal injury which, if not avoided, may result in property damage.



Denotes risk of electric shock.



Denotes risk of fire.



Denotes sharp edges.



**WARNING:** To reduce the risk of injury, read the instruction manual.

# **General Power Tool Safety Warnings**



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

# SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

### 1) WORK AREA SAFETY

- a) Keep work area clean and well lit.
  Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

### 2) ELECTRICAL SAFETY

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

### 3) PERSONAL SAFETY

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

### 4) POWER TOOL USE AND CARE

- a) Do not force the power tool. Use the correct power tool for your application.
   The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean.

  Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

### 5) SERVICE

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

# Additional Specific Safety Rules for Drill Presses

- · Keep your fingers well out of the drill area.
- Always use the drill guard. Before turning on machine ensure the guard is closed securely.
- Always use the safety chain.
- The magnetic stand is suitable for use on steel with a thickness starting from 10 mm, with zero air gap between the magnet core surface and the mounting surface. Curvature, coats of paint and surface irregularities will create an air gap. Keep the air gap to a minimum.
- Always place the machine on a flat surface.
   Do not clamp the stand on small or irregularly shaped objects.
- Always place the machine on a surface that is clear of shavings, chips, swarf and surface dirt.

- Keep the magnet clean and free of debris and swarf.
- Do not turn on the machine until it has been mounted and installed according to these instructions.
- Do not turn on the machine before having checked that the magnetic stand has been tightened firmly to the mounting surface.
- Adjust the table so cutter does not extend into the workpiece before drilling. Do not perform any design, assembly or construction activities on the workpiece while the machine is turned on.
- Before turning on the machine, make sure the accessory has been mounted correctly.
- Always use the recommended speed for the accessories and the material.
- Do not use the machine on the same workpiece on which electric welders are being used.
- Use only an appropriate cutting fluid. Use a general metal cutting coolant diluted with water.
- Do not use liquid cutting fluids while drilling vertically or overhead. Dip the cutter in cutting paste or apply an appropriate spray for these applications.
- Do not pour cutting fluid into the reservoir while it is mounted in the bracket. Do not allow cutting fluid to enter the drill motor.
- Before use, ensure movable chuck guard operates properly.
- Ensure that metal chips or resinous residue cannot lead to blockage of the function.
- In case of jammed cutter disconnect the machine from the power supply, remove the reason for the jam before turning on the machine again.

### **Residual Risks**

In spite of the application of the relevant safety regulations and the implementation of safety devices, certain residual risks cannot be avoided. These are:

- Impairment of hearing.
- Risk of personal injury from flying particles.
- Risk of burns due to accessories becoming hot during operation.
- Risk of personal injury due to prolonged use.

# **Markings on Tool**

The following pictograms are shown on the tool:



Read instruction manual before use.



Wear ear protection.



Wear eye protection.



Warning! This product is Class I Construction and must be connected to an Earth connection.



# **Package Contents**

The package contains:

- 1 Magnetic drill press
- 1 Drill guard
- 3 Handles
- 1 Hub
- 1 Safety chain
- 1 Lubrication system
- 1 Hex tool
- 1 3 jaw chuck with adaptor
- 1 Kitbox
- 1 Instruction manual
- Check for damage to the tool, parts or accessories which may have occurred during transport.
- Take the time to thoroughly read and understand this manual prior to operation.

# **Description (fig. 1, 5)**



**WARNING:** Never modify the power tool or any part of it. Damage or personal injury could result.

- a. On/off power/magnet switch
- b. Off button for motor
- c. On button for motor
- d. Gear selector
- e. Magnetic bracket
- f. Feed handle
- g. Hub
- h. Tool holder
- i. Quick-release collar

- i. Guard
- k. Coolant bottle
- I. Coolant tube
- m. Flow regulator
- n. LED indicator light
- o. Safety chain (fig. 5)

### INTENDED USE

Your DWE1622 magnetic drill press has been designed for drilling holes in steel construction surfaces. Do not drill into non-ferrous metal.

**DO NOT** use under wet conditions or in presence of flammable liquids or gases.

This drill press is a professional power tool.

**DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

 This product is not intended for use by persons (including children) suffering from diminished physical, sensory or mental abilities; lack of experience, knowledge or skills unless they are supervised by a person responsible for their safety. Children should never be left alone with this product.

# **Electrical Safety**

The electric motor has been designed for one voltage only. Always check that the power supply corresponds to the voltage on the rating plate.

Your DEWALT tool is designed in class I (grounded) according to IEC 61029. Earth wire is required.



**WARNING:** 115 V units have to be operated via a fail-safe isolating transformer with an earth screen between the primary and secondary winding.

