BIG DAISHOWA KAISER BORING SYSTEM

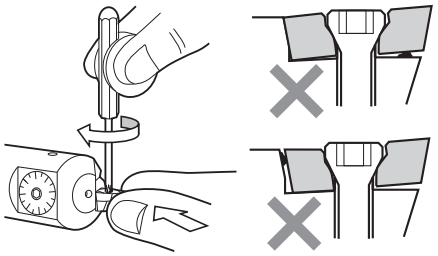
EW MICRO HEAD

OPERATION MANUAL

Please read these instructions before use and keep them where the operator may refer to them whenever necessary.

INDEXABLE INSERT INSTALLATION

- Ensure that the locating surface of the indexable insert and the seating area of the toolholder is free of any particles or oil by using compressed air.
- Then use an absorbent cloth to wipe these surface clean.
- Position the indexable insert by placing the insert into the toolholder, then by locating the clamping screw supplied through the indexable insert, proceed to rotate the clamping screw until the indexable insert is securely clamped into position.
- Ensure that there is no gap between the locating surfaces of the insert and the toolholder.



⚠ CAUTION

- Use only genuine clamping screws to avoid any unnecessary damage.
- Care must be taken not to cause any injury when indexing insert.
- Regularly replace clamping screws to ensure the maximum clamping force can be maintained.

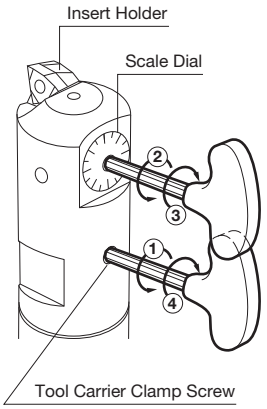
BORING DIAMETER ADJUSTMENT

① Loosen the Tool Carrier Clamp Screw.

② Rotate the scale dial in a counterclockwise direction passed the desired size required.
Note: Each graduation equals to .0005”/ø.

③ Rotate the scale dial in a clockwise direction until the desired size is reached.

④ Tighten the Tool Carrier Clamp Screw.



⚠ CAUTION

- Do not touch the screw marked in red color.
- NEVER adjust the diameter before loosening the Tool Carrier Clamp Screw or exceed the adjustable boring range. Precision components in the head are damaged.
- Slight rotational movement of the scale dial is normal and is unrelated to any backlash to the moving parts in the boring head.
- Use only genuine hexagon key for unclamping, clamping and any adjustments. Never overtighten clamping screws by using any form of extensions.

ADDITIONAL GENERAL CAUTION NOTES

⚠ CAUTION

- Boring range of the boring head must not be exceeded.
- It is recommended that a semi-finished bore diameter is machined to determine the influence of the cutting conditions to the actual bored diameter.
- Never use unsuitable cutting conditions.
- Never continue using the boring head if it has been subjected to any shock or damage.
- Safety Goggles MUST be worn during any boring operation.

BIG DAISHOWA SEIKI CO., LTD.

No.0625

MAXIMUM SPINDLE SPEED

Head Model	MAX.
ST14W-EW15E-110	6,000 RPM
-140	
ST16W-EW18E-100	
-160	

⚠ CAUTION

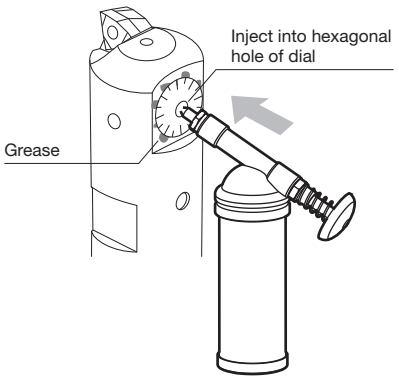
- **Never exceed the maximum RPM shown for each respective boring head.**
- **Since the max. permissible RPM is the limit which is related to the safety based on the construction of EW head, it is not guaranteed to machine with max. RPM.**
- **When the cutting condition is actually decided, spindle speed must be gradually increased from low cutting condition. Because the condition depends on the rigidity of a machine tool and workpiece and the length of a boring tool.**

MAINTENANCE

- Regularly apply grease into the grease nipple installed so that adequate lubrication of moving parts is maintained and to keep moving parts free from dust and coolant.
  Grease Model : HSG50 (50g/net)
- The boring head must be set on the smallest diameter when greased.
- Continue to inject grease until it appears to ooze out from behind the scale dial.
- Occasionally adjust the boring head through its entire range when storing for a period of time to avoid the grease from hardening.

⚠ CAUTION

Never overhaul boring heads.



Grease Gun (Model: GRG-02)