

The Instruction Manual For Safe Use

Diamond dresser

To ensure safety, be sure to carefully read before using the diamond dresser (below referred to as 'dresser'), the instruction manual of the dresser and the instruction manual of the used machine.

After reading the manuals, be sure to sufficiently explain the instructions to operators, and to keep it within their easy reach. Improper handling may result in faults or injuries.

Meaning of warning and caution

The Instruction Manual and Attention in the diamond tool security as follows according to the extent of risk and injury that could be caused by improper handling.



Warning Improper handling may result in death or serious injury.



Caution Improper handling may result in a minor injury or only material damage.

Prohibited action symbols



Prohibited



Do not touch

Instructed action symbols



Follow the instruction



Wear safety glasses



Wear safety shoes



Wear a safety hat



Wear a mask



Wear earplugs



Unplug the machine

1. Work environment, Clothing, Protective outfit



Warning



Be sure to properly install the safety cover specified by the manufacturer of the used machine. Only authorized personnel should come close to the machine.



Keep off the moving range of the machine, in particular in the rotational direction of grindstone and around the table of the used machine.



The dresser may generate sparks during use. Do not use the dresser in flammable or explosive environments.




Be sure that operators wear dust goggles, safety shoes, hard hats and other protective outfits as well as work clothing with tight sleeves and trousers furled at the bottom.








Be sure that operators wear dust masks and earplugs. Provide sufficient ventilation to remove dust and other particles from the air.

2. Before use

Warning






-  Do not allow the maximum amount of cutting to exceed 0.04 mm. When modifying the grindstone surface by a large amount, be sure to conduct dressing several times separately.

Caution

-  Do not allow the maximum feed per stroke to exceed 500 mm/min.
-  Check to confirm that the dresser axis size conforms to the mount size of the used machine.
-  Remove the protective cap from the dresser.
Keep the removed materials in an enclosure.
-  Check for cracks, fissures, defects, poor bonding with the base metal, and other problems in the dresser.
-  Clean the dresser mounting part of the used machine.



3. Mounting of tools

Warning




-  Mount the dresser on the holder and tighten properly and firmly.
Otherwise, the dresser may get loose due to vibration during use, and the dresser or grindstone may break and the resulting flying fragments may cause serious injury.
-  Check for scratches and foreign matter in the mounting part of the dresser.
-  The setting angle used should be from 10 to 15 degrees (negative) from the centerline of the grindstone.
The tilt angle relative to the grindstone side face should be between 20 and 30 degrees.
-  Do not allow the dresser shaft to protrude more than necessary.
-  Do not modify the shape of the dresser.
Please consult with us if necessary.

4. Idling

Warning







-  Make sure that the grindstone is mounted securely.
-  Make sure that the dresser is mounted securely.

Caution


-  Make sure that the coolant is poured onto the point of grinding.
-  Make sure that the setting angle is appropriate.
-  Make sure that feed, cutting depth, cycle time and other settings are implemented properly. Do not use the tool under overload conditions.

5. Amendment

Warning




-  Never turn on the power to the grindstone shaft when the dresser is in contact with the grindstone.
-  Do not cut directly from a side face. If used with a slit cut, the dresser or grindstone may break and the resulting flying fragments may cause serious injury.
-  Never touch the tool when it is rotating. Touching the rotating tool or getting caught in the machine may result in a serious injury.
-  If abnormal sound or vibration occurs, disengage the rotary tool immediately, and fully stop the operation. If one continues operation in this state, the tool and/or machined part may break and scatter, causing injury.
-  When the correction work is complete, shake off the coolant off of the wheel before switching off the wheel shaft rotation.
-  Wait until the grindstone stops naturally, without touching it by hand or pressing it against any object.

Caution

-  Do not use the dresser if its work face has enlarged. Otherwise, it may break and the resulting flying fragments may cause injury.

6. Storage, Handling

Caution

-  Observe the work face of the dresser, and check for abnormal abrasion, fall-off, cracks, defects, fissures, and the like.
-  When removing and storing the dresser, protect its acting area and store it in a dry place free of fall-off or impact.
-  Do not modify the shape of the dresser. Please consult with us if necessary.