



RW/NH-35072/01/2010-S&R(B)PT-2
Government of India
Ministry of Road Transport & Highways
S&R (Bridge)
 Transport Bhawan, 1, Parliament Street, New Delhi- 110001

Dated: 27.10.2025

To,

1. The Chief Secretaries of all the State Governments/ UTs
2. The Principal Secretaries/ Secretaries of all States/ UTs Public Works Department/ Road Construction Department/ Highways Department (dealing with National Highways and other centrally sponsored schemes).
3. The Chairman, National Highways Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi-110 075.
4. The Managing Director, NHIDCL, Tower A, World Trade Centre, Naurojni Nagar Market, Block G, Nauroji Nagar, Safdarjung Enclave New Delhi-110029.
5. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi- 110 010.
6. The Chairman & CEO, Railway Board, Ministry of Railways, Rail Bhawan, New Delhi-110001
7. All Engineers-in-Chief and Chief Engineers of Public Works Department of States/ UTs/ Road Construction Department/ Highways Departments (dealing with National Highways and other centrally sponsored schemes).
8. The Secretary General, Indian Roads Congress
9. The Director, IAHE, NOIDA, UP
10. All Project Zone Chief Engineers
11. All CE-ROs, ROs and ELOs of the Ministry.
12. The General Secretary, Hydraulic Trailer Owners Association, Mumbai.

Subject: Online Permission for Movement of Single Indivisible Unit ODCs/OWCs Consignment on Modular Hydraulic Trailers (HT-1 to HT-13) on National Highways in the Country -Regarding...

Sir,

Ministry is granting online permission for transportation of single unit indivisible ODCs/OWCs consignment on Modular Hydraulic Trailers [MHTs] combinations (HT-1 to HT-13) on National Highways through OWC/ODC portal (www.morth-owc.nic.in) of the Ministry.

2. Ministry has carried out study in 2012 for bridges having span length ranging from 5m to 50m and simply supported type covering various cross section with 2 lane, 4 lane, 6 lane and 8 lane width, based on which aforesaid permission is granted for OWC/ODC vehicles.

The recommendations of the study are not applicable for the bridges designed based on Limit State principles specified in IRC 6 and IRC 112.

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Ministry has issued guidelines vide circulars dated 17.01.2024 and 12.06.2024 on the subject mentioned above for grant of permission for movement of OWCs/ODCs on National Highways.

Study has been further carried out by the experts on bridges designed with Special Vehicle (SV) loading and furnished recommendations for grant of permission for MHTs. Further, it has been decided that route approvals will be granted within the time frame of 7 days. Accordingly, in supersession with aforesaid circulars dated 17.01.2024 and 12.06.2024, guidelines are hereby issued for ensuring the safe and uninterrupted movement of all types of vehicles on National Highways and preventing damage to any component of road infrastructure.

3. Based on the findings of study, simplified charts (C-1 to C-13 and C-SV-1) have been prepared for different combinations of modular hydraulic trailers which are enclosed as Annexure-I. The said charts shall form the basis for permitting movement of multi axle modular hydraulic trailers carrying OWC/ODC throughout the territory of India considering that the load per axle row shall not exceed 18 Tonnes. Different combinations of multi axle modular hydraulic trailers are listed in Table 1:

Table 1-Load Composition of Type HT1 to HT13

Chart No.	Type Of Combination	Total No. of Axles in MH TRAILER UNIT	Gross Vehicle Weight (without Puller Tractor) (MT}
C1	HT1	4	72
C2	HT2	6	108
C3	HT3	8	144
C4	HT4	10	180
C5	HT5	12	216
C6	HT6	14	252
C7	HT7	16	288
C8	HT8	18	324
C9	HT9	20	360
C10	HT10 *	8+8	288
C11	HT11 *	10+10	360
C12	HT12 **	14+14	504
C13	HT13 **	16+16	576

MHT combination type HT 10 to HT 13 involves attachment, in such combinations, the weight of attachment to be considered as part of the gross vehicle weight. The attachment weight is to be declared in the application.

(*) Units with Turn Table Bolster Arrangement

(**) Units with Girder Arrangement

The puller tractor is a 3 axle tractor along with ballast weight for traction purpose and considered to have a gross vehicle weight of 25T

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4. In order to select the appropriate chart applicable to a particular type of bridge structure, it is important to identify the characteristics of the bridge (i.e. Span Length, Structure Type, Support Condition etc.). Before granting permission for passage of OWC/ODC, it is necessary to ensure that these parameters are available with the Ministry and overall condition of the bridge is being monitored by the concerned Regional Officer of MoRT&H/NHAI/NHIDCL.

5. *Movement of MHTs based on recommendations of study:*

5.1 Bridges not designed with SV Loading:

Based on the above referred charts (C-1 to C-13), a concise recommendation of study in the form of summary is presented in Table 2A below. The tables presents the equivalency of IRC loads to different HT Loads with respect to structure type.

Table 2A: Simply Supported Bridges of Spans from 5.0 m to 50.0 m not designed for IRC SV loading

TYPE OF BRIDGE STRUCTURE		CATEGORY OF STRUCTURE TYPES		
		1	2	3
TYPE OF HT LOADING		✓ Culverts ✓ Masonry Arch Bridges ✓ RCC Solid / Voided Slab Bridges ✓ RCC Precast / Cast-in-situ Beam & Slab Bridges (with or without intermediate cross girder)	✓ PSC Precast / Cast-in-situ Beam & Slab Bridges (With or Without Int. cross girder) ✓ PSC Cast-in-situ Box Girders type Bridges	✓ PSC Precast Segmental Box Girder type Bridges with WET joints. ✓ Composite Decks with steel beams and concrete slab bridges (with or without intermediate cross girder)
HT LOADING	HT1, HT2, HT3	PASS	PASS	PASS
	HT4 TO HT9	PASS	✓ For HT4 : PASS ✓ For HT5 to HT9 : Pass with Restricted GVW In Some Cases - Refer Charts No. C-4 to C-9 for Details	✓ Pass with Restricted GVW In Some Cases - Refer Charts C-4 to C-9 for Details
	HT10, HT11, HT12 & HT13	PASS	✓ Pass with Restricted GVW In Some Cases - Refer Charts C-10 to C-13 for Details	✓ Pass with Restricted GVW In Some Cases - Refer Charts C-10 to C-13 for Details

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As is evident from the enclosed charts and above summary table, free movement for MHT combination type HT1, HT2 & HT3 may be permitted for all specified types of bridges and for all specified span lengths. But for MHT combination type HT4 to HT13, movement shall be permitted up to Gross Vehicle Weight (GVW) as per the respective chart or reduced GVW reflected in specific cell of the chart for different carriageway widths and structural arrangements, if falling enroute.

5.2 Bridges designed with SV loading:

Study has further been carried out by the experts in 2024 for bridges designed with SV loading, and the recommendations of study has been mentioned in Table 2B below and in enclosed Chart No.C-SV-1. The table presents the equivalency of IRC loads to different HT Loads with respect to structure type.

Table 2B: All Types of Bridges Designed for IRC SV Loading

TYPE OF BRIDGE STRUCTURE		CATEGORY OF BRIDGE STRUCTURES	
		1	2
TYPE OF HT LOADING		ALL TYPES OF SIMPLY SUPPORTED BRIDGES	ALL BRIDGES OTHER THAN SIMPLY SUPPORTED TYPE
HT LOADING	HT1 TO HT11	PASS	PASS
	HT12 & HT13	PASS	NOT PERMITTED

As may be seen from aforesaid Table 2B and the chart for SV loading, movement of MHTs of type HT-1 to HT-13 with OWC/ODC is permissible on all Bridges of simply supported type designed with SV loading and are in good condition without showing any sign of distress. The transportation of OWC/ODC is permissible on MHTs of type HT-1 to HT-11 on Bridges other than simply supported type designed with SV loading and are in good condition without showing any sign of distress. However, movement of HT12 and HT13 vehicles is not allowed on all type of Bridges other than simply supported type designed with SV loading.

