

CLASSIFICATION & NOMENCLATURE OF COACHING STOCK

ROLLING STOCK

Rolling stock comprises all the vehicles that move on a railway. It usually includes both powered and unpowered vehicles, for example locomotives, railroad cars, coaches and wagons. However, in some countries (like UK), the term is usually used to refer only to non-powered vehicles; specifically excluding locomotives which may be referred to as *running stock*, *traction* or *motive power*.

CLASSIFICATION OF ROLLING STOCK

Rolling stock are classified into following two groups, according to the availability of power source to move on the track

SELF-PROPELLED VEHICLE: These are railway vehicles that do not require a separate power source to move over the railway track. For example- Locomotives, Rail Cars, Electrical multiple Units (EMUs), Diesel Multiple units (DMUs) Diesel Breakdown Cranes, Motor trolleys etc.

NON SELF-PROPELLED VEHICLE: These are railway vehicles that need a separate power source like locomotives to move over the railway track. For example- **Coaching Stock and Freight Stock**

FUNCTION OF ROLLING STOCK

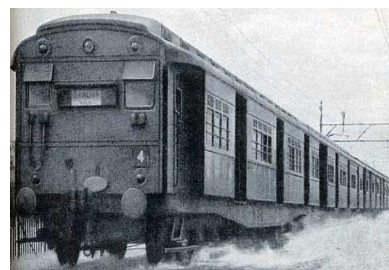
- ❖ Locomotives: These are source of power used to haul a train, a coach or a wagon etc.
- ❖ Coaching stock: Coaching stocks are used for transporting passengers.
- ❖ Freight Stock: Freight Stocks (Wagon) are used mainly for transporting goods and live stocks etc.
- ❖ Diesel/ Steam Break down Crane: These are rail mobile cranes used in case of railway accident for lifting loads, derailed wagon or coaches. Diesel/ Steam Break down Crane are part of accident relief trains which are used for rescue & restoration operation.
- ❖ Motor trolleys: These are used for inspection of railway track by staff of engineering department.

COACHING STOCK

The coaching stock comprises all the vehicles in which passengers move, including self-propelled vehicles such as rail cars, electrical multiple units, goods wagons intended for coaching traffic etc.

CLASSIFICATION OF COACHING STOCK (According To Design & Construction)

- ❖ IRS Coach (wooden body)
 - First generations coaches
 - Fully from Timber
 - Serious consequences in accidents
- ❖ **MAN-HAL (BEML) Coaches**
1948- 50 Hindustan Air Crafts Ltd. Bangalore
Started manufacturing Steel bodied coaches at BEML Bangalore.
- ❖ **SCHELERENE Coaches**
In the year 1955 ICF Was Set in Collaboration with Swiss Car & Elevator Manufacturing Corporation, Zurich, Switzerland for integral design.
 - Fabricated bogie Coil primary springs
 - Laminated secondary springs
 - Speed potential of 96 km/h
- ❖ **ICF All coil bogie coaches**
 - Secondary suspension modified to Coil springs
 - Side bearers to transfer body weight in place of centre pivot
 - 16t bogie for AC coaches
 - Adoption of Air brakes
 - Bogie mounted air brake system
 - Composition brake blocks in place of Cast Iron
 - Speed potential 110 Kmph.
- ❖ RCF set up at Kapurthala to make coaches to ICF design.
Variants developed like:
AC self-generating and End-on-generating
2-tier AC, AC chair cars, 3-tier AC



❖ **LHB Coach (Linke Hoffman Busch)**

- Stainless Steel Body
- Fitted with FIAT Bogie
- Improved Ride Index
- Disc Brake with WSP device
- CDTS in lavatories
- Tight-lock CBC
- Speed potential 160 Kmph

❖ **HYBRID Coaches**

- Duronto Coach
- Stainless Steel Body
- ICF Bogie With Air Spring in secondary suspension
- Speed potential 120 Kmph

❖ **DOUBLE Decker Coaches**

- Hybrid design Coaches
- Two Stake Sitting arrangement
- Reduction in floor height in between bogies.
- Chair cars.
- Howrah-Dhanbad Double Decker Express.

