



पश्चिम मध्य रेल

West Central Railway

No. W-HQ/W-4/Track-II/Policy/Circular/5

Date: 22.09.20 (11.06.2019)

CTE Circular No. 4 (Revised)

Sub: Allotment of Track Machines to Construction / RVNL / IRCON.

It has been observed that during recent deployments of track machines for construction/IRCON/RVNL projects, the same were **severely underutilized**, primarily because of poor site preparations like:

- | | |
|--|---|
| 1. Track parameters out of limits | 5. Inadequate ballast collection at site |
| 2. Inadequate ballasting at site | 6. Not ensuring removal of infringements as per SOD, etc. |
| 3. Delay in providing HSD for fuelling of machines | |
| 4. Ballast flowing over the rail heads | |

Track machines are costly assets and their idling is not acceptable; particularly when it is at the cost of maintenance tamping of open line sections. Therefore, henceforth, following procedure shall be followed by all Executive agencies and Divisions while demanding and providing track machines.

1. Initial Packing (First time) (except final tamping)

- (i) The Executing Agency (CE/C for Construction and CPM/ED/PD for RVNL & IRCON projects) will formally request for Tamping Machine to Sr.DEN/Co. of the division along with a Certificate (**Annexure-A**) that the track is ready for machine tamping and is fit for a speed of 50 kmph. This Certificate must be endorsed by Sectional ADEN certifying that he/she has personally inspected the track.
 - a) Following track tolerances (Peak values) are prescribed for guidance:

▪ Unevenness	:	20mm on 9m chord
▪ Twist	:	5mm/m
▪ Alignment	:	15mm on 9m chord

 For achieving above geometry, suitable small track machines such as off track tampers may be used.
 - b) Minimum clean ballast cushion of 250mm on main line for initial packing and 320mm for final packing and 150mm on yard lines for initial packing and 250mm for final packing with adequate ballast on shoulders and cribs must be ensured.
 - c) The above track tolerances are not safety/slow down tolerances but are only a prerequisite for deployment of tamping machines to obtain optimum utilisation.
 - d) Executing agency should ensure that proper recording of track parameters for curved portion of track is done by a trained person and **lift & slew values** are calculated in advance for design mode tamping. However, secondary assistance/guidance, if required, can be taken from sectional ADEN setup.
- (ii) On receipt of request from executing agencies to Sr.DEN/Co., **sectional Sr.DEN/DEN** will do the inspection of site to cross check the fitness of track for 50 kmph and shall ensure that all arrangements for optimum progress of machine are available at site/ in place.
Sectional Sr.DEN/DEN can get such inspection (fitness of track for 50 kmph) done from ADEN of the section also. **Report of the same by sectional Sr. DEN/DEN** shall be submitted to Sr.DEN/Co. by **giving certificates as per Annexure-A** as mentioned in Para (i).

This shall be done in 3 days maximum. Based on this report, Sr.DEN/Co. shall obtain **approval of CTE for deploying** the machine to the site for a particular number of days depending upon the length of track prepared by the executing agency.

- (iii) Since the track would have already made fit for 50kmph, it is presumed that **at least two rounds of manual packing (besides kutcha packing)** must have been done to this new track.
- (iv) Machine packing can be done in design/smoothing mode as decided by executing agency. Double insertion will be considered equivalent to two round of machine packing. Expected progress will be 5 km/day.

2. Final Packing (Last time)

- (i) The last round of Tamping Machine shall be provided in similar procedure just before CRS Inspection as indicated in Para 1 above with the following modification:
 - a) the Ballast Cushion shall be measured jointly (Executing Agency & Open Line) at least 03 days in advance of date on requisition of the machine by the Executing Agency (CE/C for Construction and CPM/ED for RVNL & IRCON projects) to Sr.DEN/Co. of the division
 - b) The Ballast Cushion shall be measured jointly at 04 locations/KM along with obligatory locations as per PCE Circular No. 23 (Copy of KM wise Ballast cushion survey to be enclosed)
 - c) It shall be certified as per Annexure B that the entire section has a **minimum ballast cushion of 320mm** before deployment of tamping machine for final round tamping.
 - d) The Cess Width shall also be measured along with the Ballast Cushion at all locations. At no place, it should be less than 100 cm.
- (ii) Last packing shall be done **only in Design mode**; expected progress will be 5 km/day. All required measurements (lifts & slews) must be done in advance for quality tamping.