5.3 Permission will not granted for movement of OWC/ODC vehicles on bridges designed as per Limit State Method and not as per SV loading of IRC 6.

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5.4 For Longer Spans and for Type of Structures not covered in the above referred charts, specific studies need to be carried out on identical system, which shall form the basis for clearance for movement of OWC/ ODC and also for future reference.

6. The distress bridges on National Highways have to be identified marked and uploaded on the portal. The distressed bridges on National Highways will be coded as **Orange** (moderately severe) and **Red** (highly severe). Some of the bridges in the above mentioned categories are already uploaded on the ODC/OWC portal. The same shall be updated and particularly colour coding shall be done for distressed bridges.

7. Permission will not be granted for movement of different combinations of Modular Hydraulic Trailers on the types of bridges as shown below:

Sl. No.	Type of Bridge	Type of Combinations which are not allowed
1	Simply Supported Bridges covered in aforesaid Table 2A having individual span length > 50 m (not designed for SV loading of IRC:6)	HT1 to HT13
2	All types other than simply supported bridges of any span length not designed for SV loading of IRC:6	HT1 to HT13
3	All Bridges other than simply supported type designed for SV loading of IRC:6 covered in aforesaid Table 2B	HT12, HT13
4	Distressed bridges coded as Red in the portal (highly severe)	HT1 to HT13
5	Distressed bridges coded as Orange in the portal (moderately severe)	HT1 to HT13
6	Bridges rated under capacity for carrying loading as per IRC:6 or where load restrictions have been already imposed.	HT1 to HT13
7.	Bridges designed as per Limit State Method and not as per SV Loading of IRC 6	HT1 to HT13

8. For grant of permission to MHT carrying ODC/OWC consignment leading to overall height more than 4.75 meter, the applicant have to select the route on aforesaid portal which do not have overhead structures, RoBs, RuBs, underpasses causing vertical constraint to the subject movement or the permission will be excluding the RUBs/FOBs/Overpasses for which the applicant shall make diversions for movement of ODC/OWC. For this purpose, ROs of the MoRT&H/NHAI/NHIDCL will upload the details of overhead structures with maximum physical vertical clearance from road level available on OWC/ODC portal of the Ministry.

9. Procedure for submission of application and grant of online permission for movement of OWC/ODC:

9.1 The consignor, consignee and the transporter will register themselves once on the ODCs/OWCs portal by filling the prescribed registration format as per Annexure-II enclosed herewith. Registered email-id will act as the user-id for login on ODCs/OWCs portal for all future transactions.

9.2 The consignor/consignee already registered on the portal will upload the cargo dimensions, origin and destination details on the Ministry's ODCs/OWCs web portal in the format as per Annexure-III. Annexure-V include a declaration by competent person from Consignor/Consignee as per para A of annexure V stating the details mentioned in Annexure-III are true and correct. The consignor/consignee shall also nominate the registered transporter on the ODC Portal for the subject movement.

On successful online submission of cargo and registered transporter details as above, an application reference number will be generated by the system and a system generated email will be triggered to registered applicant consignor, consignee and the nominated transporter email id confirming the same.

9.3 The nominated transporter on acceptance of the aforesaid nomination will upload the details of Modular Hydraulic Trailer, Puller Tractor, Driver and other details on the ODC web portal as per Annexure-IV. Some important details in this regard are as mentioned below:

- i) Proposed route to be taken for subject movement with minimum one station at each interval of 100 km or part thereof for the total journey shall be indicated.
- ii) Portal will permit change of Puller Tractor registration number and/or MHT registration number for identical HT type prior to payment of fee.
- iii) Portal will permit replacement of eligible driver prior to payment of fee or even during the journey, subject to verification from SARATHI portal.
- iv) ODC portal will verify & capture the details and validity of documents of Puller Tractor, Modular Hydraulic Trailer and Driver from VAHAN and SARATHI portal directly.
- v) ODC Portal will not permit deployment of Puller Tractor, MHT and Driver if any of the documents is noticed invalid at the time of online payment of prescribed ODC fee.

9.4 Online self-declaration shall be made by applicant transporter as per para B and C of Annexure-V.

9.5 The conditions of movement of OWCs/ODCs are at Annexure-VI.

9.6 The Portal shall make available the applicant transporter to view available route options from origin to destination. In case a transporter plot a route where there is any bridge falling under different type of bridges as shown in para-7 above for the corresponding MHT combination, portal shall not permit to apply for such route.

Further, permission will not be granted in those vehicles in which Vehicle Location Tracking Device (VLTD) device compliance to AIS 140 is not fitted. While applying for permission, the applicant shall select whether VLTD device is fitted in vehicle or not.

10. In case of ODCs/OWCs classified as HT-1 to HT-3, portal will generate demand for fee to be paid by the transporter instantaneously after the feasible route is finally selected & accepted by the transporter. The portal will generate the single trip movement permission letter for selected feasible route on real time basis against online payment of the requisite fee by the applicant transporter. System generated email alongwith copy of the permission so granted shall be automatically triggered to the respective RO(s) of MoRT&H/NHAI/NHIDCL and also uploaded on Ministry's website on real time basis.

11. In case of ODCs/OWCs classified as HT-4 to HT-13, system generated email of the application exhibiting consignment details, HT type and requested route upto maximum three alternate routes, if selected by the applicant will be triggered to concerned RO(s) of

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the MoRT&H/NHAI/NHIDCL on real time basis. It will be the responsibility of concerned RO(s) of the MoRT&H/NHAI/NHIDCL to examine and, if required, review and update the list of type of bridges mentioned in the para-7 above on the ODC/OWC portal as per prevailing field conditions within a maximum period of 7 days from date of application.

In case of no review update by the field units on the ODC portal, a system generated reminder email will be sent to concerned RO(s) of the MoRT&H/NHAI/NHIDCL on 3rd day following the date on which initial email was sent. Another system generated reminder email will be sent to concerned RO(s) of the MoRT&H/NHAI/NHIDCL and concerned ADG of MoRTH/Member of NHAI/Director Technical of NHIDCL on 5th day following the date on which initial email was sent. In case the aforesaid selected route or any route from alternate routes is objected by any of the RO due to availability of bridges under para 7 above, the applicant have to review & decide route for transportation from alternate safer routes, on which type of bridges as per aforesaid para 7 of this circular are not available, and will fill the milestones as per para 9.3 above for final route for which permission will be generated by the portal. In case of no review /update by concerned RO(s) of the MoRT&H/NHAI/NHIDCL within a maximum period of 7 days from the date of application, system will consider the opted route(s) as feasible and the portal will permit the payment of fee by the transporter. Once the fee is paid online by the applicant transporter, the portal will grant & generate the permission letter for feasible approved route. The remaining alternative routes applied, if any will not be available thereafter for payment of fee, even if approved. A copy of such system generated permission letter will be auto emailed to concerned RO(s) of MoRT&H/NHAI/NHIDCL and uploaded on Ministry's website.

12. The permission shall be granted subject to the conditions mentioned in Annexure-VI.

12.1 In case fee is not deposited within 7 days from the date of notification of fee on the portal as per aforesaid para no. 10 & 11, the system based approval shall stand withdrawn and the process for grant of permission will be repeated as per para 10 and 11 above, if the applicant transporter intends to re-apply against the time lapsed application. Fee demand will be re-generated post system based feasibility clearance by the ODC portal and thereafter the permission shall be granted against online deposit of the fee.

