

**NORTH CENTRAL RAILWAY**

Head quarter's office,  
Engineering Department,  
Allahabad.

No. 355-W/One Time Movement/Multipurpose Tamping Machine/NCR/Bridge, Dt 07.01.13

**CPTM**

**Sub: -One time movement of 01 no. Multi Purpose Machine Model-Unimat Split Head MFI, manufactured by M/s Plasser, India from Kosi Kalan (KSV) – MTJ-AGC-TDL-ETW-CNB section at a maximum speed of 45 kmph when running on its own power as well as when running in train formation as a dead vehicle.**

Based on RDSO provisional speed certificate No. TM/HM/11/30/MFI, dated 15.10.2012, the competent authority (PCE, CME & CEE) has permitted One Time Movement of 01 nos. Multipurpose Tamping Machine Model-Unimat Split Head MFI, manufactured by M/s Plasser, India to South Western Railway over from Kosi Kalan (KSV) –MTJ-AGC-TDL-ETW-CNB section at a maximum speed of 45 kmph when running on its own power as well as when running in train formation as a dead vehicle. Copy of Certificate for One Time Movement, Track and Bridge certificate enclosed.

This is for information, necessary action and to circulate concerning deptt please.

DA: As above

  
 07.01.13  
 (Sachin Verma)  
 Dy CE/Bridge/HQ

Copy to: CE/TMC for kind information and n/a please.

  
 07.01.13

**NORTH CENTRAL RAILWAY  
CERTIFICATE FOR ONE TIME MOVEMENT  
(No 2/Multi Purpose Tamping Machine/NCR/2013)**

Based on RDSO provisional speed Certificate No. TM/HM/11/30/MFI, dated 15.10.2012, certified that **01 nos. Multi Purpose Tamping Machine Model-Unimat Split Head MFI, manufactured by M/s Plasser, India having maximum axle load of 15.75t is safe for ONE TIME MOVEMENT to run at a maximum speed of 45 kmph when running on its own power as well as when running in train formation as a dead vehicle over KSV-MTJ-AGC-AF-JAB-TDL-ETW-CNB Section of North Central Railway, subject to the following conditions:**

- (i) *Observance of all permanent and temporary speed restrictions already in force/or those that may be imposed from time to time on various accounts.*
- (ii) *Observance of all the conditions as stipulated in the RDSO provisional speed certificate No. TM/HM/11/30/MFI, dated 15.10.2012 along with concomitant Track, Bridge and Joint Safety Certificate.*
- (iii) *Speed restriction of 15 kmph shall be imposed on Diamond Crossings as laid down in IRSOD, 2004 when vehicle running on its own power. No. speed restriction on main line route at Points & Crossing is required. Speed restriction on Turn Out side of Points and Crossing (on geometrical consideration and not due to wheel diameter of 730mm/710mm) will be applicable as per provision in IRPWM-2004.*
- (iv) *For the machine when running in train formation, a speed restriction of 15 mkph shall be imposed on Diamond Crossings as laid down in IRSOD, 2004. No speed restriction on main line route at Points & Crossing is required. Speed restriction on Turn Out side of Points and Crossing (on geometrical consideration and not due to wheel diameter of 730mm/710mm) will be applicable as per provision in IRPWM-2004.*
- (v) *Acceleration and de-acceleration of machine should be avoided when negotiating diamond crossings.*
- (vi) *Railway shall ensure the safe operation of the machine in train formation keeping the dimensions in order such as proper height of buffers and couplers and to run within prescribed speed limit of 45 kmph in train formation.*
- (vii) *When the machine is being moved either on its own power or hauled in a train formation, it shall be ensured that all the protruding parts are withdrawn and suitably locked.*

  
Chief Mechanical Engineer

  
Chief Electrical Engineer

  
Principal Chief Engineer

**NORTH CENTRAL RAILWAY  
BRIDGE ENGINEER'S CERTIFICATE**

Based on RDSO's speed certificate No. TM/HM/11/30//MFI dated 15.10.2012, certified that bridges on the sections given below are having minimum strength of super structure as indicated against the sections as per revised Bridge Rules -1964 and are safe for One Time Movement of 01 nos. Multi Purpose Machine Model-Unimat Split Head, when running on its own power as well as when running in train formation as a dead vehicle, up to the maximum speed indicated against the sections, subject to all temporary & permanent speed restrictions already in force and those that may be imposed from time to time.