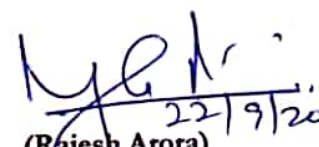
3. General

- (i) Executing agency should plan for ballasting, wherever required immediately, in the rear of machine packing. This will reduce time gap between machine packings as per Para (1) and (2) above.
- (ii) In case of turnout, full ballasting, levelling and welding shall be completed prior to deployment of machine. UNIMAT, for turn out tamping, will be spared only when adequate numbers of turnouts are ready for tamping.
- (iii) It shall be the responsibility of Executing agency to obtain optimal progress from machine. He shall ensure that the work is completed within the allotted days of machine. Stay of machine will not be extended.
- (iv) After opening of section for traffic after CRS Inspection, another round of Tamping along with consolidation by DTS may be done on need basis.
- (v) The vertical and lateral clearance for OHE, Signal post and any other structure should be checked and adjusted before entry of any track machine.
- (vi) Minimum distance between the machines when working in convoy shall be 50m to avoid collision between machines and danger to life of P. Way staff working with machine.

Thereafter, Track Machines should be spared to Construction / RVNL / IRCON accordingly, for a fixed Duration only, as decided by CTE in consultation/recommendation of Sr.DEN/Co. of division.

This may be followed with immediate effect and supersedes all previous versions of CTE Circular No. 4.

DA: Annexure-A & B.


 22/9/20
 (Rajesh Arora)
 Chief Track Engineer

Annexure A

(Format for Initial Deployment of Tamping Machine)

No. _____

Date: _____

CERTIFICATE**TAMPING MACHINE (except for Final Round Tamping)**

1. It is certified jointly that track between Station _____ to Station _____ (Km _____ to Km _____) with length _____ km has been laid, linked and personally inspected by me and is considered fit for a speed of 50 kmph.
2. It is further certified jointly that track measurements have been taken, the same are conforming to the parameters as specified in Para (i) of CTE Circular No. 4 (Revised).
3. This track is on Curve between Km _____ to Km _____ (length _____ km) and its versine measurements are fit for speed of 50kmph.
4. It is certified jointly that ballast cushion has been checked and measured at 04 locations/km along with obligatory locations as per PCE Circular No. 23 (Copy of KM wise ballast cushion survey enclosed) and Minimum Ballast Cushion is _____ mm.
5. It is certified that 02 rounds of manual packing have been done (besides initial kutcha packing).

In view of the above, It is recommended jointly to provide DUOMATIC / UNIMAT for tamping of this _____ km of track length track for _____ days from date _____ to _____.

Sectional ADEN**GM/GGM IRCON/RVNL**

Verified at site that the information given above is correct.

**Project Head of Executing Agency
(CPM/ED/PD for RVNL/IRCON)
(not by anybody else)**

Verified at site and found to be ok.

Sectional Sr. DEN/DEN**Sr. DEN/Coordination**

(Format for Final Deployment of Tamping Machine Certificate)

No. _____

Date: _____

CERTIFICATE**TAMPING MACHINE (For Final Round Tamping Machine)**

1. It is certified jointly that track between Station _____ to Station _____ (Km _____ to Km _____) with length _____ km has been laid, linked and personally inspected by me and that ballast cushion has been checked and measured at 04 locations/km along with obligatory locations as per PCE Circular No. 23 (Copy of KM wise ballast cushion survey enclosed) and Minimum Ballast Cushion is 320 mm.
2. Before this, Tamping Machine has been deployed in this track length/ section _____ times for initial packing with single/double round (tick whichever applicable).

In view of the above, It is recommended jointly to provide DUOMATIC / UNIMAT for tamping of this _____ km of track length track for _____ days from date _____ to _____.

Sectional ADEN

GM/GGM IRCON/RVNL

Verified at site that the information given above is correct.

Project Head of Executing Agency
(CPM/ED/PD for RVNL/IRCON)
(not by anybody else)

Verified at site and found to be ok.

Sectional Sr. DEN/DEN

Sr. DEN/Coordination