RW/NH-34062/01/2020-S&R (B)
GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
S&R -(Bridges)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated:17.01.2024

To,

1. The Chief Secretaries of all State Governments/Union Territories.
2. The Principal Secretaries / Secretaries of all States/U.Ts Public Works Department dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
3. The Engineer-in-Chief and Chief Engineers of Public Works Departments of States/U.Ts dealing with National Highways, other Centrally Sponsored Schemes and State Schemes.
4. The Chairman, National Highways Authority of India (NHAI), G-5&6, Sector-10, Dwarka, New Delhi-110 075.
5. The Managing Director, NHIDCL, PTI Building, Parliament Street, New Delhi-110 001.
6. Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110 010.
7. The Chairman- Policy Advocacy, Process Plant and Machinery Association of India.
8. The General Secretary, Hydraulic Trailer Owners Association, Mumbai.

Subject: Online permission for single unit ODCs/OWCs consignment on Modular Hydraulic Trailers (HT-1 to HT-13) on National highways in the country.

Sir,

Ministry has been granting online permission for road movement of single indivisible unit of overweight/over dimensional consignments (OWCs/ODCs) on Modular Hydraulic Trailers under different loading arrangements classified as HT 1 to HT 13 on National Highways through Ministry's Portal (www.morth-owc.nic.in). Ministry has earlier issued guidelines vide Ministry's letters dated 24.01.2013, 20.05.2014, 20.04.2015 and 02.6.2021 for grant of aforesaid permission and the same have been reviewed. Revised comprehensive guidelines are being hereby issued in supersession of the Ministry's letters mentioned above for effective regulation of movement of OWCs/ODCs consignments on National Highways and for ensuring the safe and uninterrupted movement of all types of vehicles on National Highways and preventing damage to any component of road infrastructure.

2. A detailed analytical study was carried out in 2012 for passage of various types and combinations of multi-axle modular hydraulic trailers carrying OWC/ODC. **The study was carried out only for various types of simply supported bridge structures with span length ranging from 5m to 50m covering various cross sections with 2 lane, 4 lane, 6 lane and 8 lane width.**

3. Based on the findings of this study, simplified charts (Chart C.1 to Chart C.13) were 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. 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	HTS	18	324
C9	HT9	20	360
C10	HTl0 *	8+8	288
C11	HT11 *	10+10	360
C12	HT12 **	14+14	504
C13	HT13 **	16+16	576

(The Unladen weight of single axle is considered as 3.3 t

(*) Units with Turn Table Bolster Arrangement (Beam Weight = 16 t)

(**) Units with Girder Arrangement (Self Weight of Girder = 132 t)

The puller tractor is considered to carry a load of 25t comprising of 6t axle load in front axle and 9.5t each in rear two axles.

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 important to ensure that these parameters are available with the Ministry and overall condition of the bridge is examined by the concerned Regional Officer of MoRT&H/NHAI/NHIDCL.

5.1 Based on the above referred charts, a concise recommendation of study in the form of summary is presented in Table below. The HT Loadings are categorized as A, B & C and structure types categorized as 1, 2 & 3 respectively. The summary table presents the equivalency of IRC loads to different HT Loads with respect to structure type.

5.2 **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.

TABLE 2: SUMMARY TABLE SHOWING ADEQUACY OF STRUCTURE TYPES FOR PASSAGE OF HT LOAD

TYPE OF BRIDGE / STRUCTURE / TYPE OF HT LOADING			CATEGORY OF STRUCTURE TYPE		
			1	2	3
			✓ 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 and slab Bridges (with or without intermediate cross girder) ✓ PSC Cast-in-situ Box Girder 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 CATEGORY	A	HT1, HT2, HT3	PASS	PASS	PASS
	B	HT4TO HT9	PASS	✓ For HT4: Pass ✓ For HT 5 to HT9: Pass with Restricted GVW in some cases- Refer charts for details.	✓ Pass with Restricted GVW in some cases- Refer charts for details.
	C	HT10, HT11, HT12, HT13	PASS	✓ Pass with Restricted GVW in some cases- Refer charts for details.	✓ Pass with restricted GVW in some cases- Refer charts for details.

As may be seen from the enclosed charts and above summary statement, 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, HT5, HT6, HT7, HT8, HT9, HT10, HT11, HT12 & HT13, movement shall be permitted up to Gross Vehicle Weight (GVW) as applicable for a particular chart or reduced GVW reflected in specific cell of the chart for different carriageway widths and structural arrangements.

