Specifications for Bushing in milling bar of JIER Make Horizontal Boring Machine

1. Description: Bushing in milling bar of JIER HBM

2. Quantity: 3 Numbers

3. Material: GCr15 steel or Equivalent material suitable for above referred milling + boring bar assembly.

   3.1. Equivalent material shall be only of ISO/Equivalent standards.

   3.2 Supplier to submit material test certificates from Government authorized agency accredited with NABL or equivalent while delivery

4. Spindle general arrangement drawing attached herewith for ready reference.

5. Spindle size is 160 mm.

6. Ram end size 500×550 mm.

7. After the GeM contract/PO placement, Supplier shall visit BHEL Trichy for taking measurements. Supplier has to submit drawings (for BHEL approval) with sliding tolerance to match the Boring bar+ Milling bar assembly. Tolerance of raceway F in MICRON: 0/-9. Or better. Precision as per standard bearing sleeve. P4 class or better. Bidder to specify.

8. Supply of items shall be as per above technical specifications and BHEL approved drawing.

9. Delivery: Within 180 days from date of GeM contract/PO placement. Schedule for various activities is given below.

   a. BHEL will intimate supplier to visit BHEL Trichy for taking required measurements: Within 90 days from the date of Gem contract

   b. Supplier has to visit BHEL Trichy after the above email intimation for visit: Within 7 days from the date of email intimation for visit.

   c. Supplier has to submit complete Drawing of required item for BHEL approval: Within 14 days from the date of above email intimation for visit (i.e. within 7 days from the date of visit)

   d. Drawing Approval will be given by BHEL: Within 7 days after receipt of complete drawing.

   e. Supply of items to BHEL Stores, Trichy: within 180 days from the date of GeM contract.

10. After receipt of items as per PO, BHEL will provide material acceptance within 7 days.

Below technical details for reference purpose only

1. Model：TXG71＊160 Headstock of JIER Machine-tool Group Co., Ltd, China

The headstock is applicable to CNC Floor-type Boring-milling Machine, has a spindle motor power 71kW and a boring diameter ϕ160mm. And, normally, it's called a headstock.

2. Main technical data： Boring bar diameter ----------ϕ160mm

i. Milling bar diameter ----------ϕ260mm
ii. Boring bar taper hole ----------ISO No.50
iii. Ram sectional area ----------500mm×550mm
iv. Boring bar （W-axis） stroke ----------1200mm
v. Ram （Z-axis） stroke ----------1250mm
vi. Z. W feed speed----------0.5~6000mm/min
vii. Z. W rapid movement ----------6000mm/min