12.2 In case, any bridge data is updated by RO(s) of the MoRT&H/NHAI/NHIDCL falling under para 7 of this circular on the selected route, the permission will not be granted for such route and the applicant will be informed accordingly by system generated e-mail through the ODC portal. Such objections may also be viewed by the applicant transporter on the ODC portal through his user-id.

13. ODCs/OWCs fee rate per 50 km or part thereof of total trip journey on National Highways (in Rs.) for categories of HT type while carrying ODCs/OWCs with GCW including Puller weight falling under the permissible limits:

Type of loaded HT combination carrying ODC/OWC	Rate per 50 km or part thereof of total trip journey on National Highways (in Rs.)
HT -1 to HT-3	1200
HT-4 to HT-6	2400
HT-7 to HT-9	3600
HT-10 to HT-13	4800

14. All ROs of MoRT&H/NHAI/NHIDCL are authorised to verify all details/documents submitted by the applicant at any time during movement of ODCs/OWCs and will invariably submit an online report thereto in such case on the ODC portal itself against the subject permission. The permission is granted after examining the position of bridges on National Highways by concerned Regional Officers. Fairness of permission may be verified online on the Ministry's website or ODC portal. Accordingly, no additional document shall be sought by the authority for indemnification from the representatives of consignee, consigner or transporter during movement of ODC/OWC vehicles.

In case of any violation/deficiency, ROs of the MoRT&H/NHAI/NHIDCL will act as under:

14.1 In case, axle weight for any axle row is noticed higher than 18.0 ton or gross vehicle weight (GVW) is detected more than Registered Laden Weight (RLW) capacity of the Modular

Hydraulic Trailer combination or in case, the physical overall dimensions of the loaded MHT combination is noticed much higher than the declared dimensions appearing in the permission letter, the onward movement of vehicle will be put on hold for a period of 7 days and a fine equivalent to twenty times of the prescribed fee will be imposed and recovered from the applicant. The ODC/OWC consignment will be allowed to move onwards but transporter will make detour of all bridges and structures irrespective of their condition/status. The transporter will be barred on ODC portal for a minimum period of one year from such date of detection of violation.

15. The applicant shall ensure that the journey commences within 7 days from the date permission is granted. Otherwise the applicant is required to notify its revised extended journey commencement date on the ODC portal prior to expiry of 7 days. This notification will be intimated to Concerned RO(s) of MoRT&H/NHAI/NHIDCL through the portal automatically. RO will review and update the list of type of bridges mentioned in the para-7 above on the ODC/OWC portal within 7 days period from the date of aforesaid notification. In case, there is no change in the status of bridges on the selected route during the extended period with reference to para 7 of this circular, instantaneous extension confirmation will be generated through the portal on the submission of physical journey commencement date by the transporter under intimation to the concerned RO(s) of MoRT&H/NHAI/NHIDCL through system generated email and uploaded on Ministry's website. In case there is a change in the status of bridges on the selected route with reference to para 7 of this circular during the extended period applied, the permission will stand cancelled and applicant will be informed accordingly by system generated e-mail through the ODC portal. Applicant transporter may apply for refund of ODC fee deposited in such case of cancellation of permission during the extended period. In such case, applicant transporter has to opt and apply for alternative feasible route. The applicant transporter has to declare closure of trip once the trip is completed.

16. NIC will make changes in OWC/ODC portal of the Ministry as per guidelines issued in this circular within two weeks time from the date of issue of this circular.

To ensure that there is no movement of OWC consignment on bridges in violation of para 7 of this circular, *RO(s) of the MoRT&H/NHAI/NHIDCL shall review & update the list of aforesaid bridges under para 7 of this circular and overhead structures as per para 8 of this circular on ODC portal of the Ministry on monthly basis.* Accordingly, a system generated reminder e-mail and message will be sent to ROs on the last day of the month to update the list & details of the aforesaid bridges/ overhead structures identified during the month by 7th day of the following month.

17. ROs of the MoRT&H/NHAI/NHIDCL will update details of Bridges as per para 7 and overhead structures as per para 8 of this circular on OWC/ODC portal within one Month from the date of issue of this circular. In case no bridges are uploaded on the ODCs / OWCs portal within one month from the date of issue of this circular, it would be presumed that bridges of such types as mentioned in para-7 above and overhead structures under para 8 above are Nil in the jurisdiction of the concerned RO or the same were as earlier updated in the portal. In the event of any untoward incident on account of not identifying / not uploading of such bridges on the ODCs / OWCs portal, the onus for such incident would lie on the concerned jurisdictional RO.

18. The contents of this circular may please be brought to the notice of all the concerned in your organization for strict implementation. This circular shall be effective after one months from the date of its issuance.

19. This issues with the approval of the competent authority.

Encl:

- i. Annexure-I (Chart C-1 to Chart C-13 & Chart no. SV-1)
- ii. Annexure-II ((Consignor, Consignee & Transporter registration format)
- iii. Annexure-III (Cargo details)
- iv. Annexure-IV (Details of MHT and Drivers)
- v. Annexure-V (Online self declaration)
- vi. Annexure-VI (Conditions of movement)

Yours faithfully,



(Jitendra Kumar)
SE(S&R) Bridges

For Director General (RD) & Special Secretary

Copy to:

1. All the Technical Officers in the Ministry of Road Transport & Highways
2. All the Joint Secretaries in the Ministry of Road Transport & Highways
3. Technical circular file of S&R (P&B) Section
4. NIC-for uploading on Ministry's website under "What's new"

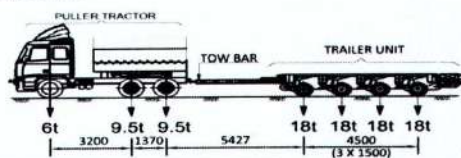
Copy for kind information to:

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2. PS to Hon'ble MOS (RT&H)
3. Sr. PPS to Secretary (RT&H)
4. Sr. PPS to DG (RD) & SS
5. Sr. PPS/PPS to Addl. Secretary (Transport)/Addl. Secretary (H & LA)
6. Sr. PPS/ PPS to AS&FA
7. Sr. PPS/ PPS to all ADGs
8. Sr. PPS/ PPS to JS (EAP) / JS (Logistics)

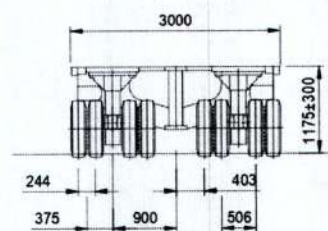
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CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR :
HT-1 LOADING (WITH 4 AXLE TRAILER UNITS)

CHART NO. C-1



Span	C/Way	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5	TOTAL GVW INCLUDING PULLER TRACTOR=97 t
1. Masonry Arch bridges							
8 m				NOT APPLICABLE			
10 m				NOT APPLICABLE			
18 m				NOT APPLICABLE			
2. RCC Solid/Voided slab bridges							
8 m							
10 m							
18 m							
20 m							
3. RCC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder							
10 m							
18 m							
20 m							
25 m							
4. RCC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder							
10 m							
18 m							
20 m							
25 m							
5. PSC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
6. PSC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
7. PSC Cast In Situ Box Girders type bridges							
30 m							
35 m							
40 m							
45 m							
50 m							
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint							
30 m				NOT APPLICABLE			
35 m				NOT APPLICABLE			
40 m				NOT APPLICABLE			
45 m				NOT APPLICABLE			
50 m				NOT APPLICABLE			
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF
HYDRAULIC TRAILER UNITS

Legend:

Safe to carry the specified load

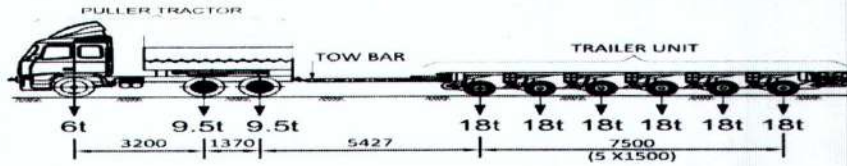
Safe to carry marked reduced GVW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