❖ **EMU/DEMU Coaches**

- Operated as multiple unit (1 unit consists of 4 coaches)
- Mostly used for passenger trains in suburban sections
- ICF designed coach with Air Spring in secondary suspension
- Fitted with SCHAKU Coupler.
- Having Electro-pneumatic Brake system.
- Provided with separate VENDOR Compartment.

❖ **According To Speed Potential**

- High speed coaches (above 110 KMPH)
- Non- High speed coaches (less than 110 KMPH)

❖ **According To Class Of Accommodation**

F : 1st class vehicle

S : 2nd class vehicle with 2 or 3 tier

T : Third Class (obsolete)

CZ : Chair cars

Y : Ladies compartment

D : Disabled Compartment

L : Luggage vans

M : Military

CN : 3-tier sleeper coach

CW : 2-tier sleeper coach

CZ : Chair car

CB : Pantry/kitchen car/buffet car

CT : Tourist car (first class) (includes bathrooms, kitchen, and sitting and sleeping compartments)

CTS : Tourist car (second class) (includes bathrooms, kitchen, and sitting and sleeping compartments)

C : (except as above) With Coupe

D : Double-decker

AC : Air-conditioned

❖ **UTILIZATION**

L : Luggage van or luggage cubicle (suburban: motorman's cabin + luggage space)

R : Brake van / guard van

RA : Inspection carriage (administrative)

RB : Inspection carriage (divisional officers), also Rail Bus

D : (suburban) Motorman's cabin (EMU/DMU)

EN : Power supplied by end-on generator



❖ **PARCEL VANS**

VP : Parcel van (8-wheeled)
VPH : High-capacity parcel van
VPAC : Air-cooled parcel van
VPU : Parcel van / motor car carrier composite (old, 8-wheeled)
VF : Fruit van
VE : Fish van
VR : Refrigerated parcel / fish van
VV : Milk van



❖ **POSTAL FACILITY**

PP : Postal Car (RMS/mail van)
PPS : Full postal van
PPT : Three-quarter postal van
PPH : Half postal van
PPQ : Quarter postal van



❖ **PREFIXES/SUFFIXES**

W : (prefix) Vestibuled
Y : (prefix) Suburban
Y : (Suffix) Ladies
G : Self-generating
E : 4-wheeled stock
L : (prefix) LHB coaches
D : (Suffix) Disabled



❖ **TRANSPORTATION CODES OF COACHES**

FC First-class coupe coach
FAC (WGFAC) First-class air-conditioned coach
GS Second-class coach (self-generating), non-vestibuled
WGS Vestibuled second-class coach (self-generating)
WGSCN Vestibuled self-generating second-class 3-tier sleeper
WGSCZ - Vestibuled self-generating second-class chair-car (used on InterCity Express trains)
WGACCN - Vestibuled self-generating air-conditioned 3-tier sleeper
WGACCNW (Proposed) - BG 2-tier / 3-tier AC composite
LACCN/EOG - LHB AC 3-tier sleeper, non-self-generating
LACCW/EOG - LHB AC 2-tier sleeper, non-self-generating
LACCW/SG - LHB AC 2-tier sleeper, self-generating
LFAC - LHB AC First Class
WGACCW- AC 2-tier Sleeper
WGACCZ- AC Chair Car
LACCB - LHB AC Pantry Car
SLR - Second-class Luggage/parcel van + guard van
YF - Suburban first-class
YFYS- Suburban first-class and second-class composite coach
SRRM - Second-class with brake van and generator
WCB, WGCB - Kitchen / pantry / buffet cars
VPU- Older motor-cum-parcel vans (could carry 2 automobiles, with end ramps for loading/unloading).
VPH - High-capacity parcel van (23t, 130km/h).
ERA - 4-wheeler inspection carriage
RU - 8-wheeler (bogie stock) OHE inspection cars

