

MINOVA

Cordless Air-Cooling Hot Knife



SAFETY INSTRUCTIONS

⚠ WARNING General Power Tool Safety Warnings

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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.

WORK AREA SAFETY

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **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.

ELECTRICAL SAFETY

- **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.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **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.
- **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.

PERSONAL SAFETY

- **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.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- **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 energizing power tools that have the switch on invites accidents.

- **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.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- **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.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

POWER TOOL USE AND CARE

- **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.
- **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.
- **Disconnect the plug from the power source and/or remove the battery pack, if detachable, 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.
- **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.
- **Maintain power tools and accessories. 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.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **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.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

SERVICE

- **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.

SECURITY ADVICES

- When the tools are not used, place them in the box and place them in dry and untouchable areas. When using transportation and storage, please pay attention to moisture-proof, shock-proof and anticorrosion.
- Only let qualified personnel repair your power tool and use only original spare parts for that.
- Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the workpiece by hand or against your body leaves it unstable and may lead to loss of control.

PRODUCT DESCRIPTION AND SPECIFICATIONS



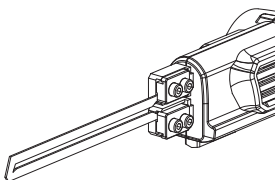
READ ALL THE SAFETY AND GENERAL INSTRUCTIONS

Failure to observe the safety and general instructions may result in electric shock, fire and/or serious injury.

INTENDED USE

Minova cordless air-cooling hot knife is the First Cordless Hot Knife. Minova cordless air-cooling hot knife is a real professional-grade hot cutting tool for foamed plastics. Minova cordless air-cooling hot knife heats up in seconds and gives the operator temperature control. Never before has working with foamed plastics been this easy, inexpensive and free of mess.

RECOMMENDED USE



Expanded Polystyrene (EPS), Extruded Polystyrene(XPS), Polyethylene, Cross-Linked Polyethylene, Polypropylenes, and many other foamed plastics and materials can be easily cut with Minova cordless air-cooling hot knife. Check with the foam manufacturer for safe and proper cutting procedures.

TECH SPECS:

Minova cordless air-cooling hot knife	
Rated Voltage	18V DC
Rated Power Output	115W
Weight	1.72 lbs / 780g
Temperature	0-400 °C

These specifications vary at different voltages and in country-specific models.

BLADE INSTALLATION

NOTE: Always unplug the power cord of the Minova cordless air-cooling hot knife before installing or removing the blades. Allow sufficient cooling time for blades, blade holders and mounting crews before handling.

Caution 1: The Minova cordless air-cooling hot knife blade have a sharpened razor edge, for the cleanest cut always cut in the direction on the sharpened edge.

STRAIGHT BLADE:

1. Loosen the screws on the blade holders with the wrench.
2. Slide the blade under the square pressure plates until snug.
3. Securely tighten screws to assure the proper electrical connection. Do not over-tighten.
4. Once the blade is firmly in place, plug the Minova cordless air-cooling hot knife Unit into a standard 120 volt power supply.
5. The temperature control knob has 16 click setting that correspond to the graduated ridges on the surface. The smaller the ridge the lower the power setting.

Caution 2:

Please keep no anything at the Air intake, not cover the Air intake; Excessive power output and heat generation may cause the blade holders to overheat resulting in damage to the unit. Use only the power output for proper cutting. The blade does not need to be red hot to move through foamed plastics.

OPERATION

NOTE: For the best results, practice on scrap pieces of foam.

When cutting foam it is best to keep the temperature and speed consistent. If smoke develops during the cut, you are cutting too slow or the blade is too hot which could result in an oversized, uneven cut. This can be remedied by lowering the temperature and intermittently releasing the trigger during your cut.

As the cutting resistance increases, depress the trigger again. The Minova cordless air-cooling hot knife will reach the set temperature within seconds. You can accomplish your cut with minimal smoke using this process. Cutting in this manner will also prolong the life of the knife. Releasing the trigger approximately one or two inches prior to the completion of the cut will help keep the blade clean and free from buildup.

The selected cutting blade should not be longer than 3/4" past the thickness of your foam board. The foam cools the blade as it cuts. The exposed portion can overheat and cause your blade to warp.