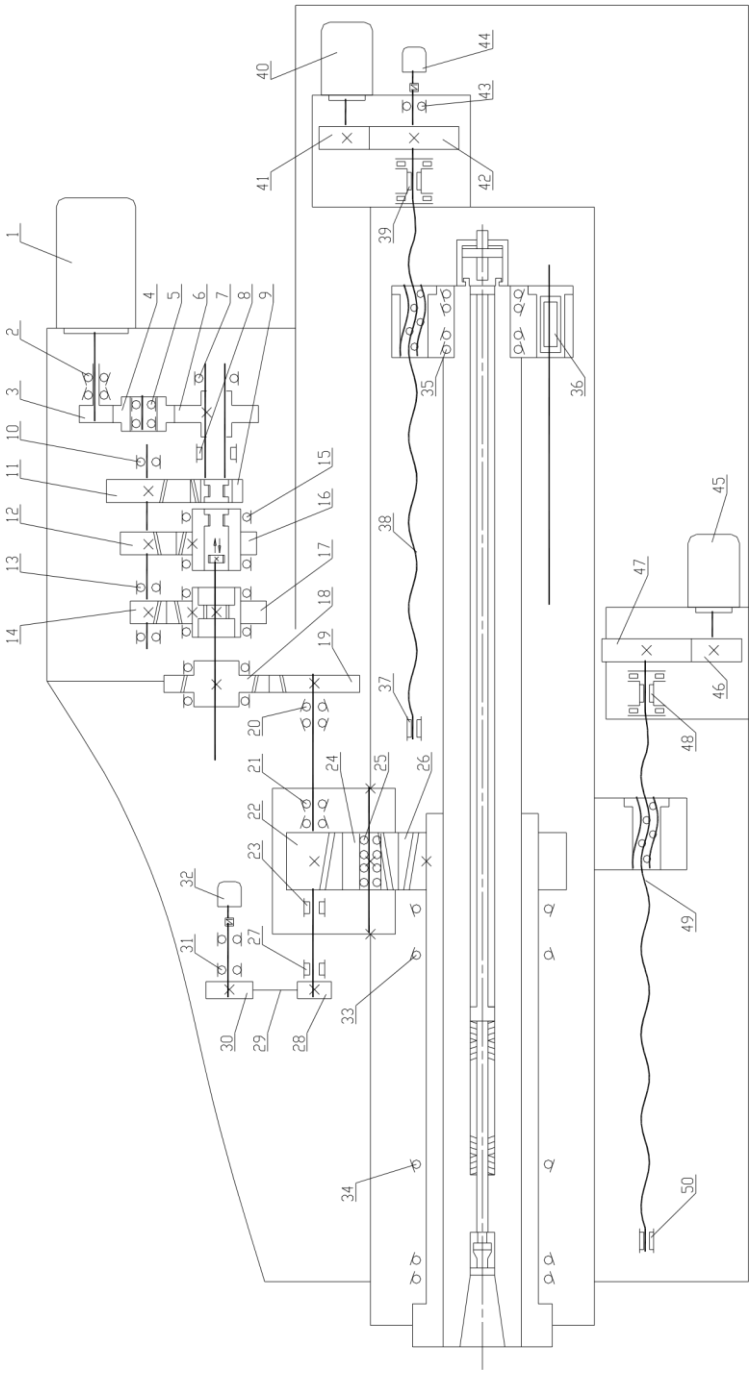

Fig.1 Schematic Diagram for Headstock Drive System

Boring bar is also a middle hollow component, is retained by a GCr15 steel bushing in milling bar, and can slide along a pair of keys on milling bar (W-axis).
Reference from Machine manual – Highlighted portion is GCr15 steel bushing

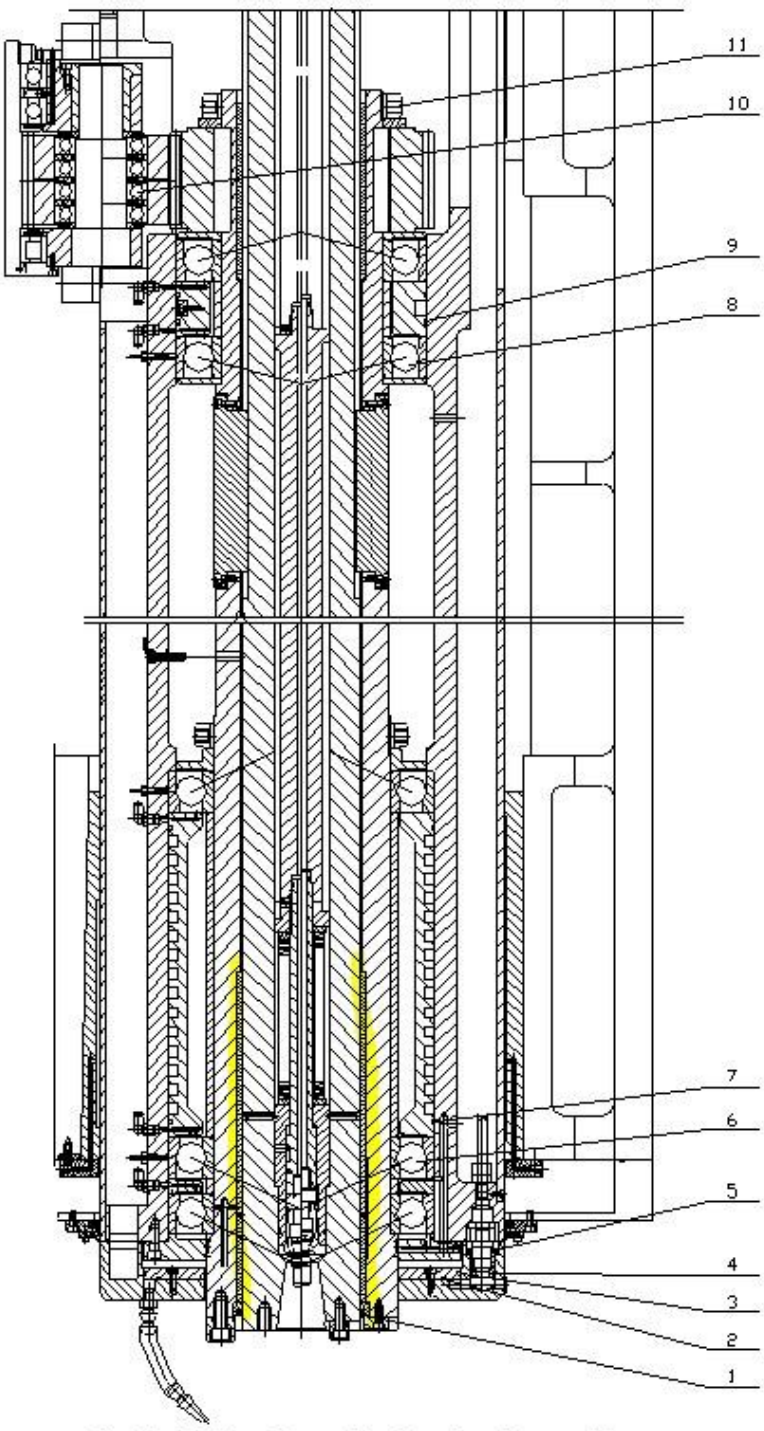

Fig.6 : Milling Bar + Boring Bar Assembly

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