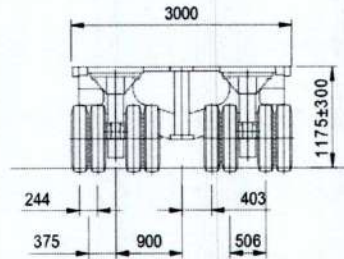
NOTES :

- THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- THE OWC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW \cdot 25) / 4$
Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)
- THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

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Span	CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5	TOTAL GVW INCLUDING PULLER TRACTOR= 133 t
1. Masonry Arch bridges							
5 m				NOT APPLICABLE			
10 m				NOT APPLICABLE			
15 m				NOT APPLICABLE			
2. RCC Solid/Voided slab bridges							
5 m							
10 m							
15 m							
20 m							
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder							
10 m							
15 m							
20 m							
25 m							
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder							
10 m							
15 m							
20 m							
25 m							
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
7. PSC Cast in Situ Box Girders type bridges							
30 m							
35 m							
40 m							
45 m							
50 m							
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint							
30 m				NOT APPLICABLE			
35 m				NOT APPLICABLE			
40 m				NOT APPLICABLE			
45 m				NOT APPLICABLE			
50 m				NOT APPLICABLE			
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF
HYDRAULIC TRAILER UNITS

Legend:

- Safe to carry the specified load
- Safe to carry marked reduced GVW

- C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

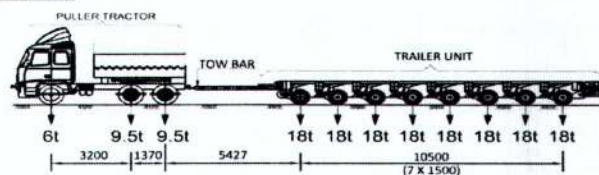
NOTES :

- THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- THE OVC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW - 25) / 5$
Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)
- THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

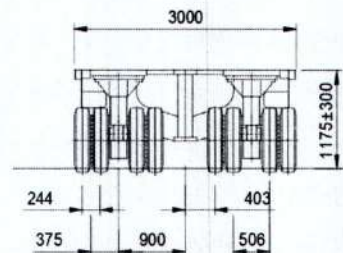
M12

CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR
HT-3 LOADING (WITH 8 AXLE TRAILER UNITS)

CHART NO. C-3



Span	CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5	TOTAL GVW INCLUDING PULLER TRACTOR= 169 t
1. Masonry Arch. bridges							
5 m				NOT APPLICABLE			
10 m				NOT APPLICABLE			
15 m				NOT APPLICABLE			
2. RCC Solid/Voided slab bridges							
5 m							
10 m							
15 m							
20 m							
3. RCC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder							
10 m							
15 m							
20 m							
25 m							
4. RCC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder							
10 m							
15 m							
20 m							
25 m							
5. PSC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
6. PSC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
7. PSC Cast In Situ Box Girders type bridges							
30 m							
35 m							
40 m							
45 m							
50 m							
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint							
30 m				NOT APPLICABLE			
35 m				NOT APPLICABLE			
40 m				NOT APPLICABLE			
45 m				NOT APPLICABLE			
50 m				NOT APPLICABLE			
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF
HYDRAULIC TRAILER UNITS

Legend:

Safe to carry the specified load

Safe to carry marked reduced GVW

C'WAY TYPE 1: 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY

C'WAY TYPE 2: 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY

C'WAY TYPE 3: 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR

2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

C'WAY TYPE 4: 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

C'WAY TYPE 5: 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES:

1 THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.

2 THE OVC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.

3 THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY

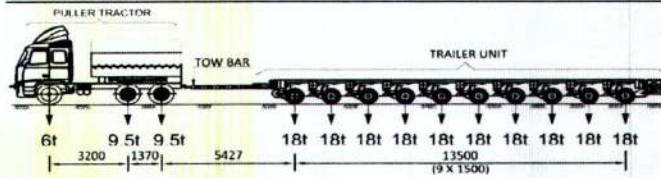
4 WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA: $RAL = (RGVW - 25) / 8$

Where: RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)

5 THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES

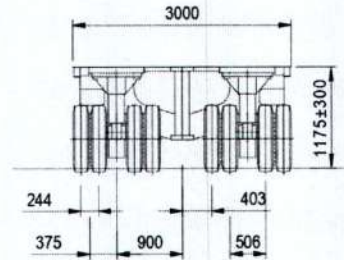
6 IN CASE OF STRUCTURES MARKED TO CARRY ROWW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

Man



Span	CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonry Arch bridges						
6 m						NOT APPLICABLE
10 m						NOT APPLICABLE
15 m						NOT APPLICABLE
2. RCC Solid/Voided slab bridges						
5 m						
10 m						
15 m						
20 m						
3. RCC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder						
10 m						
15 m						
20 m						
25 m						
4. RCC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder						
10 m						
15 m						
20 m						
25 m						
5. PSC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder						
20 m						
25 m						
30 m						
35 m						
40 m						
6. PSC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder						
20 m						
25 m						
30 m						
35 m						
40 m						
7. PSC Cast In-Situ Box Girders type bridges						
30 m						
35 m						
40 m						
45 m						
50 m						
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint						
30 m						NOT APPLICABLE
35 m						NOT APPLICABLE
40 m						NOT APPLICABLE
45 m						NOT APPLICABLE
50 m						NOT APPLICABLE
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder						
15 m						
20 m						
25 m						
30 m						
35 m						
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder						
15 m						
20 m	202.7			202.7		202.7
25 m	199.1		199.1	199.1		199.1
30 m	195.5		195.5	195.5		195.5
35 m	192.0		192.0	192.0		192.0

TOTAL GVW INCLUDING PULLER TRACTOR= 205 t



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF
HYDRAULIC TRAILER UNITS

Legend:

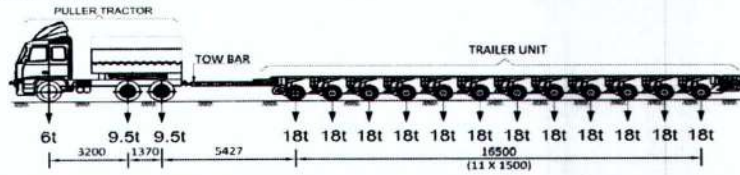
- Safe to carry the specified load
- Safe to carry marked reduced GVW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

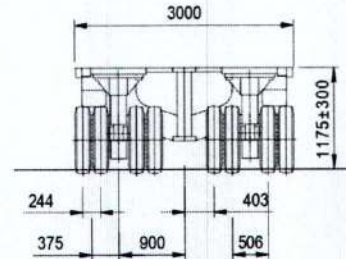
NOTES:

- THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- THE OWC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW - 28) / 10$
Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)
- THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

mw



Span, CV type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5	TOTAL GVW INCLUDING PULLER TRACTOR= 241 t
1. Masonry Arch bridges						
5 m			NOT APPLICABLE			
10 m			NOT APPLICABLE			
15 m			NOT APPLICABLE			
2. RCC Solid/Voided slab bridges						
5 m						
10 m						
15 m						
20 m						
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
10 m						
15 m						
20 m						
25 m						
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
10 m						
15 m						
20 m						
25 m						
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
20 m						
25 m						
30 m						
35 m						
40 m	237.5					
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
20 m				240.5	236.5	
25 m				240.5	236.5	
30 m				240.5	237.5	
35 m						
40 m				240.5	236.5	
7. PSC Cast in Situ Box Girders type bridges						
30 m						
35 m						
40 m						
45 m						
50 m						
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint						
30 m				NOT APPLICABLE		
35 m				NOT APPLICABLE		
40 m	237.5					
45 m	237.5			NOT APPLICABLE		
50 m	237.5			NOT APPLICABLE		
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder						
15 m						
20 m	238.5					
25 m	237.5				236.5	
30 m	238.5		237.5			
35 m	238.5				236.5	
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder						
15 m						
20 m	236.5		237.5		236.5	
25 m	237.5	237.5	236.5		236.5	
30 m	236.5		236.5		237.5	
35 m	234.5	237.5	236.5		232.5	