If the supply cord is damaged, it must be replaced by a specially prepared cord available through the DEWALT service organisation.

# **Using an Extension Cable**

If an extension cable is required, use an approved 3-core extension cable suitable for the power input of this tool (see technical data). The minimum conductor size is 1.5 mm<sup>2</sup>; the maximum length is 30 m.

When using a cable reel, always unwind the cable completely.

### **ASSEMBLY AND ADJUSTMENTS**



WARNING: To reduce the risk of injury, turn unit off and disconnect machine from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs.

Be sure the switch is in the OFF position. An accidental start-up can cause injury.

# Installing the Machine (fig. 2-5)

- 1. Assemble the feed handle.
- 2. Mount the drill guard (j).
- 3. Fit the lubrication system as necessary.
- Place the machine on a clean, level and solid surface. Remove any particles that will obstruct full contact between the magnetic stand and the mounting surface.
- 5. Fit and tighten the safety chain (o).

### MOUNTING THE FEED HANDLE ASSEMBLY (FIG. 1, 2)

The quick-release feed handle assembly can be mounted in one simple operation both to the left and the right of the machine.

- 1. Screw all three feed handles (f) into the hub (g).
- 2. Keep the button (p) depressed while inserting the hub shaft into the hole (q).
- 3. Release the button.

### MOUNTING THE DRILL GUARD (FIG. 3)

- Hold the guard (j) in front of the tool holder, aligning the slots in the guard with the holes in the machine.
- 2. Fit the screw (r) into the hole (s) located in the front of the frame.



WARNING: Always use the drill guard.

### FITTING THE LUBRICATION SYSTEM (FIG. 1, 4)

The lubrication system can be used for horizontal drilling applications (the drill being used vertically).

- With the coolant bottle (k) placed into the magnetic bracket (e), mount the magnetic bracket onto the steel strip (t) on either side of the tool.
- 2. Attach the coolant tube (I) to the coolant bottle:
  - a. Remove the nut (u) and thread it with the tube.
  - b. Slide the tube onto the nipple and tighten the

- 3. Attach the tube to the quick-release connector (v) on the gearbox
  - a. Push coolant tube (I) in to install.
  - b. To remove, push the collar on the connector(v) in and pull the tube from the connector.

In order to use the lubrication system, the coolant bottle (k) must be filled with a sufficient amount of cutting fluid.

### Filling the Coolant Bottle

- 1. Make sure the flow regulator (m) is closed.
- 2. Unscrew the cap (x).
- 3. Fill the container with cutting coolant diluted with water.
- 4. Screw the cap back on.



**WARNING:** Do not use the lubrication system in vertical or overhead drilling applications.

### FITTING THE SAFETY CHAIN (FIG. 5)

Thread the provided safety chain (o) through the handle of unit and around the workpiece and secure in place.



**WARNING:** Always use the safety chain.

# Inserting and Removing an Accessory (fig. 6)

The tool holder (h) accepts annular cutters with a 19 mm shank with two flats.



**WARNING:** The teeth of a cutter are very sharp and can be dangerous.

- Slide the pilot pin through the hole in the center of the cutter shank.
- 2. Push up on the quick-release collar (i).
- 3. Insert the cutter with pilot pin and turn until the flat meets the locking pin. When the flat meets the locking pin the collar will snap down.
- 4. Check that the cutter is securely held in the arbor.
- 5. Lift the collar (i) to release the cutter.

### 3-JAW CHUCK (FIG. 10)

A DEWALT 3-jaw chuck (y) can be installed using an adaptor (z) to fit the drill press for various bit sizes. Refer to *Inserting and Removing an Accessory* for installation instructions.

**NOTE:** It may be necessary to adjust the motor position when chuck is installed. Please refer to **Adjusting the Motor Height** for instructions.

Consult your dealer for further information on the appropriate accessories.

# **Setting the Speed (fig. 7)**



**WARNING:** Do not change gears at full speed or during use.

The machine is equipped with a two-gear selector to vary the speed/torque ratio.

- Rotate the gear selector tab (d) out of the detent slot and shift into the desired mode.
- 2. Lock the selector tab back into the detent.

### LOW SPEED AND HIGH TORQUE:

The yellow dot (aa) should be aligned with position 1 for low speed and high torque (holes from 32 to 50 mm).

### **HIGH SPEED AND LOW TORQUE:**

The yellow dot (aa) should be aligned with position 2, for high speed and low torque (holes from 12 to 30 mm).

**NOTE:** It may be necessary to slightly turn the spindle by hand a little to complete the gear change.

# **Adjusting the Motor Height (fig. 11)**

The motor height can be adjusted to accommodate the need for more or less bit clearance over the workpiece.

