

EASTERN RAILWAY/CARRIAGE COMPLEX/KANCHRAPARA

SCOPE OF WORK

1. The tender is for Refurbishment of 614 nos. CTRB SKF TBU 1639433 BB/1639433 BC LHB Coach Axle Box Bearing of SKF make fitted in LHB Coaches of Carriage Workshop, Eastern Railway, Kanchrapara for two years through M/s SKF India Limited, 611-617, 6th Floor, Bestech Chambers, B-Block, Sushant Lok, Phase-1, Gurgaon-122002.
2. The Railway will remove CTRB SKF TBU 1639433 BB/1639433 BC LHB Coach Axle Box Bearing of SKF makes from incoming LHB Coaches as and when they arrive at Carriage Complex, Eastern Railway, Kanchrapara and shall pack all the refurbishable bearings duly wrapped in polythene sheets and packed in wooden/PVC case so that bearing do not get damaged during transit for refurbishment from Kanchrapara workshop to Jamshedpur. The loading of dismantled CTRB SKF TBU 1639433 BB/1639433 BC LHB Coach Axle Box Bearing of SKF make at Carriage Complex/Kanchrapara & unloading of refurbished/ rejected bearings at Carriage Complex/Kanchrapara shall be arranged by the firm by engaging their own manpower. M/s SKF India Limited/Gurgaon shall pack all the refurbished bearings duly sealed in polythene packs and packed in wooden/PVC case so that bearing do not get damaged during transit after refurbishment from Gurgaon to Kanchrapara Workshop. M/s SKF India Limited will collect the removed bearing from SSE/20, Carriage Complex, Eastern Railway, Kanchrapara and return the same after refurbishment to Kanchrapara workshop. The contractor shall return all the rejected / scrapped / released materials / components to SSE/20/C, Carriage Complex, Eastern Railway, Kanchrapara. The polythene sheet and wooden/PVC Box shall have to be provided by M/s SKF India Limited for loading of CTRB, which shall be duly wrapped in polythene sheets and packed in wooden/PVC cases of refurbishable bearings at Kanchrapara workshop.
3. The freight charges both ways of the Road transport from Carriage Complex, Eastern Railway, Kanchrapara to M/s SKF India Limited/Gurgaon and back will be paid by the contractor at their own cost on full truck load basis and the same will be billed to the Railways along with serviced bills.
4. The contractor shall collect the CTRB SKF TBU 1639433 BB/1639433 BC from Carriage Complex, Eastern Railway, Kanchrapara for refurbishing at contractor's worksite and after refurbishment the same are to be delivered back by the contractor to Carriage Complex, Eastern Railway, Kanchrapara in a lot/batch size. However, the lot quantity, Lot Nos. and Lot frequency may vary depending on the arising of LHB Wheel Sets with CTRB SKF TBU 1639433 BB/1639433 BC LHB Coach Axle Box Bearing of SKF make of SKF make & dismantling of the same. Subsequent lot of defective/ repairable bearings shall be lifted from Carriage Complex, Eastern Railway, Kanchrapara only after delivery of earlier lot.
5. An Indemnity bond amounting to **Rs. 25,29,920.00** (Rupees Twenty-five lakh twenty-nine thousand nine hundred and twenty only) towards the cost of 80 nos. CTRBs are required to be submitted by the firm for taking the delivery of the CTRB SKF TBU 1639433 BB/1639433 BC LHB Coach Axle Box Bearing of SKF make for undertaking the contractual work in hand.
6. The contractor has to carry out repair/refurbishment of CTRB SKF TBU 1639433 BB/1639433 BC as per standard procedure for CTRB SKF TBU 1639433 BB/1639433 BC. After opening of the bearing the same will have to be examined by the authorized representative of Dy. CME/C/Kanchrapara to assess the extent of repair and quantum of replacement of components needed. After due refurbishment, the CTRB SKF TBU 1639433 BB/ 1639433 BC will again be inspected by the authorized representative of Dy.CME/C/KPA and entry made in History card regarding the satisfactory compliance item-wise i.e. inspection by the authorized representative of Dy. CME/C/KPA will have to be undertaken both at the time of disassembly of CTRB SKF TBU 1639433 BB/1639433 BC for assessment of quantum of repairs required and before assembly of CTRB SKF TBU 1639433 BB/1639433 BC bearing offered after refurbishment. All the attended CTRB SKF TBU 1639433 BB/1639433 BC should be marked with Contractors name, Sl. No., date, month & year of repair by the contractor for traceability of the repaired CTRB SKF TBU 1639433 BB/1639433 BC. The refurbished CTRBs shall be sent back to Carriage Workshop, Eastern Railway, Kanchrapara in a lot along with History Card of each CTRB & SKF inspection certificate of refurbished CTRBs with dimensional check sheet. The investigation report of the pre-matured/reported dismantled CTRBs to be submitted separately along with returnable materials.