Guidelines and Caution 3:

1. Consult foam manufacturer's MSLS sheet for flash points and toxicity of material you will be cutting.
2. Always operate the Minova cordless air-cooling hot knife in well ventilated space.
3. Never burn off excess residue on the hot knife blade. The blades will overheat, warping the blade and potentially overheating the Minova cordless air-cooling hot knife.
4. Only operate hot Knife when it is in contact with the insulation board.
5. Keep hot blades away from skin, clothing and other flammable materials.
6. Allow blades to cool before handling. A hot blade may cause injury or burns to exposed surfaces.
7. This tool is not suitable for people with, health issues, sensory or mental impairment.
8. This tool is not intended for children.
9. Operate electric tools as instructed. Use gloves and appropriate safety gear when using electric tools. Store electric tools in a dry place when not in use. Do not use electric tools in damp or wet locations.

MAINTENANCE AND SERVICE

MAINTENANCE AND CLEANING

Power Tool:

- Pull the plug out of the socket or remove the battery before carrying out any work on the power tool.
- To ensure safe and efficient operation, always keep the power tool and the ventilation slots clean.

In order to avoid safety hazards, if the power supply cord of AC adaptor needs to be replaced, this must be done by Minova or by an after-sales service center that is authorized to repair Minova power tools. Clean the saw blade guide and the saw blades at regular intervals (approx. after every 8 hours of operation).

You will need to remove the saw blades from the power tool to do this. It is best to clean the saw blades with white spirit.

MAINTENANCE

Constant use of the Hot Knife may result in polystyrene material build up on blades and the brass holders. This excess polystyrene interferes with the proper electrical and impairs the performance of the blades. The brass blade holders and blades can be thoroughly cleaned with a wire brush.

Always inspect your device before use. Do not use if the power cord is damaged. Tool should be repaired by a certified electrician to avoid injury.

INSPECTION AND REPAIR

Daily Inspections

- Please check the shell and handle whether damage;
- Please check whether the switch is normal and flexible;
- Whether the mechanical protection device is in good condition;
- Whether the rotation of the tool is flexible, light and free from blocking;
- Long-shelved tools (or before work) must check whether the joints of each thread are tightened to avoid loosening.

Repairs

- Repairs may be carried out by an authorized customer service center only;
- To ensure the designed operational integrity of power tools and charger, do not remove installed covers or screws.

WARRANTY

This warranty applies only to products which have not been subjected to negligence use, misuse, uses other than those indicated in the product's owner's manual, alteration, accident, use of unauthorized parts, failure to perform periodic maintenance as specified in product's owner's manual, normal wear and tear, use of unauthorized parts or repairs performed at non-authorized service centers.

ENVIRONMENTAL PROTECTION

Please follow the national laws and regulations on the environmental treatment and recycling of scrap machinery and equipment, packaging and accessories. Please render scrap power tools unusable by removing the battery pack.

EU COUNTRIES ONLY

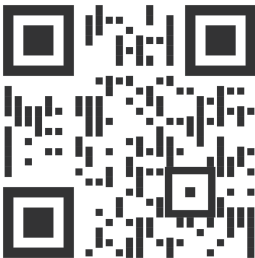


Do not throw electric power tools into the household waste! In accordance with the European Directive 2002/ 96/ EG on Waste Electrical and Electronic Equipment and transposition into national law and electric power tools must be collected separately and recycled in an environmentally friendly manner. Please ask your dealer about disposal options!

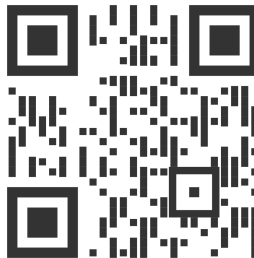
EXEMPTION FROM LIABILITY

The manufacturer and his representative are not liable for any damage and lost profit due to interruption in business caused by the product or by an unusable product. The manufacturer and his representative are not liable for any damage which was caused by improper use of the product or by use of the products from other manufacturers.