- 1. Loosen the motor slide bolt (bb) with the supplied hex key tool (cc).
- 2. Position the motor to the desired height.
- 3. Tighten the bolt firmly with the hex tool to secure the motor in position.

# **Prior to Operation**

Try a few simple projects using scrap material until you develop a "feel" for the machine.

### **OPERATION**

### Instructions for Use



**WARNING:** Always observe the safety instructions and applicable regulations.



WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/installing attachments or accessories.

- Apply only a gentle pressure to the tool. Excessive force does not speed up drilling but decreases tool performance and may shorten tool life.
- If the accessory jams, stop the motor and gently raise the accessory out of the workpiece before resuming work.

- · Always use the safety chain.
- Always use the drill guard.

# Turning On and Off (fig. 1, 8)

In order to operate properly, the machine has to be turned on following the procedure described below.

### TURNING THE POWER ON AND OFF

Connect the machine to the mains.

To turn the power on, press the power/magnet switch (a) to the on position.

**NOTE:** Once the power is switched on the magnet will automatically be activated.

To turn the power off, press the power/magnet switch to the off position.

### TURNING THE DRILL MOTOR ON AND OFF

The drill motor can only be switched on when the magnet is activated.

To turn the drill motor on, press the green button (c) on the motor switch.

To turn the drill motor off, press the red button (b) on the motor switch.

### **RE-SETTING THE MACHINE**

If the power is interrupted during use, or if at any point the magnetic seal is broken, the machine must be reset.

- Turn off the drill motor first, and then the power/magnet.
- 2. Ensure that the work area is clean.
- 3. Turn on the power/magnet.

# Drilling a Hole (fig. 1)

- 1. Always apply an appropriate cutting fluid/coolant on the cutting area.
- 2. Lower the guard (j) so that it screens the surface to be drilled.
- 3. Make sure the drill point or cutter pilot is properly installed over the spot to be drilled.
- 4. Press green button (c) on the motor switch to the start motor.
- 5. Slowly feed the accessory into the workpiece using the feed handle (f).
- 6. At the start of the cut, apply light pressure to allow the accessory to perform the initial groove.
- Continue applying sufficient pressure to achieve a smooth progressive cut. Do not force.

**NOTE:** The LED indicator light (n) will flash (red) to indicate too much pressure is being applied, if this happens reduce the pressure being

- applied until the light changes to a constant (green).
- 8. Take extra care when the accessory is about to break through the surface to prevent splintering.
- Always turn off the motor, the magnet and the power, in that particular order, when work is finished and before unplugging.

### OVERLOAD PROTECTION

The DEWALT magnetic drill is fitted with an overload protection feature to prevent damage to the motor if excessive loads are applied during operation.

The LED indicator light (n) will flash as a warning that excessive load is being applied, if this happens reduce the pressure being applied until the light changes to a constant green. If pressure is not reduced the overload protection will activate by cutting power, at which point the LED will be a constant red. To reset the tool from this state, run the unit at no load for several seconds. This allows the motor to cool before resuming the drilling operation.

# **Drilling with Annular Cutters**

Annular cutters only cut material at the periphery of the hole, rather than converting the entire hole to shavings. As a result, the energy required to make a hole is lower than for a twist drill.

When drilling with an annular cutter, it is not necessary to drill a pilot hole.



**WARNING:** 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 where the metal core is ejected.

# **Drilling Conditions**

The ease with which material can be drilled depends on several factors including tensile strength and abrasion resistance. Whilst hardness and/or strength is the usual criterion, wide variations in machineability can exist among material showing similar physical properties.

The drilling conditions are dependent on requirements for tool life and surface finish. These conditions are further restricted by the rigidity of the tool and the workpiece, lubrication and machine power available. The harder the material, the lower the cutting speed.

Some materials of low hardness contain abrasive substances leading to rapid cutting edge wear at high speeds. Feed rates are governed by rigidity of set-up, volume of material to be removed, surface finish and available machine power.

### **MAINTENANCE**

Your DEWALT power tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.



WARNING: To reduce the risk of injury, turn unit off and disconnect machine from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs. Be sure the switch is in the OFF position. An accidental start-up can cause injury.

# **Pop-off Brushes**

The motor will be automatically shut off when the carbon brushes are nearly worn out and the tool needs servicing. The carbon brushes are not user-serviceable. Take the tool to an authorised DEWALT repair agent.



# Lubrication

### IN HORIZONTAL APPLICATIONS

- Adjust the fluid flow as required using the flow regulator (m) (fig. 1).
- Add more cutting fluid if the shavings become blue.