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF
HYDRAULIC TRAILER UNITS

Legend:
 Safe to carry the specified load
 Safe to carry marked reduced GVW

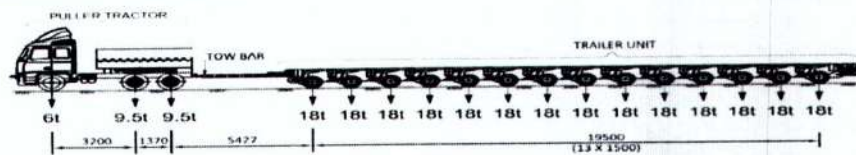
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES :
1 THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
2 THE OWC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
3 THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
4 WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE
CALCULATED BY THE FORMULA : RAL = (RDVW-25) / 12
Where : RAL = Reduced Axle Load (in tonnes); RDVW = Reduced Gross Vehicle Weight (in tonnes)
5 THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING
THE HT LOADS OVER THE BRIDGES
6 IN CASE OF STRUCTURES MARKED TO CARRY RDVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF
GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

Mian

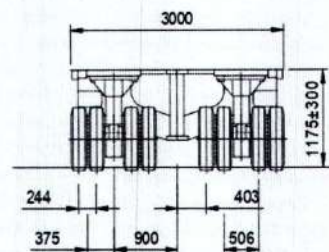
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-6 LOADING (WITH 14 AXLE TRAILER UNITS)

CHART NO. C-6



Span, CW type	C WAY TYPE 1	C WAY TYPE 2	C WAY TYPE 3	C WAY TYPE 4	C WAY TYPE 5
1. Masonry Arch bridges					
5 m			NOT APPLICABLE		
10 m			NOT APPLICABLE		
15 m			NOT APPLICABLE		
2. RCC Solid/Voided slab bridges					
5 m					
10 m					
15 m					
20 m					
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder					
10 m					
15 m					
20 m					
25 m					
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
10 m					
15 m					
20 m					
25 m					
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder					
20 m					
25 m					
30 m					
35 m					
40 m					
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m					
25 m					
30 m					
35 m					
40 m					
7. PSC Cast in Situ Box Girders type bridges					
30 m					
35 m					
40 m					
45 m					
50 m					
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m				NOT APPLICABLE	
35 m				NOT APPLICABLE	
40 m				NOT APPLICABLE	
45 m				NOT APPLICABLE	
50 m				NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m					
25 m					
30 m					
35 m					
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m					
25 m					
30 m					
35 m					

TOTAL GVW INCLUDING PULLER TRACTOR= 277 t



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF HYDRAULIC TRAILER UNITS

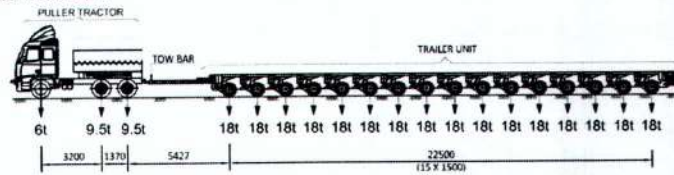
Legend:

- Safe to carry the specified load
- Safe to carry marked reduced GVW

- C'WAY TYPE 1 : 2 LAINE SINGLE CARRIAGEWAY OR 2 LAINE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
 C'WAY TYPE 2 : 3 LAINE SINGLE CARRIAGEWAY OR 3 LAINE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
 C'WAY TYPE 3 : 4 LAINE SINGLE CARRIAGEWAY OR 4 LAINE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR
 2 LAINE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
 C'WAY TYPE 4 : 3 LAINE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
 C'WAY TYPE 5 : 4 LAINE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

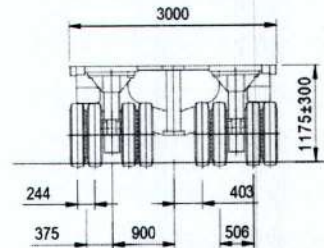
NOTES :

- THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- THE GVW CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY.
- WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW \times 25) / 14$
 Where : RAL = Reduced Axle Load (in tonnes), RGVW = Reduced Gross Vehicle Weight (in tonnes)
- THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES.
- IN CASE OF STRUCTURES MARKED TO CARRY ROW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.



TOTAL GW INCLUDING PULLER TRACTOR= 313 t

Span & CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonry Arch bridges					
5 m			NOT APPLICABLE		
10 m			NOT APPLICABLE		
15 m			NOT APPLICABLE		
2. RCC Solid/Voided slab bridges					
5 m					
10 m					
15 m					
20 m					
3. RCC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder					
10 m					
15 m					
20 m					
25 m					
4. RCC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder					
10 m					
15 m					
20 m					
25 m					
5. PSC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder					
20 m					
25 m					
30 m	112.1				
35 m	104.1				
40 m	96.1	87.1			112.1
6. PSC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder					
20 m					
25 m		82.1		104.1	104.1
30 m	104.1	79.1		79.1	79.1
35 m	112.1	107.1		79.1	104.1
40 m	104.1	104.1		104.1	112.1
7. PSC Cast In Situ Box Girders type bridges					
30 m	71.1				
35 m	79.1				
40 m	79.1				
45 m	79.1				
50 m	79.1				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m	79.1			NOT APPLICABLE	
35 m	79.1			NOT APPLICABLE	
40 m	79.1			NOT APPLICABLE	
45 m	79.1			NOT APPLICABLE	
50 m	79.1			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m	104.1				
25 m	71.1		112.1		104.1
30 m	104.1		79.1		104.1
35 m	104.1		104.1		112.1
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	79.1		79.1		79.1
25 m	104.1	104.1	79.1	79.1	79.1
30 m	79.1	104.1	104.1	79.1	79.1
35 m	104.1	104.1	104.1	104.1	104.1



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF HYDRAULIC TRAILER UNITS

Legend:

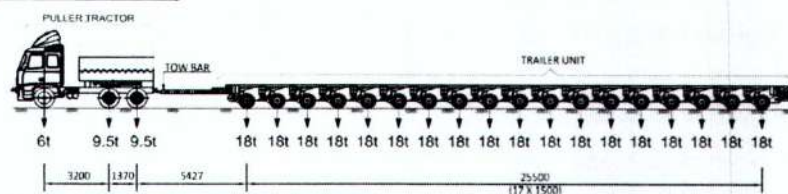
- Safe to carry the specified load
- Safe to carry marked reduced GW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES :

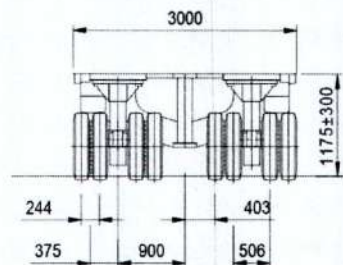
- THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING
- THE D/W CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- WHEREVER REDUCED GW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGW - 25) / 16$
Where : RAL = Reduced Axle Load (in tonnes); RGW = Reduced Gross Vehicle Weight (in tonnes)
- THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- IN CASE OF STRUCTURES MARKED TO CARRY RGW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