6. The distressed bridges on National Highways will be coded as **Orange** (moderately severe) and **Red** (highly severe) and uploaded on the OWC/ODC portal. Similarly the bridges having individual span length more than 50 m and bridges not covered in Table-2 of para-5 shall also be uploaded on the OWC/ODC portal. 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	Bridges having individual span length > 50 m	HT1 to HT13
2	Bridges having superstructure not covered in Table-2 of para-5	HT1 to HT13
3	Distressed bridges coded as Red	HT1 to HT13
4	Distressed bridges coded as Orange	HT4 to HT13
5	Bridges rated under capacity for carrying loading as per IRC:6 or where load restrictions have been already imposed.	HT1 to HT13

8. Maximum height of the motor vehicle with such ODC/OWC consignment shall be 4.75 m.

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

9.1 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 transporter already registered on the portal will upload the cargo details on the ODCs/OWCs web portal in the format as per Annexure-III. Annexure-III include a signed statement by competent person from Consignee stating the details mentioned in Annexure-III.

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

9.3 The applicant will upload the details of Modular Hydraulic Trailer, Puller Tractor, Driver and other details on the ODCs/OWCs web portal as per Annexure-IV. Some important details in this regard are as mentioned below:

i) Route proposed to be taken for subject movement with minimum one station at each interval of 100 kms or part thereof for the total journey shall be indicated.

ii) Portal will permit change of Puller Tractor number and/or MHT number for identical HT type prior to payment of fee.

iii) Portal will permit replacement of eligible driver prior to payment of fee.

iv) ODCs/OWCs portal will automatically verify the details of Puller Tractor, Modular Hydraulic Trailer and Driver from VAHAN and SARATHI portal.

v) Portal will not allow deployment of Puller Tractor, MHT and Driver if any of the details given in Annexure-IV in respect of the same are not valid at the time online payment of prescribed fee.

9.4 Online self-declaration shall be made by applicant as per Annexure-V.

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

9.6 Portal shall make available the applicant to view alternate routes from origin to destination. Once the applicant selects a route, the list of bridges of types as mentioned in para-7 above shall be available to the transporter to view so that the transporter can plan an alternative route, if any, on which such bridges can be avoided/ minimized. In case a transporter finally selects a route where there is any bridge of any type as shown in para-7 above for the corresponding MHT combination, permission shall not be granted on such bridge(s) and the transporter shall have to detour the said bridge(s) by its own arrangement.

10. In case of ODCs/OWCs classified as HT-1 to HT-3, portal will generate fee to be paid by the transporter instantaneously after the route is finally selected by the transporter. Once the fee is paid online by the transporter, the portal will generate the permission letter excluding the types of bridges mentioned at sl. no. 1, 2, 3 & 5 of Table in para-7 above. 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. In case fee is not paid within 7 days from the date of notification of fee on the portal, the application will be automatically cancelled.

11. In case of ODCs/OWCs classified as HT-4 to HT-13, system generated email of the application exhibiting consignment, HT type and requested route will be forwarded to concerned RO(s) of the MoRT&H/NHAI/NHIDCL. After receiving system generated email, it will be responsibility of concerned RO(s) of the MoRT&H/NHAI/NHIDCL to examine and, if required, revise/modify the list of types of bridges mentioned in the para-7 above on the ODC/OWC portal as per prevailing site conditions within 15 days time period. An auto generated alert email will be sent to concerned RO(s) of the MoRT&H/NHAI/NHIDCL on seventh day following the date on which initial email was sent. Another auto generated alert 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 twelfth day following the date on which initial email was sent. Whether the list of bridges is modified by concerned RO(s) of the MoRT&H/NHAI/NHIDCL or not on completion of 15 days time period, the portal will generate fee to be paid by transporter. Once the fee is paid online by the applicant transporter, the portal will generate the permission letter excluding the types of bridges mentioned at sl. no. 1, 2, 3, 4 & 5 of Table in para-7 above as revised/ modified by RO(s) of the MoRT&H/NHAI/NHIDCL, if any. 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. In case fee is not paid within 15 days from the date of notification of fee on the portal, the application will be automatically cancelled.

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

13. ODCs/OWCs fee rate per 50 km or part thereof of total trip journey on National Highways (in Rs.) for categories of ODCs/OWCs with GCW including Puller weight is revised as under:

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 a report thereto in each case. 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 more than 18.0 ton or gross vehicle weight (GVW) is more than declared RLW of Puller Tractor and Modular Hydraulic Trailer or in case, the dimensions of the Puller Tractor and Modular Hydraulic Trailer under laden condition is more than the dimensions declared in Annexure-III, 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 ODCs/OWCs portal for a minimum period of one year from such date of detection of violation.