### VERTICAL AND OVERHEAD APPLICATIONS

Dip the cutter in cutting paste or apply an appropriate spray.

### **LUBRICATING THE FEED TRAVEL (FIG. 9)**

The feed travel should be lubricated periodically with grease to ensure smooth operation.

- Raise the motor unit to the highest position possible.
- Lubricate the dove-tail guide way (dd) at both sides.
- Lubricate the gear rack (ee).

After repeated use, the gear rack may become loose. If necessary, adjust the 5 self-locking set screws at the left side. Tighten screws in series until the gear rack moves freely in the dove-tail guide but does not allow the motor to wobble.



# Cleaning



**WARNING:** Blow dirt and dust out of the main housing with dry air as often as dirt is seen collecting in and around the air vents. Wear approved eye protection and approved dust mask when performing this procedure.



warning: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

# **Optional Accessories**



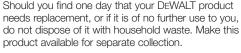
WARNING: Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT recommended accessories should be used with this product.

Consult your dealer for further information on the appropriate accessories.

# **Protecting the Environment**



Separate collection. This product must not be disposed of with normal household waste.





Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at

### **ENGLISH**

municipal waste sites or by the retailer when you purchase a new product.

DEWALT provides a facility for the collection and recycling of DEWALT products once they have reached the end of their working life. To take advantage of this service please return your product to any authorised repair agent who will collect them on our behalf.

You can check the location of your nearest authorised repair agent by contacting your local DEWALT office at the address indicated in this manual. Alternatively, a list of authorised DEWALT repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com.

# 磁力钻 DWE1622

# 恭喜!

感谢您选购 DEWALT 工具。凭借多年的产品开发和 创新经验,DEWALT 已经成为专业电动工具用户最 可靠的合作伙伴之一。

# 技术参数

		DWE1622
电压	伏	220
输入功率	瓦	1200
空载转速		
1档	转/分	300
2档	转/分	450
使用空心钻头时的		
最大钢孔钻孔范围	毫米	50
工具夹持器(平柄)	毫米	19
重量	千克	14.55

# 定义:安全指引

下列定义描述了各警示词的严重程度。请仔细阅读 本手册,并注意这些警示符号。



**危险**:表示存在紧急危险情况,如果不加以避免,**将**导致**死亡或严重伤害**。



警告:表示存在潜在的危险情况,如果 不加以避免,**可能**导致**死亡或严重伤** 害。



警示:表示存在潜在危险情况,如果不加以避免,可能导致轻度或中度伤害。 注意:表示存在不涉及人身伤害的情况,如果不加以避免,可能导致财产损失。



表示存在触电危险。



表示存在火灾风险。



表示有锋利的边缘。



警告: 为降低伤害风险,请阅读使用手 册。

# 电动工具通用安全警告



警告!阅读所有警告和所有说明。不 遵照以下警告和说明会导致电击、着火 和/或严重伤害。

### 保存所有警告和说明书以备查阅。

在所有下列的警告中术语"电动工具"指市电驱动 (有线)电动工具或电池驱动(无线)电动工具。

### 1) 工作场地的安全

- a) **保持工作场地清洁和明亮。**混乱和黑暗的场 地会引发事故。
- b) 不要在易爆环境,如有易燃液体、气体或粉 尘的环境下操作电动工具。电动工具产生的 火花会点燃粉尘或气体。
- c) **让儿童和旁观者离开后操作电动工具。**注意 力不集中会使你失去对工具的控制。

### 2) 电气安全

- a) 电动工具插头必须与插座相配。绝不能以任何方式改装插头。需接地的电动工具不能使用任何转换插头。未经改装的插头和相配的插座将减少电击危险。
- b) **避免人体接触接地表面,如管道、散热片和冰箱。**如果你身体接地会增加电击危险。
- c) 不得将电动工具暴露在雨中或潮湿环境中。水进入电动工具将增加电击危险。
- ♂)不得滥用电线。绝不能用电线搬运、拉动电动工具或拨出其插头。使电线远离热源、油、锐边或运动部件。受损或缠绕的软线会增加电击危险。
- e) 当在户外使用电动工具时,使用适合户外使 用的外接软线。适合户外使用的软线将减少 电击危险。
- f) 如果在潮湿环境下操作电动工具是不可避免的,应使用剩余电流动作保护器(RCD)。使用RCD可减小电击危险。

### 3) 人身安全

- a) 保持警觉,当操作电动工具时关注所从事的操作并保持清醒。当你感到疲倦,或在有药物、酒精或治疗反应时,不要操作电动工具。在操作电动工具时瞬间的疏忽会导致严重人身伤害。
- b) 使用个人防护装置。始终佩戴护目镜。安全 装置,诸如适当条件下使用防尘面具、防滑 安全鞋、安全帽、听力防护等装置能减少人 身伤害。

