

**Additional Special Condition of MLR/Technical up gradation of the machines (09-3X-3971 to Dynamic-3X)**

1. **SPECIAL CONDITION OF CONTRACT FOR DATAMATIC:** Each machine should be provided with Data Matic for recording the important parameters like datum rail, general lift, single insertion or double insertion, design or smoothening mode, time of start and finish of work, squeezing pressure, squeezing time, vibration pressure and tamping depth etc., shall be shown on a display in the working cabin. It shall have an inbuilt storage to store the **above** parameters of minimum 100 hours of tamping work. The storage however shall not be less than 500 GB. It shall be possible to draw these data from the system itself after work via USB port on a memory stick for the purpose of record.
2. **APPLICABLE TECHNICAL DOCUMENTS:** Following manual/documents will be applicable for this work:
  - (a) Indian Railway Track Machine Manual Sept. 2019 as updated on date of opening of tender. An updated copy of above manual/documents is available on Indian Railway web site Indianrailways.gov.in/railway board.
  - (b) Maintenance Schedule for 09-3X DTE as issued by RDSO (TM/HM/TEX). This is an overall reference Document for guidance. The scope of contractor will be limited to SCHEDULE OF ITEM, RATE AND QUANTITIES.

Note: Subsequent changes after date of opening of tender including correction slips to above documents will be applicable only when revision of rates, terms and conditions are worked out with mutual consent.
3. This up-gradation work will be done at agency workshop.
4. The cost of work includes the scope of work as defined in the schedule. No other incidental charges will be payable. Consumables required during up-gradation and testing at agency workshop are deemed to have been included in the cost and nothing extra shall be paid on this account.
5. **STAGES OF WORK:**

| S.N. | Stage  |
|------|--|
| 1    | Award of contract  |
| 2    | Through inspection of the existing machine & detailed design work  |
| 3    | Procurement of spares  |
| 4    | Finalization of base bar chart                                     |
| 5    | Overhauling & upgradation  |
| 6    | Final Inspection & Testing of function on track in energy facility |
| 7    | Dispatch of machine to field                                       |
| 8    | Trial Blocks   |
| 9    | Commissioning of track machine after successful trials             |

6. **WORKING TIME:**
  - 6.1 Timely troubleshooting of any defects noticed during inspection and testing will be done by contractor. After up gradation work, track machine should work / function properly & should

be fine-tuned / calibrated as per Contract specifications & commissioned for proper working by the contractor.

6.2 In case of reasons beyond the control of contractor, suitable extension of completion period will be considered by competent authority.

7. **PROGRAMME OF WORK:** Immediately after issue of LOA, OEM team will inspect the machine within 15 days and will submit the BAR Chart for each item, duly approved by Railway. Thereafter firm shall start the Design part and submit the same for approval of Northern Railway within 2 months from the date of LOA. Design and Procurement phase will be completed within 6 months from the date of LOA. After notice from agency (Minimum 10 days' notice) regarding its readiness to start the work along with submission of bar chart, machines will be moved for agency workshop. Upgradation of machine must be completed within 3 months from the date of its arrival at the agency's workshop. The agency shall submit a Bar Chart detailing the various activities to be undertaken for the upgradation of each machine, ensuring completion of the entire work within the specified timeframe and the same should be got approved by the competent authority. If the agency/contractor does not complete the Mid Life Rehabilitation/upgradation work as per approved programme/bar chart, a penalty of Rs.20,000/- per day per machine till its completion will be levied on the agency/contractor.

8. **QUANTITY VARIATION:** All efforts have been made to include scope of work. It is based on the budgetary offer submitted by OEM for up-gradation of existing 09-3x machine to latest version of DTE. It is the bidder's responsibility to upgrade the machine, within the frame work of tender. Any incidental work is to be executed by the bidder for which no extra payment will be made except items which are defined to be not executed in the tender. Variation in the contract value shall be governed as per GCC provisions and shall be restricted up to 125%-140%.

## 9. INSPECTION & TESTING:

9.1 All items included in tender schedule should be carried out in accordance with the specifications mentioned in scope of work, as per para 25 & 26 of Annexure-A of Tender Document & RDSO maintenance schedule (TM/HM/TEX) and OEM's line diagrams / circuit diagrams and OEM's (M/s Plasser) specifications, to the overall satisfactory functioning of this track machine after upgradation. After upgradation, Track Machine will be subjected to final inspection & testing by Railway Officer (on one-week notice from agency) before it is released from agency workshop and dispatched to field / work site for trial blocks before Commissioning. Inspection and acceptance of machine shall be carried out as per para 25 & 26 of Annexure-A of Tender Document. Should any modification be found necessary as a result of the tests, these shall be carried out by the agency at his own expenses.

9.2 Contractor is entrusted with overall responsibility of final inspection, testing & commissioning of machine after up gradation and any defects in material /installation/ connection/fitting/workmanship etc. will be identified by him for further repair/replacement/corrective action.