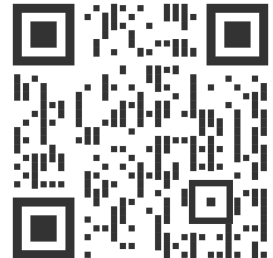
Please feel free to contact us if you have any questions or concerns.



contact@minovatoool.com



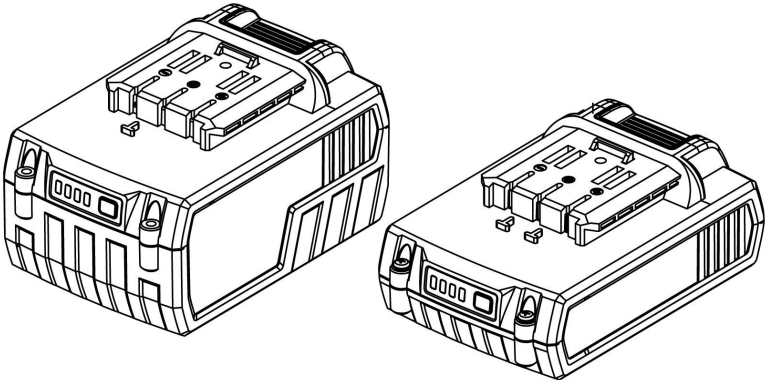
support@minovatoool.com



Youtube Channel

MINOVA

MINOVA LI-ION BATTERY



SAFETY INSTRUCTIONS

Read all the safety information and general instructions. Failure to observe the safety information and general instructions may result in electric shock, fire and/or serious injury.

Keep all the safety information and general instructions for future reference.

- **These safety warnings apply only for Minova lithium-ion batteries!**

- **Only use the battery with products from the manufacturer.** This is the only way in which you can protect the battery against dangerous overload.

- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

- **The battery is supplied partially charged.** To ensure full battery capacity, fully charge the battery in the charger before using your power tool for the first time.

- **Keep battery packs out of the reach of children.**

- **Do not open the battery.** There is a risk of short-circuiting.

- **In case of damage and improper use of the battery, vapors may be emitted. The battery can set alight or explode.** Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. The vapors may irritate the respiratory system.

- **If used incorrectly or if the battery is damaged, flammable liquid may be ejected from the battery. Contact with this liquid should be avoided. If contact accidentally occurs, rinse off with water. If the liquid comes into contact with your eyes, seek additional medical attention.** Liquid ejected from the battery may cause irritation or burns.

- **If the battery is damaged, liquid can be ejected and cover nearby surfaces.** Check affected parts. Clean these parts or change them if necessary.

- **Do not short-circuit the battery pack. When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.

- **The battery can be damaged by pointed objects such as nails or screwdrivers or by force applied externally.** An internal short circuit may occur, causing the battery to burn, smoke, explode or overheat.

- **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

- **Protect the battery against heat, e.g. against continuous intense sunlight, fire, dirt, water and moisture.** There is a risk of explosion and short-circuiting.

- **Only operate and store the battery at an ambient temperature between -20 °C and +50 °C.** Do not leave the battery in your car in the summer, for example. At temperatures of < 0 °C, some devices may experience a loss of power.

- **Only charge the battery at an ambient temperature which is between 0 °C and +45 °C. Only charge the rechargeable battery with a USB cable at an ambient temperature which is between +10 °C and +35 °C.** Charging outside of this temperature range can increase the risk of damage to the battery and pose a fire hazard.

MAINTENANCE AND SERVICE

Maintenance and cleaning for battery

Occasionally clean the ventilation slots and the terminals on the battery using a soft brush that is clean and dry.

Transport

Lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. The batteries are suitable for road-transport by the user without further restrictions.

When shipping by third parties (e.g.: by air transport or forwarding agency), special requirements on packaging and labelling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging. Please also observe the possibility of more detailed national regulations.

Disposal:

Do not throw battery pack into the household waste!

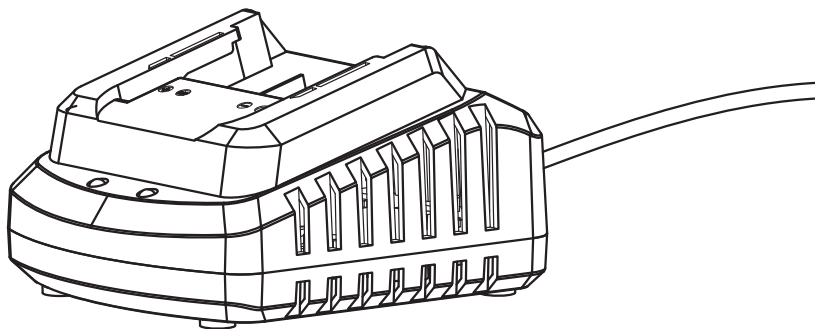
Batteries and packaging should be sorted for environmentally friendly recycling. Please return the damaged battery pack or used battery pack to the dealer. Do not throw battery pack in water! Please discharge the battery pack before handling. Please protect contacts to prevent short circuit. (e.g. use tape for isolation)

Only for EU countries:

According to the Directive 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

MINOVA

MINOVA BATTERY CHARGER



SAFETY INSTRUCTIONS

Read all the safety and general instructions. Failure to observe the safety and general instructions may result in electric shock, fire and/or serious injury.