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- c) 防止意外起动。确保开关在连接电源和/或电 池盒、拿起或搬运工具时处于关断位置。手 指放在已接通电源的开关上或开关处于接通 时插入插头可能会导致危险。
- d) 在电动工具接通之前,拿掉所有调节钥匙或 扳手。遗留在电动工具旋转零件上的扳手或 钥匙会导致人身伤害。
- 戶 手不要伸展得太长。时刻注意立足点和身体 平衡。这样在意外情况下能很好地控制电动 工具。
- g) 如果提供了与排屑、集尘设备连接用的装置, 要确保他们连接完好且使用得当。使用这些装 置可减少尘屑引起的危险。

### 4) 电动工具使用和注意事项

- a) 不要滥用电动工具,根据用途使用适当的电动工具。选用适当设计的电动工具会使你工作更有效、更安全。
- b) 如果开关不能接通或关断工具电源,则不能 使用该电动工具。不能用开关来控制的电动 工具是危险的且必须进行修理。
- c) 在进行任何调节、更换附件或贮存电动工具 之前,必须从电源上拔掉插头和/或使电池 盒与工具脱开。这种防护性措施将减少工具 意外起动的危险。
- d) 将闲置不用的电动工具贮存在儿童所及范围 之外,并且不要让不熟悉电动工具或对这些 说明不了解的人操作电动工具。电动工具在 未经培训的用户手中是危险的。
- (e) 保养电动工具。检查运动件是否调整到位或 卡住、检查零件破损情况和影响电动工具运 行的其他状况。如有损坏、电动工具应在使 用前修理好。许多事故由维护不良的电动工 具引发。
- *f)* 保持切削刀具锋利和清洁。保养良好的有锋利 切削刃的刀具不易卡住而且容易控制。
- g) 按照使用说明书,考虑作业条件和进行的作业 来使用电动工具、附件和工具的刀头等。将电 动工具用于那些与其用途不符的操作可能会 导致危险。

### 5) 维修

a) 将你的电动工具送交专业维修人员,使用同样的备件进行修理。这样将确保所维修的电动工具的安全性。

# 磁力钻附加安全细则

- 手指务必远离钻孔区域。
- 始终使用钻机护罩。开启钻机前,确保护罩牢 牢封闭。

- 始终使用安全链。
- 磁座适用于最小厚度为 10 毫米的钢表面,磁 芯表面和安装表面之间间隙为零。弯曲、漆皮 和不规则表面会产生间隙。请保持间隙最小。
- 始终将机器放在平坦表面上。不要将磁座夹在 面积小或形状不规则的物体上。
- 始终将机器放在没有切屑、碎片、碎屑和污垢的表面。
- 保持磁座清洁, 没有碎片和切屑。
- 在机器尚未按照此处的说明固定和安装好之前,不要开启机器。
- 开启机器之前,必须先确认磁座牢牢紧固在安 装表而。
- 调整磁机工作台,使钻头不会在钻孔前即伸进工件内部。机器打开时,不要对工件进行任何设计、组装或改造活动。
- 打开机器前,确保附件已正确安装。
- 始终使用附件和材料的建议转速。
- 不要在正在进行电焊加工的工件上使用本机器。
- 只能使用合适的切削液。请使用已经用水稀释的一般金属切削冷却剂。
- 进行垂直或高空钻孔时,不要使用切削液。进行这些应用时,请将钻头蘸取切削膏或使用适当的喷剂。
- 请勿将切削液直接倒进安装在支架上的容器中。不要让切削液进入钻机马达。
- 使用前,确保可移动的夹头护罩正常运行。
- 确保金属屑或润滑脂残留不会阻碍机器运行。
- 如果钻头堵塞,请拔掉钻机的电源插头,清除堵塞物、然后再重新开启机器。

# 剩余风险

尽管遵守了相关的安全法规并采用了安全装备,某 些剩余风险仍然是无法避免的。这些风险包括:

- 听力损伤。
- 飞散颗粒造成的人身伤害风险。
- 操作过程中附件加热而产生的烧伤风险。
- 长时间使用引起的人身伤害风险。

# 工具上的标记

工具上印有下列标志:



使用前请阅读使用手册。



请佩戴听力保护器。



请佩戴护目装备。

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警告!本产品为1级结构,必须接地。

# 包装内的物品

本产品包装内含有:

- 1 磁力钻
- 1 钻机护罩
- 3 手柄
- 1 轮毂
- 1 安全链
- 1 润滑系统
- 1 六角工具
- 1 带适配器的 3 爪夹头
- 1 工具箱
- 1 使用手册
- 检查工具、部件或附件是否在运输过程中损 坏。
- 操作前, 请抽空仔细阅读并掌握本手册。

# 说明(图1、5)

警告: 切勿改装电动工具或其任何部 、件, 否则可能会导致损坏或人身伤害。

- a. 电源/磁力开关
- b. 马达关闭按钮
- C. 马达开启按钮
- d. 档位选择器
- e. 磁性支架
- f. 进刀手柄
- a. 轮毂
- h. 工具夹持器
- i. 快速释放轴环
- i. 护置
- k. 冷却剂瓶
- 1. 冷却剂管
- m. 流量调节器
- n. LED 指示灯
- o. 安全链(图 5)

### 设计用途

DWE1622 磁力钻设计用于在钢结构的表面钻孔。 请勿用于非金属材料的钻孔。

**请勿**在潮湿环境中或在有易燃液体或气体的环境中 使用。

此磁力钻是专业的电动工具。

**请勿**让儿童接触本工具。缺乏经验的操作员需要在 监督下使用本工具。

• 本产品不适合体力、感官或智力不足以及缺乏 经验、知识或技能的人员(包括儿童)使用. 除非一旁有能为他们的安全负责的监督人员。 不得在无人监管的情况下让儿童触及本产品。

# 由气安全

电机只适用一种工作电压。请务必检查电源电压是 否与铭牌上的电压一致。

本 DEWALT 工具依照 IEC 61029 标准采用 I 级 (接 地)设计。必须使用接地线。



警告: 115V 装置必须通过故障保险隔 离变压器操作, 在初级绕组和次级绕组 之间使用接地屏蔽。

若电源线损坏,必须交由 DEWALT 服务部门采用专 门制备的电线进行更换。

# 使用延长电缆

如需使用延长电缆,请使用与本工具的输入功率(见 技术数据) 匹配的经检验 3 芯延长线。最小导体尺 寸为 1.5 平方毫米, 最大长度为 30 米。

使用电缆卷筒时, 请务必拉出所有的电缆。

# 组装和调整



警告: 为降低人身伤害的风险, 在拆、 装附件或调整、修理工具之前, 请关闭 工具并拔下工具插头。请确保开关处于 关闭位置。意外启动可能会导致人身伤

# 安装机器(图 2-5)

- 1. 组装进刀手柄。
- 2. 安装钻机护罩 (i)。
- 3. 根据需要安装润滑系统。
- 4. 将机器放在干净、平整和坚固的表面上。清除 阻碍磁座和安装表面完全接触的所有颗粒物。
- 5. 安装并紧固安全链 (o)。

### 安装进刀手柄总成(图1、2)

快速释放进刀手柄总成只需一个简单的操作即可轻 松安装在机器的左侧或右侧。

- 1. 将全部三个进刀手柄 (f) 旋紧在轮毂 (q) 上。
- 2. 按住按钮 (p) 将轮毂轴插入孔 (a) 中。
- 3. 释放按钮。

### 安装钻机护罩(图3)

1. 将护罩 (i) 拿到工具夹持器前方, 使护罩上的槽 口对准钻机上的孔。

2. 将螺丝 (r) 插入机框前面的孔 (s)。



警告: 始终使用钻机护罩。

### 安装润滑系统(图1、4)

润滑系统可以用干水平钻孔应用(垂直使用钻机)。

- 1. 将冷却剂瓶 (k) 放在磁性支架 (e) 内, 将磁性支 架安装到工具任意一侧的钢条 (t) 上。
- 2. 将冷却剂管() 连接到冷却剂瓶:
  - a. 拆下螺母 (u) 并将它穿过管线。
  - b. 将管线套到油嘴上并紧固螺母。
- 3. 将管线连到变速箱上的快速释放接头 (v)
  - a. 将冷却剂管 (I) 推入装好。
  - b. 若要拆卸管线, 将接头(v)上的轴环向里推并 将管线从接头拔出。