Man



TOTAL GVW INCLUDING PULLER TRACTOR= 349 t

Span	CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonry Arch bridges						
5 m						NOT APPLICABLE
10 m						NOT APPLICABLE
15 m						NOT APPLICABLE
2. RCC Solid/Voided slab bridges						
5 m						
10 m						
15 m						
20 m						
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
10 m						
15 m						
20 m						
25 m						
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
10 m						
15 m						
20 m						
25 m						
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
20 m						
25 m						
30 m		342 t				
35 m		306 t				
40 m		284 t	388 t		347 t	343 t
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
20 m						357 t
25 m			383 t		332 t	323 t
30 m		385 t	328 t		338 t	315 t
35 m		352 t	326 t		319 t	303 t
40 m		313 t	322 t		308 t	299 t
7. PSC Cast in Situ Box Girders type bridges						
30 m		337 t				
35 m		317 t				
40 m		297 t				
45 m		283 t				
50 m		278 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint						
30 m		333 t				NOT APPLICABLE
35 m		295 t				NOT APPLICABLE
40 m		276 t				NOT APPLICABLE
45 m		263 t				NOT APPLICABLE
50 m		258 t				NOT APPLICABLE
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder						
15 m						
20 m		340 t				
25 m		302 t		348 t		335 t
30 m		275 t		345 t		319 t
35 m		268 t	347 t	329 t		312 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder						
15 m						
20 m		323 t		333 t		323 t
25 m		292 t	318 t	293 t	335 t	307 t
30 m		275 t	308 t	272 t	318 t	290 t
35 m		255 t	288 t	251 t	306 t	281 t



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF HYDRAULIC TRAILER UNITS

Legend:

Safe to carry the specified load

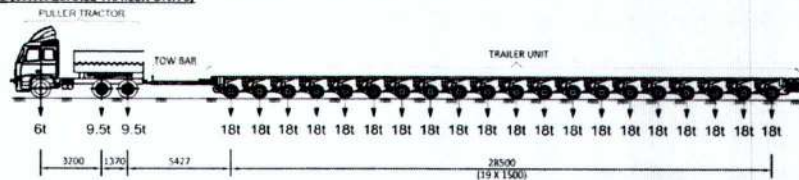
Safe to carry marked reduced GVW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES :

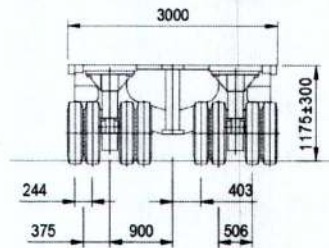
- 1 THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- 2 THE OVC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- 3 THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- 4 WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW-25) / 18$
Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)
- 5 THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- 6 IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

h2h



TOTAL GVW INCLUDING PULLER TRACTOR= 385 t

Span	CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonry Arch bridges						
5 m				NOT APPLICABLE		
10 m				NOT APPLICABLE		
15 m				NOT APPLICABLE		
2. RCC Solid/Voided slab bridges						
5 m						
10 m						
15 m						
20 m						
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
10 m						
15 m						
20 m						
25 m						
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
10 m						
15 m						
20 m						
25 m						
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
20 m						
25 m						
30 m		275 t				
35 m		235 t	230 t			
40 m		200 t	200 t		275 t	275 t
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
20 m					275 t	275 t
25 m			275 t		240 t	240 t
30 m		240 t	240 t		240 t	240 t
35 m		200 t	200 t		200 t	200 t
40 m		225 t	240 t		225 t	225 t
7. PSC Cast in Situ Box Girders type bridges						
30 m		285 t				
35 m		240 t				
40 m		210 t				
45 m		200 t				
50 m		200 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint						
30 m		275 t			NOT APPLICABLE	
35 m		235 t			NOT APPLICABLE	
40 m		200 t			NOT APPLICABLE	
45 m		275 t	275 t		NOT APPLICABLE	
50 m		275 t	275 t		NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder						
15 m						
20 m		240 t				
25 m		200 t		240 t		275 t
30 m		200 t		240 t		275 t
35 m		225 t	275 t	240 t		240 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder						
15 m						
20 m		240 t		240 t		275 t
25 m		225 t	240 t	240 t	275 t	240 t
30 m		200 t	240 t	240 t	240 t	240 t
35 m		225 t	275 t	240 t	240 t	275 t



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF
HYDRAULIC TRAILER UNITS

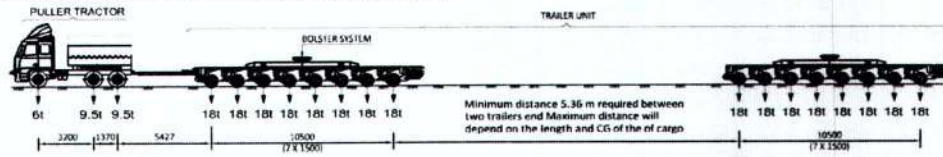
Legend:
 Safe to carry the specified load
 Safe to carry marked reduced GVW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

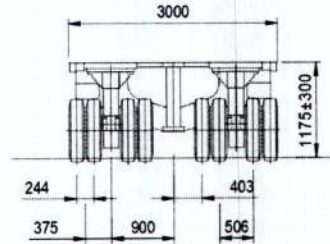
NOTES :

- 1 THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- 2 THE OVC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- 3 THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- 4 WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW-25) / 20$
Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)
- 5 THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- 6 IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

12/11



Span	CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5	TOTAL GVW INCLUDING PULLER TRACTOR= 313 t
1. Masonry Arch bridges							
5 m					NOT APPLICABLE		
10 m					NOT APPLICABLE		
15 m					NOT APPLICABLE		
2. RCC Solid/Voided slab bridges							
5 m							
10 m							
15 m							
20 m							
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder							
10 m							
15 m							
20 m							
25 m							
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder							
10 m							
15 m							
20 m							
25 m							
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder							
20 m							
25 m							
30 m							
35 m							
40 m							
7. PSC Cast in Situ Box Girders type bridges							
30 m							
35 m							
40 m							
45 m							
50 m							
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint							
30 m							
35 m							
40 m							
45 m							
50 m							
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder							
15 m							
20 m							
25 m							
30 m							
35 m							



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF HYDRAULIC TRAILER UNITS

Legend:

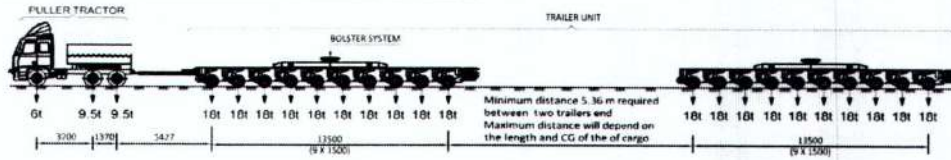
- Safe to carry the specified load
- Safe to carry marked reduced GVW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES:

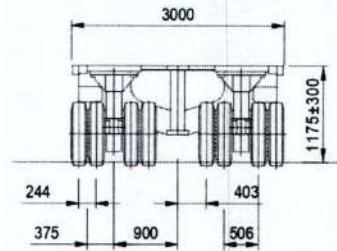
- THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- THE OWC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW \cdot 25) / 16$
Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)
- THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

MK



Span, CV type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonry Arch bridges					
8 m			NOT APPLICABLE		
10 m			NOT APPLICABLE		
15 m			NOT APPLICABLE		
2. RCC Solid/Voided slab bridges					
8 m					
10 m					
15 m					
20 m					
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder					
10 m					
15 m					
20 m					
25 m					
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
10 m					
15 m					
20 m					
25 m					
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder					
20 m					
25 m					
30 m					
35 m	127.1				
40 m	88.6				
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m					
25 m					
30 m					
35 m					
40 m					
7. PSC Cast in Situ Box Girders type bridges					
30 m					
35 m	113.6				
40 m	74.3				
45 m	58.7				
50 m	42.4				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m				NOT APPLICABLE	
35 m				NOT APPLICABLE	
40 m				NOT APPLICABLE	
45 m				NOT APPLICABLE	
50 m				NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m					
25 m					
30 m					
35 m					
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m					
25 m					
30 m					
35 m					