Only use the charger if you can fully evaluate all functions and carry them out without restrictions, or if you have received corresponding instructions.

- This charger is not intended for use by children or persons with physical, sensory or mental limitations or a lack of experience or knowledge. This charger can be used by children aged 8 or older and by persons who have physical, sensory or mental limitations or a lack of experience or knowledge if a person responsible for their safety supervises them or has instructed them in the safe operation of the charger and they understand the associated dangers. Otherwise, there is a risk of operating errors and injuries.

- Supervise children during use, cleaning and maintenance. This will ensure that children do not play with the charger.

- Only charge Minova Li-Ion batteries with a capacity of 2.0 Ah or more (3 battery cells or more).

The battery voltage must match the battery charging voltage of the charger. Do not charge any non-rechargeable batteries. Otherwise there is a risk of fire and explosion.

Do not expose the charger to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

- Keep the charger clean. Dirt poses a risk of electric shock.

- Always check the charger, cable and plug before use. Stop using the charger if you discover any damage. Do not open the charger yourself, and have it repaired only by a qualified specialist using only original replacement parts. Damaged chargers, cables and plugs increase the risk of electric shock.

- Do not operate the charger on an easily ignited surface (e.g. paper, textiles, etc.) or in a flammable environment. There is a risk of fire due to the charger heating up during operation.

- Do not cover the ventilation slots of the charger. Otherwise, the charger may overheat and no longer function properly.

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

- In case of damage and improper use of the battery, vapors may also be emitted. Ensure the area is well-ventilated and seek medical attention should you experience any adverse effects. The vapors may irritate the respiratory system.

- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

PRODUCT DESCRIPTION AND SPECIFICATIONS OF BATTERY CHARGER

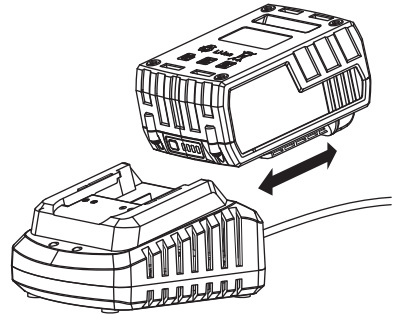
TECHNICAL DATA

CHARGER		
Input	100-240V AC 50-60Hz 65W	
Output	21V DC 2.3A	
Permitted battery temperat	0-45°C	
Charging time at battery caapprox	2.0Ah	55-65min
	5.0Ah	150-160min
Protection class	□ II	

OPERATION

For battery powered tool, before using the tool, charge the battery as follows.

- Plug the battery charger into the proper AC voltage source. The voltage of the power source must match the voltage specified on the rating plate of the charger. After plugging correctly, The power light will lighten in green.



CHARGING PROCESS

- The charging process begins as soon as the mains plug for the charger is inserted into the mains socket and the battery is inserted into the charging slot.
- When the battery is inserted fully, the charging light will change red, at the same time, the power light will go off and charging will begin. The charging light will remain lit steadily during charging.
- When the charging light goes off, the power light changes from Green (Press the button on the battery, four power display lights are on.), the charging cycle is complete.
- After charging, unplug the charger from the power source.
- The charging process is only possible when the temperature of the battery is within the permitted charging temperature range.

PRACTICAL ADVICE

A significantly reduced operating time after charging indicates that the battery has deteriorated and must be replaced. When the charger is used continuously, or for several consecutive charge cycles without interruption, the charger may heat up. This is, however, harmless and does not indicate that the charger has a technical defect.

MAINTENANCE AND SERVICE

MAINTENANCE AND CLEANING FOR BATTERY CHARGER

In order to avoid safety hazards, if the power supply cord needs to be replaced, this must be done by Minova or by an after-sales service center that is authorized to repair Minova power tools.

DISPOSAL

Chargers, accessories and packaging should be recycled in an environmentally friendly manner. Do not dispose of chargers along with household waste.