7. The contractor shall arrange for acknowledgement receipt of defective/repairable CTRB SKF TBU 1639433 BB/1639433 BC at the time of collection from Carriage Complex, Eastern Railway, Kanchrapara through his authorized representative. Carriage Complex, Eastern Railway, Kanchrapara will acknowledge the receipt of refurbished/irreparable CTRB SKF TBU 1639433 BB/1639433 BC on delivery of the same to the authorized representative of Carriage Complex, Eastern Railway, Kanchrapara.
8. Some of the TBU 1639433 BB/1639433 BC CTRBs sent to the Contractor may get discarded on account of Major components becoming irreparable or uneconomical for repairs. Whenever the cost of refurbishment exceeds Rs. 20,241.81 (Rupees Twenty Thousand Two Hundred Forty-One and Paise Eighty-one) Only inclusive of GST and to & fro transportation charges and other expenses if any per TBU 1639433 BB/1639433 BC CTRB, the refurbishment is not considered economical. This cost limit shall be the guiding factor for not carrying out refurbishing & Kanchrapara workshop must be advised by the Contractor and such ir-refurbishable bearings shall be returned along with the Refurbished TBU 1639433 BB/1639433 BC CTRBs & History card.
9. The contractor shall maintain History card for each CTRB SKF TBU 1639433 BB/1639433 BC. The History card should indicate that nature of defects of the parts and details of their refurbishment/ replacement done. Copy of this History card duly certified by the consignee shall be sent along with serviced CTRB SKF TBU 1639433 BB/1639433 BC incorporating individual number of CTRB SKF TBU 1639433 BB/1639433 BC in each card, to the Carriage Complex, Eastern Railway, Kanchrapara along with Challan and Timken Inspection certificate.
In addition to the manual mode, History Cards should be in electronics, retrievable format in a DVD saved with primary key concept of Database Software with object linking & embedding (OLE) or other object embedding mechanism to retrieve the required data easily, just by a click of mouse, as well as maintaining data integrity to avoid data duplication.
10. The Contractor will return all the rejected (scrap) components of the CTRB SKF TBU 1639433 BB/1639433 BC which have been replaced with new, to Carriage Complex, Eastern Railway, Kanchrapara as per the endorsement on the History card by the authorized representative of Dy.CME/C/Kanchrapara. The rejected materials must be in numbers as well as in weight. The scrap component box must be marked separately to distinguish them easily.
11. However, for discarded/rejected CTRB SKF TBU 1639433 BB/1639433 BC, the labour charges towards washing, buffing, disassembly, inspection & reassembly as well as charges of transportation is payable to the contractor as all the CTRB SKF TBU 1639433 BB/1639433 BC undergo these common operations.
12. Railway Administration reserves the right to reduce/increase the quantity of order during execution of the contract without assigning any reason thereof. Variation of quantity if any would be dealt as per Rly. Bd.'s letter No. 2007/CE.I/CT/18/Pt.XII dated 31.12.2010 i.e. individual item in contracts shall be operated with variation of plus or minus 25% and payment would be made as per the agreement rate. Quantities operated in excess of 125% but up to 140% of the agreement quantity of the concerned item. shall be paid at 98% of the rate awarded for that item in that particular tender, quantities operated in excess of 140% but up to 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender.
13. The firm has to assure the "Service life" of the bearing which has been provided as a warranty replacement against a failed bearing which has been earlier refurbished by the firm as at par with new refurbished bearings or new bearings.
14. Packing and Loading of refurbished SKF TBU 1639433 BB/1639433 BC have to be arranged by SKF/Pune/Ahmedabad as per SKF packing standard i.e. TBU 1639433 BB/1639433 BC will be packed in Polythene sheet and then in Wooden/PVC box for sending it to Carriage Complex, Eastern Railway, Kanchrapara.
15. The Contractor will undertake the following procedure and steps for refurbishment of TBU 1639433 BB/1639433 BC CTRB.
 - Dismount the Z Labyrinth seals/LL Seals from TBU.