15. The permission granted shall be valid for a period of 6 months from the date of issue of permission letter. However, the applicant shall ensure that the journey commences within 10 days from the date permission is granted. Otherwise the applicant is required to notify its journey date on the ODC/OWC portal 7 days in advance. If there is no change in the status of bridges on the selected route with reference to para 7 of this circular, instantaneous acknowledgement will be generated through the portal and auto emailed to concerned RO(s) of MoRT&H/NHAI/NHIDCL and uploaded on Ministry's website. In case there is change in the in the status of bridges on the selected route with reference to para 7 of this circular, applicant will be displayed the revised status clearly mentioning the bridges where movement of OWC is no more allowed. If acceptable to the applicant, new permission letter will be generated immediately excluding the said bridge(s) in the selected route and the applicant will have to detour the said bridge(s) by own arrangement. Alternatively, if applicant so wishes, he can apply for alternative route without any additional charges or may seek full refund.

16. NIC will make changes in OWC/ODC portal within one month as per guidelines issued in this circular.

17. 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 two months from the date of issue of this circular.

17.1 It is utmost requirement to update the database of the types of bridges mentioned in para-7 above on the ODC/OWC portal. Although such database is existing in the ODC/OWC portal presently, the same is not complete and updated. ***To ensure that there is no movement of OWC consignment on bridges in violation of para 7 of this circular, the concerned RO(s) of MoRT&H/NHAI/NHIDCL shall upload the information related to aforesaid bridges on OWCs/ODCs portal based on current status within a period of 2 months positively and update the same as and when such bridges are identified on National Highways under their jurisdiction.*** In case no bridges are uploaded on the ODCs / OWCs portal within 2 months of this circular, it would be presumed that bridges of such types as mentioned in para-7 above are Nil in the jurisdiction of the concerned RO or the same were 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. This issues with the approval of the competent authority.

Encl:

i. Annexure-I (Chart C.1 to Chart C.13)
ii. Annexure-II (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 Technical Officers in the Ministry of Road Transport a Highways.
2. All Joint Secretaries in the Ministry of Road Transport at Highways.
3. All ROs and **ELOs** of the Ministry of Road Transport a Highways.
4 The Secretary General, Indian Roads Congress.

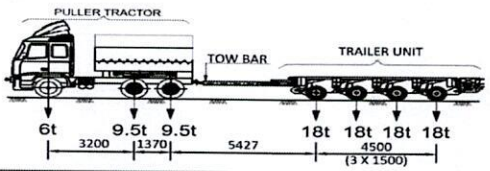
5. The Director, IAHE.
6. Technical circular file of S, R&T (B) Section.
7. NIC for uploading on Ministry's website.

Copy for kind information to:

1. PS to Hon'ble Minister (RT&H) / PS to Hon'ble MOS (RT&H).
2. Sr. PPS to Secretary (RT&H).
3. PPS to DG (RD) a SS.
4. PPS to AS at FA/ADG-I.

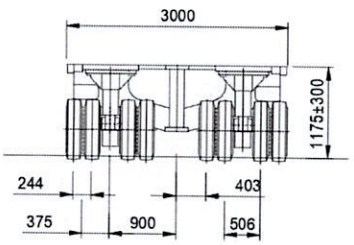
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR :
HT-1 LOADING (WITH 4 AXLE TRAILER UNITS)

CHART NO. C-1



TOTAL GVW INCLUDING PULLER TRACTOR= 97 t

Span C'Way type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonary 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

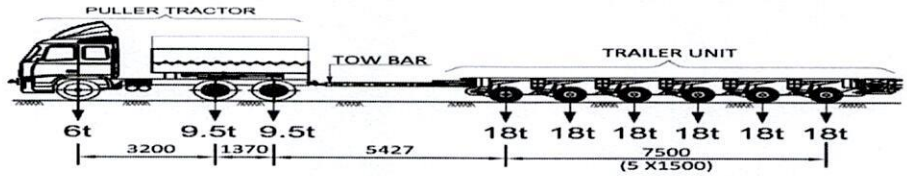
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 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 = (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.

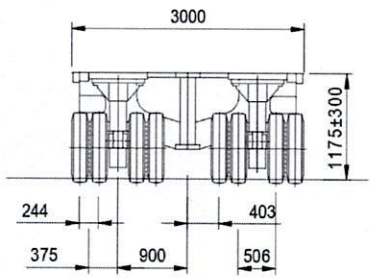
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-2 LOADING (WITH 6 AXLE TRAILER UNITS)

CHART NO. C-2



Span ↓ CW type →	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonary 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= 133 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

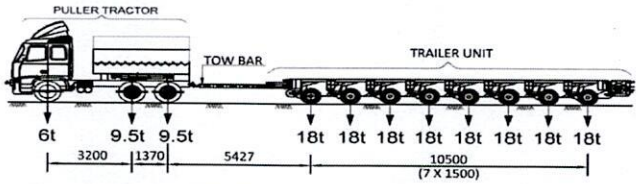
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 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 = (RGVW-25) / 6
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.

