



Office of the Chief Engineer (BODHI)  
Water Resources Department,  
Swara Bhawan, behind Kolar Rest House  
Link Road No. 3, Kolar Road Bhopal (M.P.) - 462016  
E-mail:- [eincbodhi@gmail.com](mailto:eincbodhi@gmail.com)

Memo No. / U.S.R./57 part IX/R&C /BODHI

Bhopal, Dated / /2019

**Sub: - Amendment No.8 to the Unified Schedule of Rates for Works of Water Resources Department in Madhya Pradesh in force from 01/09/2017.**

The unified schedule of rates for Water Resources Department in Madhya Pradesh, in force from 01/09/2017 issued and has been uploaded on departmental web site. In continuation to the amendment No.1 (issued vide letter No. 746/ U.S.R./57 part IX/R&C /BODHI Bhopal, Date 17.11.2017, amendment No.2 (issued vide letter No. 781/ U.S.R./57 part IX/R&C /BODHI Bhopal, Date 29.11.2017, amendment No.3 (issued vide letter No. 855/ U.S.R./57 part IX/R&C /BODHI Bhopal, Date 27.12.2017, amendment No.4 (issued vide letter No. 55/ U.S.R./57 part IX/R&C /BODHI Bhopal, Date 29.01.2018, amendment No.5 (issued vide letter No. 623/ U.S.R./57 part IX/R&C /BODHI Bhopal, Date 18.09.2018, amendment No.6 (issued vide letter No. 208/ U.S.R./57 part IX/R&C /BODHI Bhopal, Date 27.04.2019 & amendment No.7 (issued vide letter No. 224/ U.S.R./57 part IX/R&C /BODHI Bhopal, Date 14.05.2019 Following Amendment No. 8 is issued in the above stated unified schedule of rates.

**AMENDMENT NO.8**

**CHAPTER NO.8 GATE AND ALLIED WORKS (HIRING OF MACHINES)**

- (i) **In the instructions (General Note) of chapter-8 point No.5 is replaced and amended as below:-**

**Weight of 1 vertical lift gate excluding embedded parts in tonnes**

$$= 0.1332 \times (L^2 \times H \times h)^{0.659}$$

(L) is length = clear vent width in m+0.50m.

(H) is height of gate in-m = clear vent height in m+0.20m.

(h) is head of water above sill of gate in m = FSL – Sill level

**Weight of 1 radial gate excluding embedded parts in tonnes**

$$= 0.0887 \times (L^2 \times H \times h)^{0.673}$$

(L) is length in m = clear distance between piers.

(H) is total height of gate in m = FRL – Sill level +0.15m.

(h) is head of water above sill of gate in m = FRL – Sill level

**Weight of 1 set of vertical lift crest gate excluding embedded parts in tonnes**

$$= 0.0690 \times (L^2 \times H \times h)^{0.716}$$

(L) is length = clear distance between piers in m+1 m.

(H) is total height of gate in m = FRL – Sill level +0.20m.

(h) is head of water above sill of gate in m = FRL – Sill level

**Weight of 1 set of Stop log elements excluding embedded parts in tonnes**

$$= 0.0578 \times (L^2 \times H \times h)^{0.716}$$

(L) is length = clear distance between piers in m+0.65 m.

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(H) is total height of stop log gate in m = FRL – Sill level +0.20m.

(h) is head of water above sill of gate in m = FRL – Sill level

**Weight of Lifting beam in tonnes =  $[0.02212 \times (L^2 \times H \times h)^{0.716}] / n$**

(L) is length = clear distance between piers in m+0.65 m.

(H) is total height of stop log gate in m = FRL – Sill level +0.20m.

(h) is head of water above sill of gate in m = FRL – Sill level

(n) is number of gate elements in 1 set

**Capacity of screw hoist in tone including 25%reserve capacity =2.50 xWt of gate**

(Hoist capacity shall be rounded off to next 1 tonne) Weight of screw hoist with all accessories : 300kg per tonne capacity of hoist

**Hoist capacity in tone including25% reserve capacity=2.5xweight of gate (Hoist)**

Capacity shall be rounded off to next 5 tonne)

Weight of hoist with all accessories : 250kg per tonne capacity of hoist

**weight of hoist bridge:**

Columns with bracings/Anchors/Stiffeners: 400kg per meter height

Beams with cross beams/stiffeners: 400kg per meter span

Railing/ Chequered plate/Ladder etc. : 10% of wt. of columns/beams

**Weight of trunnion bridge : 300kg per meter length of catwalk**

( Approximate weight - Vertical Axis swing gate is 0.50MT per sqm.)


### Weight of Embedded parts to be taken

Gate Type	Ratio between weight of embedded parts and weight of gate		
	Minimum	Maximum	Mean
Spillway segment (Radial Gate)	0.09	0.21	0.13
Submerged segment	0.15	1.10	0.60
Fixed wheel with $B^2 hH > 200m^4$	0.10	0.50	0.32
Fixed wheel with $B^2 hH < 200m^4$	0.11	0.54	0.30
Spillway stop log	0.04	0.10	0.06
Submerged stop log	0.07	0.36	0.18
Flap gate	0.07	0.78	0.30

8/ AD  
2019

  
(G.P. Sonhi)

Chief Engineer(Bodhi)  
Water Resources Department  
Bhopal (M.P.)

  
(M.S. Dawar)

Engineer-in-Chief  
Water Resources Department  
Bhopal (M.P.)

**Copy forwarded to :-**

1. Personal Secretary to, Hon. Minister, M.P. Water Resources Department, Bhopal.
2. Additional Chief Secretary to Govt. of M.P. Water Resources Department, Bhopal.
3. Additional Chief Secretary to Govt. of M.P. NVDA Bhopal.
4. Engineer in Chief , M.P. Water Resources Department , Bhopal.
5. Engineer in Chief ,P.W.D./P.H.E. Bhopal.
6. Member Engineering, N.V.D.A. New Narmada Bhawan, Bhopal.
7. Director, WALMI, Near Kaliasote Dam Site, Bhopal.
8. The Accountant General (Civil), MP, M.P. Nagar, Bhopal.
9. The Chief Technical Examiner Govt of M.P. Jail Road Bhopal.
10. The Secretary to Lokayukt, Bhopal
11. The Secretary, Betwa River Board, Jhansi (U.P.)/Chambal Control Board, Kota (Rajasthan)/Bansagar Control Board, Rewa(M.P.)/Inter State Control Board, Sitabuldi, Nagpur (Maharashtra).
12. The Secretary ,Major Project Control Board, Bhopal.
13. All Chief Engineer, M.P. Water Resources Department

For necessary action. The copies of the amendment must be circulated at your level to all field officers under jurisdiction.

14. Superintending Engineer (Monitoring), O/O Engineer in Chief , M.P. Water Resources Department , Bhopal.
15. Web Manager, O/o Engineer-in- Chief, Water Resources Department, Bhopal for uploading in departmental web site.

Encl :- As above

  
(G.P.Soni)

Chief Engineer, BODHI  
Water Resources Department  
Bhopal (M.P.)