- Disassembling of the bearing.
- Cleaning of bearing components.
- Visual inspection of the bearing components.
- Check of the cone with polymer cage.
- Check of the outer ring.
- Check of the spacer.
- Check of the labyrinth ring and distance ring.
- Check of the outer and inner seal.
- Check of axial internal clearance before mounting.
- Assembly of the TBU & greasing.
- Mounting new LL Seals on TBU.

16. In course of refurbishing, the following components will be renewed.

Sl. No	Item	Qty. of Bearing
1.	Seal internal part SD-BT2-8516-25	02 Nos.
2.	Seal external part SE-BT2-8544-23	02 Nos.
3.	Distance Ring RD-1639433 8-15	01 No.
4.	Distance Ring RD-1639424 D-13	01 No
5.	Distance Ring RD-1639424 BA-13	01 No
6.	Grease	0.350 Kg. \pm 0.030 Kg.

17. In case of refurbishing TBU 1639433BB (Non-contact type sealing) to TBU 1639433BC (Contact type sealing), replacement of Distance ring and Backing ring is to be done at no extra cost.
18. The contractor shall ensure a Warranty/Guarantee of 24 months after supply or 30 months after putting into service, whichever is later. In case of failure within the warranty period, the same shall be repaired/refurbished again by the contractor free of cost for including to & fro charges of the road transport. Separate Warranty Certificate will not be issued against the Warranty Repair. It should be ensured that post warranty repairing and assured life of the refurbished TBU 1639433 BB/1639433 BC CTRBs is same as that of the new bearings. The firm has to assure the "Service life" of the bearing which has been provided as a warranty replacement against a failed bearing which has been earlier refurbished by the firm as at par with new refurbished bearings or new bearings.
19. Packing of all refurbished CTRB SKF TBU 1639433 BB/1639433 BC will be in polythene paper individually in the PVC make packing box/ RDSO packing standard.

20. SCOPE OF JOB INVOLVEMENT

Refurbishment of SKF TBU 1639433 BB/1639433 BC CTRB bearings assembled on LHB coaches

- Labour charges towards disassembly, washing, buffing, inspection & reassembly.
 - Must change item
 - Transportation charges to & fro.
 - Packing.
 - Repair of components on condition basis.
 - Replacement of components on condition basis.
21. In case of refurbishing TBU 1639433BB (Non-contact type sealing) to TBU 1639433BC (Contact type sealing), replacement of Distance ring and Backing ring is to be done at no extra cost.
- 22. COMPLETION TIME**
The successful tenderer shall have to execute and complete the refurbishment work within 30 (Thirty) Calendar days, wherein the time will be calculated from the date of lifting of CTRB SKF TBU 1639433 BB/1639433 BC for refurbishment.
- 23. Technical Suitability:**
The contractor has to ensure reliability and quality of the total bearings tackled to achieve cost benefit of serviced CTRB SKF TBU 1639433 BB/1639433 BC LHB Coach Axle Box Bearing of SKF make.