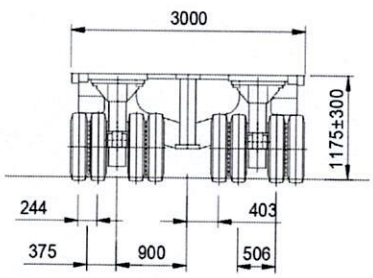
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-3 LOADING (WITH 8 AXLE TRAILER UNITS)

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
1. Masonary 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= 169 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

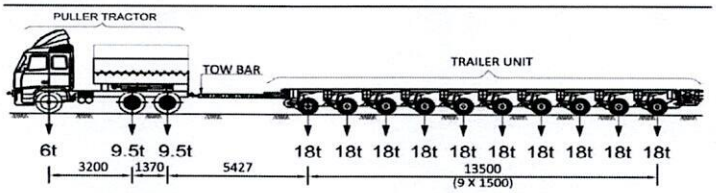
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 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 = (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 RGVW, FOR INTERMEDIATE SPAN LENGTHS, THE VALUES OF GVW OF CRITICAL OF THE TWO ADJACENT SPANS HAVE TO BE TAKEN.**

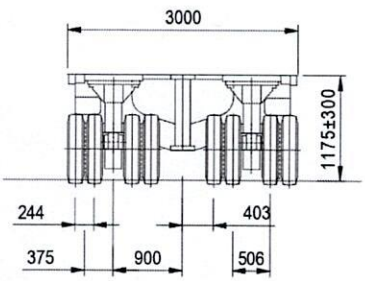
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-4 LOADING (WITH 10 AXLE TRAILER UNITS)

CHART NO. C-4



Span, CW type	C'WAY TYPE 1	C'WAY TYPE 2	C'WAY TYPE 3	C'WAY TYPE 4	C'WAY TYPE 5
1. Masonary 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			201 t		
35 m					
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	201 t		198 t		201 t
25 m	199 t	193 t	198 t		
30 m	199 t		198 t		
35 m	186 t		189 t		202 t

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

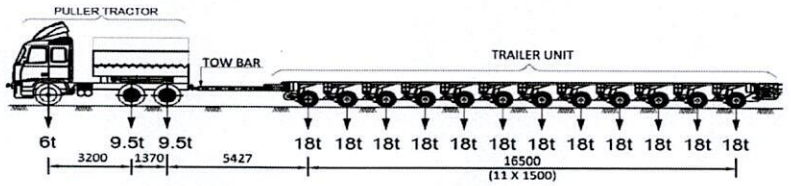
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 :

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 = (RGVW-25) / 10**
   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.**

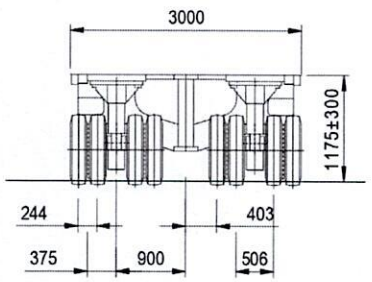
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-5 LOADING (WITH 12 AXLE TRAILER UNITS)

CHART NO. C-5



Span, CW type	C' WAY TYPE 1	C' WAY TYPE 2	C' WAY TYPE 3	C' WAY TYPE 4	C' WAY TYPE 5
1. Masonary 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 t				
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m				240 t	236 t
25 m					236 t
30 m				240 t	237 t
35 m					
40 m				240 t	234 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				NOT APPLICABLE	
35 m				NOT APPLICABLE	
40 m	237 t			NOT APPLICABLE	
45 m	231 t			NOT APPLICABLE	
50 m	231 t			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m	238 t				
25 m	227 t				239 t
30 m	220 t		225 t		
35 m	218 t				234 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	226 t		217 t		226 t
25 m	217 t	237 t	216 t		228 t
30 m	216 t		213 t		227 t
35 m	206 t	237 t	203 t		222 t

TOTAL GVW INCLUDING PULLER TRACTOR= 241 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

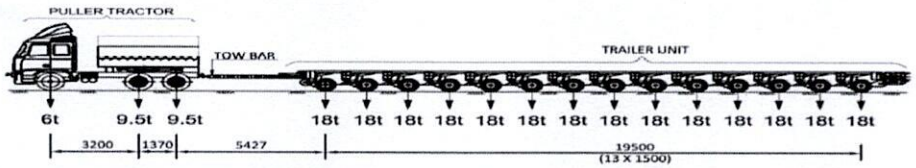
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 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 = (RGVW-25) / 12
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.

