

## भारत सरकार GOVERNMENT OF INDIA रेल मंत्रालय MINISTRY OF RAILWAYS (रेलवे बोर्ड RAILWAY BOARD)

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2017/16/CE-III/BR/Girder Inspection

New Delhi, dated 16.09.2022

Chief Administrative Officer (Con.), All Indian Railways.

Principal Executive Director/Infra-II, RDSO, Manak Nagar, Lucknow.

Sub:- Fabrication of Steel Bridge Girders.

Ref:- Board's letters of even number dated 17.05.2017, 25.05.2017, 26.05.2017, 14.05.2019 & 24.07.2019.

(ii) Indian Railway Bridge Manual-1998-Para No. 617.

(iii) RDSO's Guidelines on Fabrication of Steel Girders for construction/field Engineers-BS-110 (R) issued in March, 2016.

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Necessary instructions have already been issued from time to time on the captioned subject vide Board's letters under reference at (i) above.

Further, vide Para No. 617 of IRBM 1918 regarding welding of girders stipulates that "Site Welding is generally prohibited. However, it can be permitted by the CBE where unavoidable and is confined to connections having low stresses, secondary members, bracings etc. The suitability of parent metal to take welding, should, however, be tested first".

RDSO have also issued guidelines on steel girders for constructions/field engineers vide Report No. BS-110(R) issued in March, 2016 with Addendum & Corrigendum of July, 2017 stating that the fabrication of steel girder Bridges is governed by the provisions of:-

(i) Indian Railway Standard Specification for Fabrication of erection of steel girder Bridges and locomotive turn- tables (B 1-2001).

(ii) Indian Railway Standard Code of Practices for metal arc welding for structural steel Bridges carrying Rail-Cum-Road or pedestrian traffic (Adopted 1972 revised 2001).

For providing pathways and manrefuge on existing girder Bridges, structural steel members are being welded to existing Bridge girder elements. It is re-iterated that as per the provisions of Para No. 617 of IRBM-1998, site welding generally avoided, if necessary not with primary members. The above instructions must be followed without any exception. Use of weld/bolting/stitching free arrangements as advised vide RDSO's Report No. BS 110(R) may also be considered suitably.

This has been issued with the approval of PED/Bridge/RB.

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