TOTAL GVW INCLUDING PULLER TRACTOR= 385 t



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF HYDRAULIC TRAILER UNITS

Legend:

Safe to carry the specified load

Safe to carry marked reduced GVW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY

C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY

C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES :

1 THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.

2 THE OVC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.

3 THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY

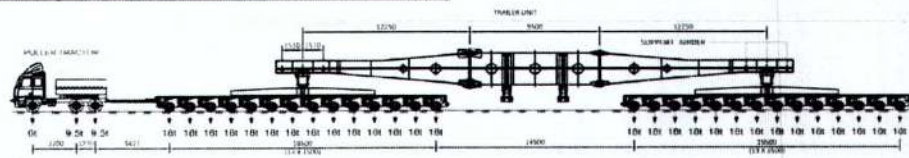
4 WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW \cdot 25) / 16$

Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)

5 THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES

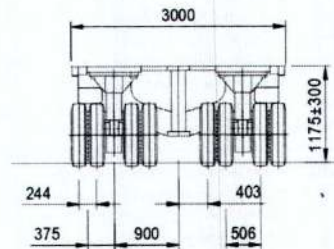
6 IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

12/12



Span, C/W type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonry Arch bridges					
5 m			NOT APPLICABLE		
10 m			NOT APPLICABLE		
15 m			NOT APPLICABLE		
2. RCC Solid/Voided slab bridges					
5 m					
10 m					
15 m					
20 m					
3. RCC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder					
10 m					
15 m					
20 m					
25 m					
4. RCC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder					
10 m					
15 m					
20 m					
25 m					
5. PSC Precast/Cast In-Situ Beam and Slab bridges - With Int. X Girder					
20 m					
25 m					
30 m					
35 m					
40 m					
6. PSC Precast/Cast In-Situ Beam and Slab bridges - Without Int. X Girder					
20 m				525 t	513 t
25 m		512 t		500 t	488 t
30 m		503 t		492 t	480 t
35 m		497 t		485 t	473 t
40 m	503 t	488 t		480 t	468 t
7. PSC Cast in Situ Box Girders type bridges					
30 m					
35 m					
40 m					
45 m					
50 m					
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m	525 t			NOT APPLICABLE	
35 m	499 t			NOT APPLICABLE	
40 m	478 t			NOT APPLICABLE	
45 m	458 t			NOT APPLICABLE	
50 m	438 t			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m	518 t				518 t
25 m	476 t				476 t
30 m	432 t		477 t		430 t
35 m	402 t		438 t		400 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	490 t		470 t		490 t
25 m	450 t	493 t	453 t	473 t	477 t
30 m	417 t	461 t	440 t	453 t	473 t
35 m	386 t	427 t	415 t	400 t	440 t

TOTAL GVW INCLUDING PULLER TRACTOR= 529 t



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF
HYDRAULIC TRAILER UNITS

Legend:

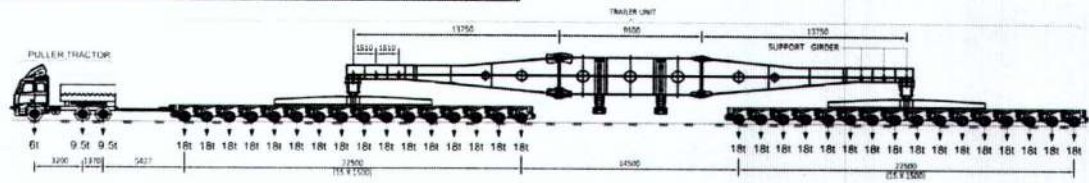
- Safe to carry the specified load
- Safe to carry marked reduced GVW

- C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR
2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY
C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES :

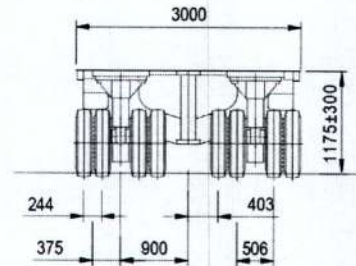
- THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.
- THE OWC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.
- THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY
- WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : RAL = (RGVW / 2.5) / 28
Where : RAL = Reduced Axle Load (In tonnes); RGVW = Reduced Gross Vehicle Weight (In tonnes)
- THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES
- IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

10/12



Span	CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonry Arch bridges						
5 m				NOT APPLICABLE		
10 m				NOT APPLICABLE		
15 m				NOT APPLICABLE		
2. RCC Solid/Voided slab bridges						
5 m						
10 m						
15 m						
20 m						
3. RCC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
10 m						
15 m						
20 m						
25 m						
4. RCC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
10 m						
15 m						
20 m						
25 m						
5. PSC Precast/Cast in-Situ Beam and Slab bridges - With Int. X Girder						
20 m						
25 m						
30 m						
35 m						
40 m						
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder						
20 m						
25 m						
30 m						
35 m						
40 m						
7. PSC Cast in Situ Box Girders type bridges						
30 m						
35 m						
40 m						
45 m						
50 m						
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint						
30 m						
35 m						
40 m						
45 m						
50 m						
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder						
15 m						
20 m						
25 m						
30 m						
35 m						
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder						
15 m						
20 m						
25 m						
30 m						
35 m						

TOTAL GVW INCLUDING PULLER TRACTOR= 601 t



TYPICAL CROSS SECTION SHOWING TRANSVERSE WHEEL ARRANGEMENT OF HYDRAULIC TRAILER UNITS

Legend:

Safe to carry the specified load

Safe to carry marked reduced GVW

C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY

C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY

C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C'WAY WITH STRUCTURAL DISCONTINUITY OR

2 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

C'WAY TYPE 4 : 3 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

C'WAY TYPE 5 : 4 LANE DUAL CARRIAGEWAY WITHOUT STRUCTURAL DISCONTINUITY

NOTES:

1 THE ABOVE CONCLUSIONS ARE FOR BRIDGES HAVING DECK SLAB WITHOUT ANY TRANSVERSE PRESTRESSING.

2 THE OVC CAN SAFELY BE PERMITTED OVER ALL TYPES OF CULVERTS HAVING SPAN LENGTH < 6m.

3 THE ABOVE CONCLUSIONS ARE BASED ON THE CONDITIONS / ASSUMPTIONS GIVEN SEPARATELY

4 WHEREVER REDUCED GVW IS MARKED "RED" IN THE CHART, CORRESPONDING REDUCED AXLE LOAD CAN BE CALCULATED BY THE FORMULA : $RAL = (RGVW - 25) / 4$

Where : RAL = Reduced Axle Load (in tonnes); RGVW = Reduced Gross Vehicle Weight (in tonnes)

5 THE TRANSPORTER SHALL TAKE PERMISSION FROM THE CONCERNED REGULATORY AGENCY BEFORE TAKING THE HT LOADS OVER THE BRIDGES

6 IN CASE OF STRUCTURES MARKED TO CARRY RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.

22/10

CHART SHOWING ADEQUACY OF THOSE STRUCTURES WHICH ARE DESIGNED FOR SV LOADING OF IRC:6 FOR SAFELY ALLOWING PASSAGE
OF VARIOUS LOAD COMBINATIONS OF OWNC ON MHT UNDER DIFFERENT LOADING ARRANGEMENTS CLASSIFIED AS HT-1 TO HT-13

Sr. No.	CATEGORY LOADING	HT-1	HT-2	HT-3	HT-4	HT-5	HT-6	HT-7	HT-8	HT-9	HT-10	HT-11	HT-12	HT-13
1	All types of simply supported bridges of any span length designed for SV loading as per IRC:6													
2	All other types of Bridges designed for SV loading as per IRC:6													
3	Bridges designed for SV loading of IRC:6 but Identified as distressed or visually Distressed or marked distressed in the Portal.													