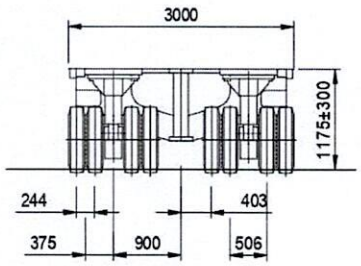
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-6 LOADING (WITH 14 AXLE TRAILER UNITS)

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. Masonary 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

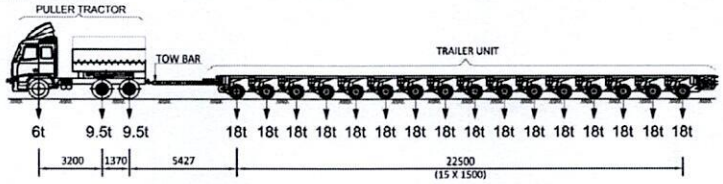
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 = (RGVW-25) / 14
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.

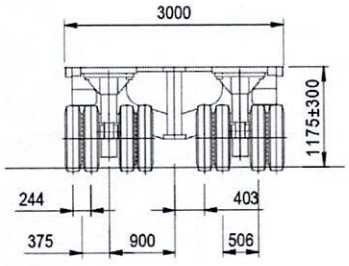
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-7 LOADING (WITH 16 AXLE TRAILER UNITS)

CHART NO. C-7



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. Masonary 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	312 t				
35 m	284 t				
40 m	266 t	308 t			312 t
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m				308 t	302 t
25 m		305 t		298 t	292 t
30 m	308 t	298 t		291 t	288 t
35 m	310 t	300 t		294 t	286 t
40 m	293 t	299 t		281 t	274 t
7. PSC Cast in Situ Box Girders type bridges					
30 m	311 t				
35 m	297 t				
40 m	281 t				
45 m	270 t				
50 m	268 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m	297 t			NOT APPLICABLE	
35 m	276 t			NOT APPLICABLE	
40 m	261 t			NOT APPLICABLE	
45 m	251 t			NOT APPLICABLE	
50 m	249 t			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m	305 t				
25 m	272 t		311 t		303 t
30 m	254 t		276 t		308 t
35 m	247 t		300 t		285 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	290 t		279 t		290 t
25 m	263 t	286 t	262 t	302 t	277 t
30 m	253 t	280 t	250 t	292 t	267 t
35 m	299 t	269 t	233 t	280 t	267 t

TOTAL GVW INCLUDING PULLER TRACTOR= 313 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

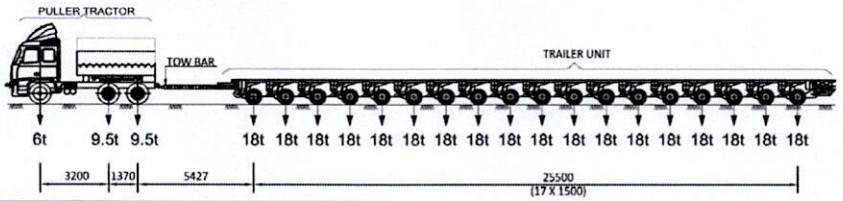
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 PRESTRESSIN**
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 = (RGVW-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 TAKIN 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.**

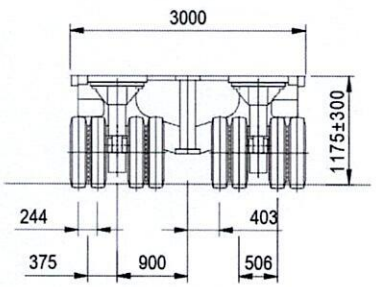
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-8 LOADING (WITH 18 AXLE TRAILER UNITS)

CHART NO. C-8



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. Masonary 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	341 t				
35 m	306 t				
40 m	284 t	333 t		347 t	341 t
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m				344 t	337 t
25 m		337 t		332 t	325 t
30 m	335 t	326 t		319 t	315 t
35 m	332 t	326 t		319 t	313 t
40 m	311 t	322 t		303 t	296 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	279 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m	321 t			NOT APPLICABLE	
35 m	295 t			NOT APPLICABLE	
40 m	276 t			NOT APPLICABLE	
45 m	263 t			NOT APPLICABLE	
50 m	259 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		346 t		335 t
30 m	275 t		304 t		339 t
35 m	263 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		311 t		323 t
25 m	292 t	318 t	291 t	335 t	307 t
30 m	276 t	304 t	272 t	316 t	290 t
35 m	255 t	288 t	251 t	300 t	286 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

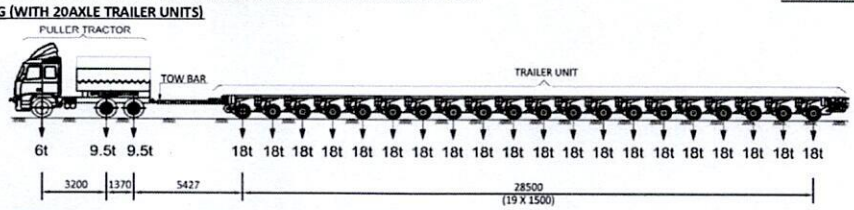
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUIT
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUIT
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 = (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.**

