

### 417 NEW WAGON NUMBERING SCHEME

Monitoring and liquidating overage arrears of rolling stock is a focus area in the interest of safety of train operations. However, some of the Railways have reported difficulty in ascertaining the age of wagons where the manufacturer’s plate is missing. Also computerization of wagon data is becoming cumbersome with development of various versions in a category e.g. BG bogie open wagons BOXN, BOXNHS, BOXNAHA, BOXNCR, BOXNHL, BOXNR and BOXNLW are being clubbed together by the computer cell and shown as BOXN in the holding. To overcome the above-mentioned problems and to facilitate computerization of the wagon data base, a new wagon numbering system was introduced by Railway Board as per letter no. 2000/M(N)/60/2/wagon census. Dated 4<sup>th</sup> July, 2003

In the new scheme, the wagon number shall consist of 11 digits as follows:

Type of wagon		Owning Railway		Year of Manufacture		Individual Wagon Number				Check Digit
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11

The codification for various types of wagons, owning railways, year of manufacture and individual wagon no. are as follows:

#### Type of Wagon Codes (C1, C2)

<b>i)</b>	<b>Open Wagon</b>	<b>Code allotted</b>	<b>10 to 29</b>
	BOXN	10	
	BOXNHA	11	
	BOXNHS	12	
	BOXNCR	13	
	BOXNLW	14	
	BOXNB	15	
	BOXNF	16	
	BOXNG	17	
	BOY	18	
	BOST	19	
BOXNAL	20		
BOXN-HL	22		
<b>ii)</b>	<b>Covered Wagon</b>	<b>Code allotted</b>	<b>30 to 39</b>
	BCNA	30	
	BCNAHS	31	
	BCCNR	32	
BCN-HL	33		
<b>iii)</b>	<b>Tank Wagon</b>	<b>Code allotted</b>	<b>40 to 54</b>
	BTPN	40	
	BTPNHS	41	
	BTPGLN	42	
	BTALN	43	
	BTCS	44	
	BTPH	45	
BTAP	46		

<b>iv)</b>	<b>Flat Wagon</b>	<b>Code allotted</b>	<b>55 to 69</b>
	BRNA	55	
	BRNAHS	56	
	BFNS	57	
	BOMN	58	
	BRSTH	59	
	BFAT	60	
	BLCA	61	
	BLCB	62	

<b>v)</b>	<b>Hopper Wagon</b>	<b>Code allotted</b>	<b>70 to 79</b>
	BOBYN	70	
	BOBYNHS	71	
	BOBRN	72	
	BOBRNHS	73	
	BOBRAL	74	

<b>vi)</b>	<b>Well Wagon</b>	<b>Code allotted</b>	<b>80 to 84</b>
	BWTB	<b>80</b>	

<b>vii)</b>	<b>Brake Van</b>	<b>Code allotted</b>	<b>85 to 89</b>
	BVZC	85	
	BVZI	86	

**OWNERSHIP (RAILWAYS') CODES (C3, C4) :**

<b>SNo.</b>	<b>Name of Railways</b>	<b>Numerical codes</b>
1	Central Railway	01
2	Eastern Railway	02
3	Northern Railway	03
4	North East Railway	04
5	Northeast Frontier Railway	05
6	Southern Railway	06
7	South Eastern Railway	07
8	Western Railway	08
9	South Central Railway	09
10	East Central Railway	10
11	North Western Railway	11
12	East coast Railway	12
13	North Central Railway	13
14	South East Central Railway	14
15	South Western Railway	15
16	West Central Railway	16
17	Wagons owned by CONCOR	25
18	Wagons owned by other private parties	26

**YEAR OF MANUFACTURE CODE (C5, C6):**

This will consist of last two digits of the year of manufacture. For example wagon manufacture in 2016 will have code 16.

**INDIVIDUAL WAGON No. (C7, C8, C9, C10):**

This will be running serial number from 0001 to 9999. Numbers 0001 to 0999 will be departmental stock and 1000 to 9999 will be other (traffic) stock. This will be running number irrespective of year. For departmental, after 0999, the number will begin from 0001. For others, after 9999, the number will begin from 1000.

The series will not change with type of wagon. For example on ECR if 1001 is BOXNHS next wagon which may be BCNHS will be 1002.

**CHECK DIGIT\_– Method of calculation**

The CHECK DIGIT for each wagon is calculated using a six-step algorithm based on ten digit wagon number arrived at as indicated below.

<b>Type of wagon</b>		<b>Railway Code</b>		<b>Year of Manufacture</b>		<b>Individual wagon Number</b>				<b>Check Digit</b>
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11

Step – 1 Starting from the left, add all the characters in the even position.  
 $S\ 1 = C2 + C4 + C6 + C8 + C10$

Step – 2 Multiply the sum by 3 to get 3. S1

Step – 3 Starting from the left, add all the characters in the odd position.  
 $S\ 2 = C1 + C3 + C5 + C7 + C9$

Step – 4 Add the sum of step 2 to the sum of step 3 to get  $S4 = 3S\ 1 + S2$

Step – 5 Round this total up to the next multiple of 10

Step – 6 The check digit is the number required to be added to round up to the next multiple of 10.

**\* NOTE:** *If the total in S4 is already of 10, then the check digit is 0.*