Legend:



Safe to carry the specified HT loading

Particular Type of HT loading is not permitted and should be checked for adequacy of particular type of bridge to carry specific type of HT loading

Note: for details of Various combinations of HT Loading and other norms, conditions and controls for allowing OWC/ODC Refer MORTH circular No. 27.10.2025

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(Reference Para 9.1 of circular)

Registration form of applicants

- 1 Name of Consignor/Consignee/Transporter
2. Applicant Type
- 3 Address Plot No.
- 4 Address Street Name
- 5 Address Area
- 6 City
- 7 Pincode
- 8 Contact Person
- 9 Designation
- 10 Contact Number
- 11 e-mail ID
- 12 PAN
- 13 GSTIN, if applicable
- 14 Document towards address proof and PAN card/GSTIN certificate shall be uploaded.
 - 14 (a) Applicant PAN
 - 14 (b) Applicant GSTIN, (if applicable)
 - 14 (c) Contact Person (Adhar Card/Voter id)
 - 14 (d) Applicant Address Proof

Proprietorship/Partnership/
Registered Company/Central
Government Department/State
Government Department

Note: Applicant address must be as appearing in the Firm/Company GSTIN/PAN.

mm

Reference Para 9.2 of circular

Consignment details

1. Type of consignment
2. Origin
3. Origin Pincode
4. Destination
5. Destination Pincode
6. Consignor Name
7. Consignor Address
8. Consignor City
9. Consignor email id
10. Consignor GSTIN or PAN
11. Consignor mobile no.
12. Consignee Name
13. Consignee Address
14. Consignee City
15. Consignee email id
16. Consignee mobile no.
17. Consignee GSTIN or PAN
18. Consignment Dimensions (in meters) Length Width Height
19. Consignment Weight incl. packing weight, if any) in Tonnes
20. Transporter id on ODC Portal
21. Declaration on the letterhead of the consignor/consignee stating above details,duly signed by competent person of the Consignor/consignee shall be uploaded.

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[Reference 9.3 of circular]

Application Reference Number

HT type

Puller Tractor Registration No.	System to retrieve details from Ministry's VAHAN database based on registration number		
Registered Owner Name			
Expiry date of Permit			
Expiry date of Fitness			
Tax Paid upto			
Expiry of insurance			
Modular Hydraulic Trailer Registration Number (separately for each module)	System to retrieve details from Ministry's VAHAN database based on registration number		
Registered Owner Name			
Expiry date of Permit			
Expiry date of Fitness			
Tax Paid upto			
Unladen Weight			
Registered laden weight			
Registered Pay load capacity			
Number of axle rows			
Transporter can update multiple number of MHT modules based on dimensions and weight of consignment subject to maximum axle rows as per HT type selected above.			
Attachment details, if any			
Attachment weight			
Overall Dimensions of MHT combination with Puller Tractor and consignment (meter)	L:	W :	H:
Driver License Number	System to retrieve details from Ministry's SARATHI database based on DL number		
Driver Name			
Father's Name			
Driver address			
Expiry date of DL			

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Authorised to drive heavy transport vehicle	Yes/No System to verify & display & permit only Driver holding valid DL for Transport Vehicle
If more than one Driver is to be deployed, details of each Driver has to be submitted	
Gross Unladen weight of MHT combination excluding Puller Tractor	system to compute & display
Consignment weight as submitted by consignor/consignee	
Gross Laden weight of MHT combination with attachment(if any) and consignment excluding Puller Tractor weight	system to compute & display
Puller Tractor Number of axle rows	3
Puller Tractor weight with ballast	upto 25 tonnes
Wheel base (distance between any two axle rows of MHT)	1.5 m
Proposed Route	
Origin	system to retrieve from consignor/consignee submission
Destination	system to retrieve from consignor/consignee submission
Intermediary Station	minimum one intermediary station required for every 100 kms. of overall journey
Total Journey Distance (kilometer)	
Portal will permit change of Puller Tractor number and/or MHT number for identical HT type prior to payment of ODC fee.	
Portal will permit replacement of eligible driver	

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ONLINE SELF DECLARATION
(Reference para 9.2 and 9.4 of circular)

(a) At the time of start of uploading of request by the consignor/consignee

I/We hereby declare that details and documents uploaded by me/us in Ministry's ODC portal for seeking permission to move single indivisible consignment under subject application are true to my/our knowledge and nothing has been concealed.

(b) At the time of updating the vehicle and driver details by the nominated transporter

I/We hereby declare that the validity period of fitness/permit/insurance of Puller Tractor, Modular Hydraulic Trailer and license of the Driver shall be ensured till the time consignment reach its destination.

I/we hereby agree to abide and follow all terms and conditions, imposed by the Ministry in this regard.

I/we as a transporter hereby declare that all the MHT deployed are technically fit and distribute the load evenly on all axle rows of the combination.

(c) Post completion of the trip by the transporter

Within 15 days from the date of reporting at the destination.

I/we hereby declare that I/we have completed the journey on dated without any damage to public Bridge Structure/Road.

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Reference Para 9.5 of circular

Conditions of Movement of OWC/ODC

1. The system will check for any additional bridge structure which may have been uploaded in the portal during the period of online processing of the application and payment of prescribed fee prior to the physical movement. In case any new unfeasible bridge structure has been uploaded during such period, the transporter shall take a detour to avoid the said bridge structure.
2. The ODCs/OWCs vehicle should display all danger flags and lights and should be accompanied by a pilot vehicle displaying prominently that an ODC/OWC consignment is passing. All necessary warning signals shall be provided on the Puller Tractor & MHT such as painting the entire width by yellow and black zebra strips on the front and rear sides, duly marked with retro reflective stickers and installing red lamps to indicate the extreme position of the vehicles clearly for night time driving /parking. Similarly, red flags on both sides should be installed for facilitating demarcation of extreme position of the vehicle during day time. Banner displaying "ODC MOVEMENT" may be put at rear most end of the MHT.
3. Coupling of the modular hydraulic trailers along the width of the road (side by side) shall not be permitted. Coupling of the trailers along the length of the road shall be allowed for transportation of single consignment subject to the condition that per axle row weight for any axle row should not be more than 18.0 ton (180.0 kN).
4. The system shall trigger a copy of the online permission so granted by the system to all concerned field officials of MoRT&H/NHAI/NHIDCL at the time of grant of permission. E-mail id of all concerned RO(s) of MoRTH/NHAI/NHIDCL will appear on the system generated permission.
5. The ODCs/OWCs should be allowed to cross a bridge/structure under supervision and escort of responsible personnel of the transporter only and at that time no other vehicle be allowed to ply on the bridge. The bridge structure shall be visually inspected by responsible personnel of the transporter before and after the movement over the bridge structure and any distress/abnormality, if noticed shall be immediately reported to the concerned field officials of MoRT&H/NHAI/NHIDCL over email.
6. The driver of the Puller Tractor while moving shall carry copy of the permission letter along with uploaded documents/information.
7. The maximum speed limit of the ODC/OWC vehicle should be equal to or less than 5 km/hour while passing over a bridge/structure and no brake shall be applied while moving on the bridge/structure.
8. During movement, the centerline of ODC/OWC must be as close as possible to the centerline of the carriageway with maximum eccentricity of 300 mm measured from centerline of particular carriageway of the bridge/structure.
9. The consignment shall be placed in such a way over the MHT so as to result into uniform distribution of consignment load over all MHT axles rows of the combination.
10. ODCs/OWCs shall not be moved (a) during earthquakes, and (b) when the wind speed exceeds 40 km/hr.
11. Movement of ODCs/OWCs vehicles over bridges should be ensured when water current is minimum. Special care shall be taken during monsoon season.

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