要使用润滑系统,冷却剂瓶(k)中必须装有足量的 切削液。

### 将冷却剂装入瓶中

- 1. 确保流量调节器 (m) 关闭。
- 2. 拧开瓶盖 (x)。
- 3. 将用水稀释了的切削冷却剂装到容器内。
- 4. 重新拧紧瓶盖。



警告:进行垂直或高空钻孔作业时,不 

### 安装安全链(图5)

将随附的安全链 (o) 穿过钻机把手, 并环绕工件固 定到位。



警告: 始终使用安全链。

# 插入和拆卸附件(图6)

工具夹持器 (h) 可夹持 19 毫米双平面柄的空心钻 头。



警告: 钻头的刀齿非常锋利, 可能带来 危险。

- 1. 将顶针滑入钻头柄的中心孔中。
- 2. 将快速释放轴环 (i) 向上推。
- 3. 插入装有顶针的钻头, 并旋转直至柄平面接触 到锁定销。当柄平面接触到锁定销时, 轴环将 落下。
- 4. 确认钻头牢牢夹在轴孔中。
- 5. 提起轴环 (i) 释放钻头。

### 3 爪夹头(图 10)

DEWALT 3 爪夹头 (v) 可以结合适配器 (z) 安装. 使 磁力钻能够使用不同尺寸的钻头。请参阅"插入和 **拆卸附件**"中的安装说明。

注:安装夹头后,可能需要调整马达的位置。请参 阅 "**调整马达高度**"中的说明。

请向您的经销商咨询更多关于合适附件的信息。

# 设置转速(图7)



警告: 钻机全速运转或在使用过程中时 请勿变换档位。

本钻机配备两档选择器用干变换转速/扭矩比。

- 1. 将档位选择器操纵杆 (d) 旋出定位槽, 并转换到 所需的模式。
- 2. 将选择器操纵杆重新锁定在定位槽中。

### 低转速, 高扭矩:

黄点 (aa) 应对齐位置 1, 以获得低转速和高 扭矩 (32 到 50 毫米的孔)。

### 高转速, 低扭矩:

黄点 (aa) 应对齐位置 2, 以获得高转速和低 扭矩(12到30毫米的孔)。

注: 为完成换档, 可能需要用手稍微转动心轴。

# 调整马达高度(图 11)

马达高度可以调节,以便将工件上方的间隙调整到 所需的大小。

- 1. 使用随附的六角键工具 (cc) 松开马达 (bb) 滑动 **嘘**栓。
- 2. 将马达定位到所需的高度。
- 3. 用六角工具牢牢拧紧螺栓,将马达固定到位。

# 使用前的准备工作

请使用废弃材料试做几个简单的物品,直到您找到 使用工具的"手感"。

# 操作

# 使用说明



警告: 请务必遵守安全指示和适用法



警告: 为降低严重的人身伤害风险, 在 进行任何调整或移除/安装配件或附件 之前,请关闭工具电源和断开工具电源 连接。

- 仅对工具施加轻微压力。过度用力不 但不会加快钻孔的速度, 而且会降低 工具性能并可能缩短工具使用寿命。
- 如果附件堵塞, 请关停马达并将附件 轻轻拉离工件, 然后再恢复作业。
- 始终使用安全链。
- 始终使用钻机护罩。

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# 启动与关闭(图1、8)

为正确操作本钻机,必须按照以下程序启动机器。 **开关申**源

将机器连接到主电源。

要打开电源,将电源/磁力开关(a)按到开启位置。 注:一旦电源开启,磁体将自动激活。

要关闭电源,将电源/磁力开关按到关闭位置。

### 开关钻机马达

只有当磁体已激活时,才能开启钻机马达。

要开启钻机马达,按下马达开关上的绿色按钮(c)。要关闭钻机马达,按下马达开关上的红色按钮(b)。

### 复位机器

如果使用过程中电源中断,或者在任何时候磁封受损,必须复位机器。

- 1. 先关闭钻机马达, 再关闭电源/磁力。
- 2. 确保工作区清洁。
- 3. 开启电源/磁力。

# 钻孔(图1)

- 1. 始终在切削区域使用适当的切削液/冷却剂。
- 2. 降低护罩 (j) 使其挡住待钻孔的表面。
- 3. 确保钻尖或钻头顶针恰好定位在待钻点。
- 4. 按下马达开关上的绿色按钮 (c) 以开启马达。
- 5. 使用进刀手柄 (f) 慢慢将附件进给到工件内部。
- 6. 切削开始时,施加轻微的压力让附件切开一个 槽口。
- 7. 继续施加足够的压力,实现平稳、连续的切削。请勿强制其运行。

注: LED 指示灯 (n) 闪烁 (红色) 表明施加的 压力过大,如果发生这一情况,请减轻压力,直到指示灯变为常亮(绿色)状态。

- 附件即将穿透表面时请格外小心,防止切屑飞溅。
- 9. 完成作业时,请始终按马达、磁体和电源的顺序关闭机器,然后再拔出机器插头。

### 过载保护

DEWALT 磁座钻有过载保护功能,可以在操作过程 中负载过大时防止马达损坏。

LED 指示灯 (n) 将闪烁(红色)警告钻机过载,如果发生这一情况,请减轻压力,直到指示灯变为绿色常亮状态。如果不减轻压力,过载保护将激活并切断电源,此时 LED 将变为红色常亮状态。要从此状态中复位工具,请让工具空载运行几秒钟。这样就可以在恢复钻孔操作之前先让马达冷却。

