

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

No.2011/Track-III/TK/4

New Delhi, dt. 12.05.2016

Chief Engineers/Track Machine,
Northern Railway,
West Central Railway.

&


ED(TMM)/RDSO

Sub: Adoption of width of deck slab for working of Ballast Cleaning Machines (BCMs) through ballasted deck bridges.

Ref: ED/B&S/RDSO's letter no. EDBS/Proj Committee dated 23.03.16 (Copy enclosed).


In order to decide the width of slab (Distance between parapet to parapet) at the through concrete type deck bridge for working of Ballast Cleaning Machines (BCMs), AM(CE) desires field trials of BCM machines. The trial block may be arranged by using 1900 mm cutter bar on one of the latest model BCM (RM-80-92-U) machine working in straight portion with marking and making adequate infringements (e.g. soft board) similar to the parapets at 2250 mm on either side from track center to measure the opening/closing space requirement for BCM with smaller cutter bar.

It is requested to take necessary action in this matter and advise to Railway Board's office so that team from RDSO & Rly Board may attend the trial.


T.K. Pandey
Director Track(MC)
Railway Board

DA: as above

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हप्ता जारी करें
नीलम
16/5/16


17/05/16

टेली फैक्स: 0522-2450398
ई-मेल: edbsrdso@gmail.com
Telefax: 0522-2450398
E-mail: edbsrdso@gmail.com



भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प एवं मानक संस्थान
लखनऊ - 226 011

Government of India-Ministry of Railways
Research Designs & Standards Organisation
Lucknow- 226 011

दिनांक 23.03.2016

सं EDBS/Proj Committee

EDCE(B & S),
Railway Board,
New Delhi.

विषय: Adoption of width of deck slab for working of BCM through ballasted deck bridges.

सन्दर्भ: Your letter nos 2014/CE-III/BR/BSC/82/Seminar Dated 17.02.2016 and 17.03.2016

In above subject and reference, the following is submitted:

1. If the inside to inside deck width is adopted as 5.0 m, then the overall width of slab required will be 5.4 m and keeping a gap of 100-200 mm between girders will mean the center to center of tracks will have to be 5.5 m/5.6 m. This will necessitate very small reverse curves on approach of bridges. Laying and maintaining such minor curves is quite problematic in field and hence not desirable.
2. As pointed out in your letter itself, the cost repercussions of increase in width from 4.5 m to 5.0 m is not going to be substantial if seen as a proportion to the total cost of the project. But as given in para 5.0 of the committee report, this is not in line with the international practices for providing slab widths. Using a different cutter bar for ballasted deck bridges is a very feasible option which has to be followed for the existing bridges and can be followed for new bridges as well while retaining 4.5m as deck width. This is what other railways might also be doing on their systems and thus saving money in bridges.
3. However, in view of the reluctance on Indian Railways to go in for reduced width cutter bar, the committee has already recommended that slab width may be increased in middle of the span, where the work can be closed (Para 8.0 (ii) of committee report). RDSO does not agree with the contention that providing and maintaining such increased widths is difficult or undesirable.
4. The issue related to SOD has been taken care of vide A & C slip no.10.
5. Lifting hooks are simple devices which can be easily cut after launching work is over. Alternate methods will involve making holes in slab, which will be required to be properly plugged after launching work is over. RDSO is of the view that providing and cutting the lifting hooks is easier as compared to the other methods of lifting slabs/ girders.

In view of above, RDSO stands by its original recommendations. This is submitted for further action at your end please.

संलग्न: Nil.

Please discuss.

EDCE/B&S

Sd/-/A-4.16

6 APR 2016

A K Dadarya
ED/B & S/ RDSO

23/3/16