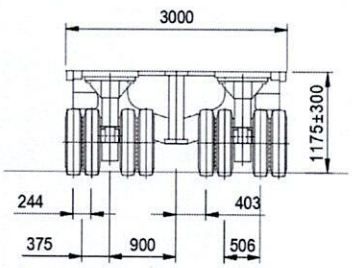
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-9 LOADING (WITH 20AXLE TRAILER UNITS)

CHART NO. C-9



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. Masonary 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	373 t				
35 m	328 t	382 t			
40 m	303 t	359 t		378 t	371 t
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m				379 t	372 t
25 m		372 t		366 t	359 t
30 m	366 t	356 t		349 t	345 t
35 m	356 t	354 t		346 t	338 t
40 m	331 t	347 t		326 t	319 t
7. PSC Cast in Situ Box Girders type bridges					
30 m	367 t				
35 m	338 t				
40 m	314 t				
45 m	297 t				
50 m	293 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m	351 t			NOT APPLICABLE	
35 m	315 t			NOT APPLICABLE	
40 m	292 t			NOT APPLICABLE	
45 m	276 t	379 t		NOT APPLICABLE	
50 m	270 t	371 t		NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m	375 t				
25 m	338 t		382 t		370 t
30 m	300 t		334 t		372 t
35 m	281 t	376 t	360 t		340 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	356 t		348 t		357 t
25 m	322 t	351 t	323 t	370 t	359 t
30 m	303 t	332 t	297 t	346 t	338 t
35 m	274 t	307 t	269 t	321 t	307 t

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

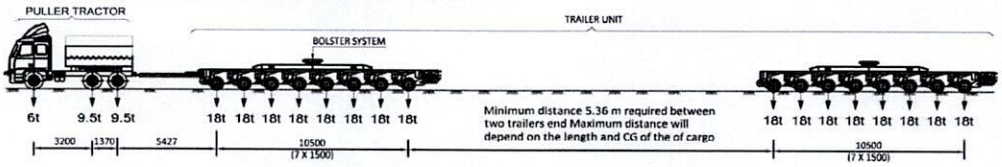
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 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 = (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.

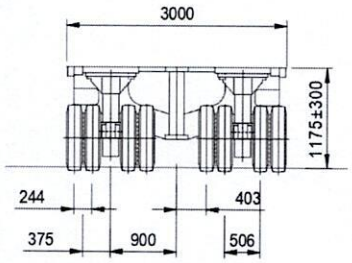
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-10 LOADING (WITH 8+8 AXLE TRAILER UNITS AND TURN TABLE BOLSTER)

CHART NO. C-10



TOTAL GVW 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. Masonary 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	304 t				
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m					
25 m					
30 m					
35 m						312.6 t
40 m				305 t	298 t
7. PSC Cast in Situ Box Girders type bridges					
30 m					
35 m					
40 m	304 t				
45 m	304 t				
50 m	296 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m				NOT APPLICABLE	
35 m	304 t			NOT APPLICABLE	
40 m	288 t			NOT APPLICABLE	
45 m	283 t			NOT APPLICABLE	
50 m	275 t			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m					
25 m					
30 m	286 t		299 t		
35 m	271 t				308 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m					
25 m	305 t		305 t		
30 m	298 t		299 t		
35 m	262 t		282 t		288 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

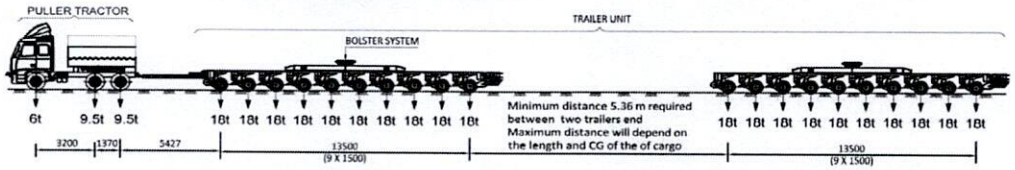
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 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 = (RGVW-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.