10. **TRIAL BLOCK AND COMMISSIONING OF TRACK MACHINE:** After successful inspection and testing, track machine will be dispatched to field for conducting trial blocks and final commissioning for which minimum 10-15 trial blocks will be conducted at field site. These test blocks should cover working of machine along with DTS units in straight lines and curves (LH and RH) in 3-point method and 4-point method. During test blocks functioning of upgraded Smart ALC working in three modes, CWS working, CMS working, DRP working (2-configurations) and DTS working to be tested. Railway shall shift the track machine and arrange necessary site, traffic blocks and HSD oil for these trial blocks. Any defect noticed during trial blocks will be required to be rectified by contractor at site. It is to be noted that,

machine will be considered as commissioned after doing minimum 10-15 successful blocks without any "Major Failure" (of spare part/ work done by Contractor). Discretion of Dy. CE/TM/Line/NDLS will be final and binding with regard to definition of "Major Failure". Occasional bursting of seal/connections etc. will not be treated as "Major Failure".

- 11. APPROVED MAKE OF MATERIAL & SAMPLE:** Contractor has to supply the material of approved MAKE, with details as under:

| S. N | Item            | Approved Makes            |
|------|-----------------|---------------------------|
| 1    | Hydraulic Hose  | AEROQUIP, PARKER, PLASSER |
| 2    | Electric Spares | PLASSER, SCHNEIDER        |
| 3    | Electric Cables | PLASSER, LAPP             |

- 12. WARRANTY:** Defect Liability Period for the new technically upgraded 09-3X Dynamic machine shall be 1200 hours of effective working hours or 24 months from date of commissioning, whichever is earlier, (except for tamping bank, for which this warranty will be 24 months or 2000 kms, whichever is earlier from the date of commissioning).
- 13. PENALTY AFTER COMMISSIONING AND UNDER WARRANTY:** The contractor should repair the Track Machines and replace the said defective part within 72 hours or earlier from the date of written request/ email/ WhatsApp by the competent authority, to avoid stabling of machine. Failing which, a penalty of Rs. 5,000/- per day will be imposed for the period of delay beyond this stipulated period, subject to a maximum amount of penalty of Rs. 2,00,000/- in one instance. Earnest Money, Security deposit and all other retention money as per SCC will be released only after satisfactory completion of warranty period on submission of No-Claim Certificate by the firm as per extant rules of railway as applicable time to time.
- 14. SAFETY OF STAFF:** The Agency is wholly responsible for the safety of its staff during up gradation of machine at agency workshop and during trial of machine at site. Railway will not be liable for any such claim whatsoever.
- 15. MAINTENANCE OF RECORDS:** The contractor shall maintain the daily progress register for keeping details of daily activities. The contractor shall compare it with standard/amended bar chart and shall submit weekly progress through email to the Railway officers. The contractor shall also maintain site order book for receiving instructions from railway staff.
- 16. RELEASED SPARES:** All released spares including engines, tamping unit, hydraulic pumps & motors etc. will be railway's property. The same shall be transported to Zonal Track Machine Depot/TKD and to be handed over to SSE/TMMD/TKD. Transportation charges shall be borne by the agency.
- 17.** During fitting & handling of spares by the contractor if any item got damaged due to the negligence on the part of agency or his personnel, it shall be replaced / rectified by the contractor free of cost.
- 18.** The tenderer has to quote the rate against the Schedule as at par or percentage above or below.
- 19.** Up-gradation work will be carried out under supervision of railway representative.
- 20.** Agency Service engineers will inspect the machine after interval of three months and will submit detail technical report regarding all the major assemblies during warranty period.

- 21.** The agency should be very careful and doubly ensure while submitting the bill/s that they have claimed the proper bill all the time. Payment Schedule will be as follows:

| SN. | Stage   | %   |
|-----|---|---|
|     | Final Inspection & Testing of all functions of track Machine by Railway Officer in OEM's premises | 90% of accepted rate for the item/machine |
| 2   | Commissioning of track machine after successful performance during trial blocks.                  | 10% of accepted rate for the item/machine |

**22. MANUALS AND DRAWINGS:**

22.1 Detailed operating manual, maintenance and service manual, user manual indicating capabilities of machine, shall be specifically prepared in English language and four hard copies & soft copies of these shall be supplied with each machine.

22.2 The agency shall also supply circuit diagrams in four hard and soft copies of electrical, hydraulic, pneumatic and electronic circuits used on the machine. Trouble shooting diagram/table shall also be supplied.

In addition, the agency shall provide dimensional drawings with material description of items like rubber seals, washers, springs, bushes, metallic pins etc. Main features such as type, rpm & discharge etc of items like hydraulic pumps, motors and such other bought out components /assemblies shall be furnished by the tenderer. These shall be specially prepared in English language and four copies of these shall be supplied with each machine.

**23. SPARE PARTS:**

23.1 The agency shall be responsible for the subsequent availability of spare parts to ensure trouble free service for the balance life of the machine (20 years). It is preferred that the spares shall be stored in India and will be available at short notice say maximum within a month.

23.2 For indigenous parts and brought out components and assemblies, the relevant technical details shall be supplied while offering the first machine for inspection.

**24. PRICE VARIATION:** Not applicable