SN	Section		Line	KM		% Strength	Max. Speed
	From	To		From	To		
1	KSV	AGC	UP	1438.08	1343.27	100% BGML	45 Kmph
2	AGC	IDH	SL	1343.27	1344.72	100% BGML	15 Kmph
3	IDH	AF	SL	1.95	0.00	100% MBG	45 Kmph
4	AF	JAB	SL	1271.12	1269.02	100% BGML	45 Kmph
5	JAB	TDL	SL	1269.02	1248.51	100% RBG	45 Kmph
6	TDL	CNB	DN	1248.51	1019.75	100% RBG	45 Kmph

Sub structure of all the bridges on the sections given above are in satisfactory condition and are safe for One Time Movement of 01 nos. Multi Purpose Machine Model-Unimat Split Head, when running on its own power as well as when running in train formation as a dead vehicle, up to the proposed speeds conforming to the provisions of revised IRS Bridge Sub structure and Foundation code-1985.


This clearance is subject to the following parameters of Multipurpose Tamping Machine –

1.	Maximum axle load	15.75t
2.	Maximum Bracking Force at Rail Level per Axle	0.475t
3.	Maximum Tractive Effort	6.72t
4.	Maximum CG height from Rail Level	1200 mm.

In train formation, the specific restrictions are applicable as mentioned in the relevent speed certificates of hauling single/multiple locomotives issued by R.D.S.O.

  
 04.01.13  
 (Sachin Verma)  
 Dy.CE/Bridge/HQ

**Countersigned**

  
 (B.Chowdhary)  
 Chief Bridge Engineer

## NORTH CENTRAL RAILWAY

### TRACK CERTIFICATE

Certified that track on the following section of North Central Railway, the weakest portion of which as per details given under is to the required strength, which can safely permit for 'One time movement of 01 no. Multipurpose Tamping Machine Model-Unimat Split Head MFI, manufactured by M/s Plasser, India, at a maximum speed of 45 Kmph when running on its own power as well as when running in train formation as a dead vehicle' up to maximum speed as indicated against each section as under, subject to observance of all temporary and permanent speed restrictions in force and/or imposed from time to time on various accounts. All conditions stipulated in RDSO's speed certificate no. TM/HM/11/30/MFI dt. 15.10.2012 for tracks is fulfilled.

Line	Section		Kms		Rails		Sleepers		Ballast cushion (in mm) Total/Clean	Max. speed proposed (kmph)	Max. sectional speed existing in the section (kmph)	
	From	To	From	To	Type	% of wear or year of laying	Type	Year of laying				Density
UP	KSV	AGC	1438.08	1343.27	52Kg,90UTS	2003	PSC-5	84-85	M+7	250/100	45	150
DN	TDL	CNB	1248.51	1019.75	52 Kg,90UTS	2002	PSC-5	1984	M+7	300/100	45	130
SL	TDL	JAB	1248.51	1269.02	52kg,72UTS	1987	PSC-5	1987	M+7	250/200	45	100
SL	JAB	AF	1269.02	1271.12	52kg, 72UTS	1984	PSC-5	1997	M+7	250/100	45	110
SL	AF	IDH	0.00	1.95	52kg, 72UTS	1984	PSC-5	1997	M+7	250/100	45	110
SL	IDH	AGC	1344.72	1343.27	52 kg, 72UTS	1974	PSC-5	1997	M+4	100/0	30	30

Countersigned

(S.N. Agrawal)  
CTE

(S.K. Srivastava)  
Dy.CE/TP