

**भारत सरकार Government of India**  
**रेल मंत्रालय Ministry of Railways**  
**(रेलवे बोर्ड Railway Board)**

No. 2025/CEDO/SR/01 (1)/12-16 Coach-VM-130 kmph

New Delhi, dated 19.03.2025

**The Director General,  
Research Designs & Standards,  
Manak Nagar,  
Lucknow-226011.**

**Sub:** Future Improvement of 12/16 Coach formation Vande Metro Coaches, as per RCF layout Drawing Nos. TS/VM/DTC-9-0-001 alt-f for Driving Trailer Coach (VMDTC), TS/VM/MC-9-0-001 alt-f for Motor Coach (VMMC), TS/VM/MC2-9-0-001 alt-f for Motor Coach (VMMC2), TS/VM/MC3-9-0-001 alt-f for Motor Coach (VMMC3), TS/VM/TC-9-0-001 alt-f for Trailer Coach (VMTC) & TS/VM/NDYC-9-0-001 alt-f for Non Driving Trailer Coach (VMNDTC)

**Ref:** (i) Railway Board's letter no. 2025/CEDO/SR/01/12-16 Coach-VM-130 kmph, dated 19.03.2025

(ii) CCRS office letter no. Q.12011/06/2024-25-T.W, dated 16.01.2025

(iii) RDSO's letter no. TS/SC/Trial, dated 19.11.24 & dated 22.01.25

(iv) RDSO's Final Speed Certificate (FSC) no. TS/SC/Trial, dated 22.07.24 and its amendment no. 1 dated 19.11.2024


With reference to RDSO above application, sent through the Chief Commissioner of Railway Safety, Lucknow; sanction of the Ministry of Railways, Railway Board has been communicated for introduction of 12/16 Coach formation Vande Metro Coaches, as per RCF layout Drawing Nos. TS/VM/DTC-9-0-001 alt-f for Driving Trailer Coach (VMDTC), TS/VM/MC-9-0-001 alt-f for Motor Coach (VMMC), TS/VM/MC2-9-0-001 alt-f for Motor Coach (VMMC2), TS/VM/MC3-9-0-001 alt-f for Motor Coach (VMMC3), TS/VM/TC-9-0-001 alt-f for Trailer Coach (VMTC) & TS/VM/NDYC-9-0-001 alt-f for Non Driving Trailer Coach (VMNDTC) up to a maximum speed of 130 kmph over Indian Railways, by Zonal Railways, on track maintained as Para No. 522 of IRPWM, June-2020 vide RB's letter under reference (i) above. CCRS, while recommending for introduction of this Rolling Stock to Railway Board has suggested following measures for future improvement of the above rolling stock:

- i. During trial, door obstruction test was conducted and it was observed that obstruction of 30 mm was detected. System should be recalibrated for detection of 10 mm obstruction at top, middle & bottom of the door with "anti drag feature" in door mechanism for all future designs of VB metro coaches.
- ii. Due to provision of inside footstep, there is gap between coach floor and closed condition of door. This may lead to entrapment of passenger foot and cause injury during door

operation while boarding/deboarding. Floor without any inside steps may be explored for future design.

- iii. The design of Vande Metro coaches should have crashworthiness features and shall conform to EN 15227.
- iv. The cock provided for isolating the bogie are located in the under frame. As it may be difficult for the motorman to isolate the bogie especially during night. Therefore, provision shall be made for isolating the bogie from respective coach itself as provided in other metro coaches.
- v. Standard Nut-Bolt and washer to relevant IS specifications shall be provided in all under slung component.

RDSO is requested to examine above and take necessary action. The compliance of the same should also be submitted to CCRS.

  
19/03/25  
(किशन रावत)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड

[Rly No. 030-47598, MTNL No. 011-23047598]


e-mail address: dceg@rb.railnet.gov.in

No. 2025/CEDO/SR/01 (1)/12-16 Coach-VM-130 kmph

New Delhi, dated 19.03.2025

Copy forwarded for information to:

1. The Chief Commissioner of Railway Safety, 3<sup>rd</sup> Floor, Traffic Account Building, State Entry Road, New Delhi-110055, w.r.t. his endorsement No. Q.12011/06/2024-25-T.W, dated 16.01.2025
2. The Commissioner of Railway Safety, All Circles
3. Executive Director (Standards) Motive Power, RDSO, Lucknow
4. Executive Director (Standards) Track-I, RDSO, Lucknow
5. EDME/Chg, Railway Board

  
19/03/25  
(किशन रावत)

निदेशक सिविल इंजी.(जी)/रेलवे बोर्ड