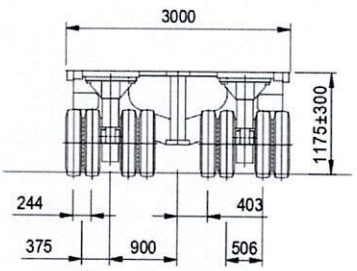
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-11 LOADING (WITH 10+10 AXLE TRAILER UNITS AND TURN TABLE BOLSTER)

CHART NO. C-11



Span / CW type	C' WAY TYPE 1	C' WAY TYPE 2	C' WAY TYPE 3	C' WAY TYPE 4	C' WAY TYPE 5
1. Masonary 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	375 t				
40 m	343 t				
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m					
25 m					384 t
30 m				378 t	374 t
35 m		383 t		374 t	364 t
40 m		374 t		351 t	343 t
7. PSC Cast in Situ Box Girders type bridges					
30 m					
35 m	375 t				
40 m	343 t				
45 m	389 t				
50 m	325 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m				NOT APPLICABLE	
35 m	349 t			NOT APPLICABLE	
40 m	319 t			NOT APPLICABLE	
45 m	315 t			NOT APPLICABLE	
50 m	302 t			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m					
25 m	374 t				
30 m	359 t		354 t		
35 m	311 t				361 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	377 t		364 t		377 t
25 m	361 t		362 t		380 t
30 m	359 t		354 t		373 t
35 m	304 t	370 t	327 t		336 t

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

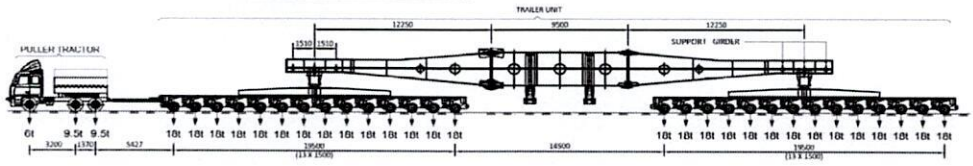
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 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 = (RGVW-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.

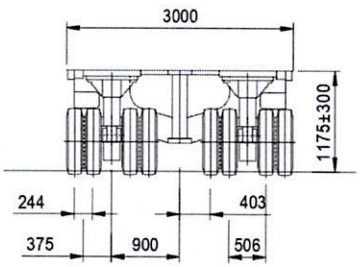
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-12 LOADING (WITH 14+14 AXLE TRAILER UNITS AND GIRDER ARRANGEMENT)

CHART NO. C-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. Masonary 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	508 t				
40 m	480 t				
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m				521 t	511 t
25 m		522 t		518 t	503 t
30 m		517 t		505 t	499 t
35 m		527 t		515 t	502 t
40 m	528.8 t	528 t		496 t	484 t
7. PSC Cast in Situ Box Girders type bridges					
30 m					
35 m					
40 m	510 t				
45 m	494 t				
50 m	492 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m	528 t			NOT APPLICABLE	
35 m	494 t			NOT APPLICABLE	
40 m	474 t			NOT APPLICABLE	
45 m	459 t			NOT APPLICABLE	
50 m	458 t			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m	516 t				
25 m	470 t				518 t
30 m	452 t		477 t		528.95 t
35 m	441 t		319 t		494 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	490 t		472 t		490 t
25 m	454 t	495 t	451 t	522 t	477 t
30 m	447 t	496 t	441 t	517 t	471 t
35 m	424 t	478 t	415 t	500 t	466 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

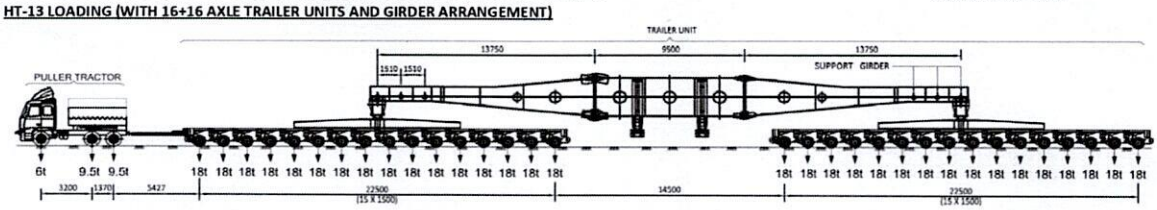
C'WAY TYPE 1 : 2 LANE SINGLE CARRIAGEWAY OR 2 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 2 : 3 LANE SINGLE CARRIAGEWAY OR 3 LANE DUAL CARRIAGEWAY WITH STRUCTURAL DISCONTINUITY
C'WAY TYPE 3 : 4 LANE SINGLE CARRIAGEWAY OR 4 LANE DUAL C' WAY WITH STRUCTURAL DISCONTINUITY OR 2 LANE DUAL 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 :

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 = (RGVW-25) / 28
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.