# 使用空心钻头钻孔

空心钻头仅切削孔周围的材料,而非对整个孔进行切削。因此,对于同一钻孔操作,使用空心钻比使用麻花钻更为节能。

用空心钻头钻孔时, 不必钻导向孔。



警告:在操作后不得立即碰触钻头或靠 近钻头的部件,它们可能非常热且会导 致皮肤灼伤。

确保没有人待在金属芯掉落的工作区。

### 钻孔条件

材料钻孔的难易程度取决于多种因素,包括材料的 抗拉强度和耐磨性。虽然硬度和/或强度是常用标 准,但是即使在物理特性相似的材料中,切削性也 可能存在巨大差异。

钻孔条件取决于对工具寿命和表面光洁度的要求。 这些条件进一步受到工具刚度以及工件、润滑和有效 机器功率的制约。材料硬度越高,切削速度越低。

有的低硬度材料中含有研磨物质,可导致刀刃在高速运转时快速磨损。进刀速率由工具刚度、待去除的材料量、表面光洁度和有效机器功率决定。

### 维护

DEWALT 电动工具设计精良,可以长期使用,而且只需最少的维护。要连续获得令人满意的工作效果,需要进行合适的工具维护和定期清洁。



警告: 为降低人身伤害的风险,在拆、 装附件或调整、修理工具之前,请关闭 工具并拔下工具插头。请确保开关处于 关闭 (OFF) 位置。意外启动可能会导致 人身伤害。

# 自停式碳刷

碳刷快磨完时电机将自动关闭,此时工具需要维修。碳刷不可由用户自行维修。请将工具送交DEWALT 授权维修代理。



# 润滑

### 水平应用中

- 使用流量调节器 (m) (图 1) 按需调节冷却液流量。
- 如果切屑变为蓝色,请增加切削液的用量。

### 垂直和高空应用

将钻头蘸取切削膏或使用适当的喷剂。

### 润滑进刀行程(图9)

为确保机器平稳运行,应定期使用润滑脂润滑进给 行程。

### 简体中文

- 尽量将马达装置提到最高位置。
- 润滑燕尾导轨 (dd) 的两面。
- 润滑齿条 (ee)。

反复使用后,齿条可能会变松。如有必要,请调整 左侧的 5 个自锁固定螺丝。依次拧紧螺丝,直到齿 条能够在燕尾导轨上自由移动,但电机不得摇晃。



### 清洁



警告: 一旦通风口和周围积聚了可见的 粉尘,请立即用干燥的空气吹走主机外 壳内的粉尘和灰尘。执行此过程时,需 戴上经认可的护目装备和防尘面具。



警告: 切勿使用溶剂或其他刺激性化 学制品来清洁工具的非金属部件。这些 化学物质可能会削弱这些部位使用的材料。请用布蘸温和的肥皂水擦拭。切勿 让任何液体渗入工具,切勿让工具的任 何部分浸在液体中。

# 可选附件



警告:除了 DEWALT提供的附件之外, 其他附件都未经此产品兼容性测试,若 将此类附件与本工具一起使用将存在安 全隐患。为降低伤害风险,本产品只可 使用 DEWALT 推荐的附件。

请向您的经销商咨询更多关于合适附件的信息。

# 保护环境



分类回收。本产品不得与普通家庭垃圾 一起处理。

如果您发现您的 DEWALT 产品需要更换或您已经不再需要使用这些产品,请不要将它们与家庭垃圾一起处理。请将它们单独分类回收。



分类回收使用过的产品和包装能够让材料得以再循环和再利用。回收材料的再利用有助于防止环境污染,并降低对原材料的需求。

当地法规可能要求由市政废物处理点或向您出售新 产品的零售商提供从家庭中分类回收电气产品的服 务。

DEWALT 提供设施收集和回收使用寿命到期的 DEWALT 产品。若要享受这项服务,请将产品送回 任一授权维修代理,他们将代表我们回收您的产品。

请根据本手册所提供的地址与当地 DEWALT 办事 处联系,查询离您最近的授权维修代理的位置。或 者,您也可以登陆以下网站查询 DEWALT 授权维修 代理名单,以及我们的售后服务和联系方式的详细 信息,网址是:www.2helpU.com。

制造商: 百得德国公司

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