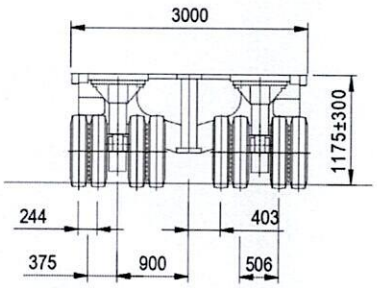
CHART SHOWING ADEQUACY OF SPAN, CARRIAGEWAY WIDTHS & STRUCTURE TYPE FOR HT-13 LOADING (WITH 16+16 AXLE TRAILER UNITS AND GIRDER ARRANGEMENT)

CHART NO. C-13



Span / CW type	C' WAY TYPE 1	C' WAY TYPE 2	C' WAY TYPE 3	C' WAY TYPE 4	C' WAY TYPE 5
1. Masonary 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	546 t				
40 m	517 t	597 t			
6. PSC Precast/Cast in-Situ Beam and Slab bridges - Without Int. X Girder					
20 m				592 t	581 t
25 m		582 t		573 t	562 t
30 m	592 t	573 t		560 t	554 t
35 m	598 t	582 t		570 t	556 t
40 m	570 t	579 t		546 t	532 t
7. PSC Cast in Situ Box Girders type bridges					
30 m	598 t				
35 m	570 t				
40 m	540 t				
45 m	519 t				
50 m	514 t				
8. PSC Precast Segmental Box Girders type bridges - With Wet Joint					
30 m	570 t			NOT APPLICABLE	
35 m	531 t			NOT APPLICABLE	
40 m	502 t			NOT APPLICABLE	
45 m	482 t			NOT APPLICABLE	
50 m	478 t			NOT APPLICABLE	
9. Composite decks with Steel Beams and Concrete slab bridges - With Int. X Girder					
15 m					
20 m	586 t				
25 m	522 t		597 t		578 t
30 m	488 t		530 t		592 t
35 m	474 t		576 t		546 t
10. Composite decks with Steel Beams and Concrete slab bridges - Without Int. X Girder					
15 m					
20 m	556 t		536 t		557 t
25 m	505 t	550 t	502 t	580 t	531 t
30 m	487 t	538 t	480 t	560 t	513 t
35 m	459 t	516 t	448 t	538 t	513 t

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 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 = (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.**

Annexure- II

1	Name of Transporter	
2	Applicant Type	Proprietorship/Partnership/ Registered Company
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.	

Annexure- III

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)	L	W	H
19.	Consignment Weight incl. packing weight, if any) in Tonnes			
20..	Transporter id on ODC Portal			
21.	Copy of a document on the letterhead of the consignee stating above details and duly signed by competent person of the Consignor shall be uploaded.			

Annexure- IV

Application Reference Number
HT type

Puller Tractor Registration No.	System will 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	
Attached copy of insurance	
Modular Hydraulic Trailer Registration Number (separately for each module)	system will 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	
Attachment weight	
Overall Dimensions of MHT combination with Puller Tractor and consignment	L: W : H:
Driver License Number	system will retrieve details from Ministry's SARATHI database based on DL number
Driver Name	
Father's Name	
Driver address	
Expiry date of DL	
Authorised to driver heavy transport vehicle	Yes/No System to verify & display

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	Less than 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
Intermediatory Station	minimum one intermediatory station required for each 100 kms. Of overall journey
Total Journey Distance	kms
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 prior to payment of ODC fee.	

Annexure V

ONLINE SELF DECLARATION

At the time of start of journey

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.

(Notarised affidavit by applicant on Rs. 100 stamp paper shall be uploaded certifying correctness of information provided in the application.)

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

Notarised affidavit by applicant on Rs. 100 Stamp paper shall be uploaded certifying correctness of information provided in the application and undertaking for keeping validity of fitness/license/permit of Puller Tractor, Modular Hydraulic Trailer and Driver shall be ensured till the time consignment reaches the 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.

Within 15 days from the date of completion of journey
I hereby declare that I have completed the journey on dated..... without any damage to Bridge Structure/Road

1. The transporter will check the ODCs/OWCs web portal before actual movement of the OWC/ODC consignment. If any additional bridge has been uploaded in the portal after online permission is granted for the corresponding MHT combination, the transporter shall detour the said bridge on its own arrangement.

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 axle weight for any axle should not be more than 18.0 ton (180.0 kN).

4. The actual programme of movement of the consignment should be intimated to all concerned field officials of MoRT&H/NHAI/NHIDCL by the transporter before start the movement of ODC/OWC. 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 technical personnel of the transporter only and at that time no other vehicle be allowed to ply on the bridge. The bridge/structure shall be inspected by responsible technical personnel of the transporter before and after inspection and any distress/abnormality shall be immediately reported to all concerned field officials of MoRT&H/NHAI/NHIDCL.

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 whether the bridge/structure has single or dual carriageway.

9. The consignment shall be placed in such a way which result uniform distribution of consignment load over MHT axles.

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 when water current is minimum. Special care shall be taken during monsoon season.