❖ **CAPACITIES OF COACHES**

- 3-tier sleeper coach -72
- Air-conditioned 2-tier sleeper coaches - 46 berths
- LHB 2-tier AC coaches - 54 berths
- AC 3-tier sleeper coaches - 64 berths
- LHB AC 3-tier coaches accommodate - 75
- Jan Shatabdi AC Chair Cars accommodate 73 passengers

- Newer version of the AC-3T coach - 81 passengers.
- First-class or AC chair cars - 64 seats
- Second-class chair cars - 72 seats
- Jan Shatabdi chair cars have a capacity of 103.
- The combination first and second class AC coaches (AC1 cum AC2T, also marked 'HA' in accommodation charts) have 10 berths, two cabins and a coupe in first class,

HOW ARE COACHES NUMBERED BY IR

Coaches usually have a 4-, 5-, or 6-digit number, where the first two digits denote the year of construction. In some cases the first two digits may represent the year the coach was transferred to the zonal railway, and sometimes the year represented is the year the coach was rebuilt.

'ER 01252 AB' - WGSCN coach

'ER' indicates a coach belongs to / maintained by Eastern Railway .

001-025 : AC first class. On NER, some MG FC coaches from 2000/2001.

026-050 : Composite 1AC + AC-2T

051-100 : AC-2T

101-150 : AC-3T

151-200 : CC (AC Chair Car)

201-400 : SL (2nd class sleeper)

401-600 : GS (General 2nd class)

601-700 : 2S (2nd class sitting / Jan Shatabdi chair cars)

701-800 : SLR

801+ : Pantry car, VPU, RMS mail coach, generator car, etc.

If there are more coaches of a particular type than numbers available in the allotted range as described above, the excess coaches are allotted numbers in the high 800's, usually 875 and above

Sleeper coaches have been spotted marked SR 96886A, and AC-3T coaches spotted marked SC 97906A.

OLD COACH DESIGNATIONS

S-1, S-2, etc., are usually the sleeper coaches on overnight trains, but can also indicate sitting-only coaches in day trains on SER, ECoR, NR, ER, some SR.

SC-1, SC-2, etc., are second-class sitting-only coaches (WR, CR, etc.).

A-1, A-2, etc., are the AC 2-tier coaches.

H-1, H-2, etc., are the AC first class coaches.

HA-1, HA-2, etc., are the composite 1AC/2AC coaches.

AS-1, AS-2, etc., are the AC 3-tier coaches (except Garib Rath).

FC (sometimes just F) is used for first-class

G is used for the Garib Rath AC 3-tier coaches.

GC-1, etc. is used for coaches of Garib Rath chair cars

FS-1 is the rare first-class / sleeper composite

CC (less common) and C is used for chair car coaches. AC Chair car coaches are most often marked C-1, C-2, etc.

EC is used for executive chair car coaches.

(OLD) SS-1, SS-2, etc., were used for second-class sitting coaches.

GS and sometimes (rarely) GEN are used for unreserved second-class accommodation.

UR-1, UR-2, etc., are also used for unreserved second-class accommodation.

ES-1, ES-2, ..., are sometimes occasionally seen for what seem to be ordinary sleeper coaches -- probably stands for 'Extra' sleeper coaches provided to accommodate rush travel periods.

EX-1 : Also sometimes used for extra coaches attached to trains to clear rush traffic.

NEW COACH DESIGNATIONS (2007)

Sleeper coaches' designations are unchanged: S-1, S-2, etc.

1st AC coaches' designations are unchanged: H-1, H-2, etc.

AC 2-tier coaches' designations are unchanged: A-1, A-2, etc.

First class coaches' designations unchanged: FC or F.

AC Chair Car coaches' designations unchanged: C-1, C-2, etc.

B-1, B-2, etc. : AC 3-tier (formerly AS-1, etc.)

D-1, etc. : Second-class sitting (formerly S-1, or SC-1, etc.)

E-1, etc. : Executive class (formerly EC-1, etc.).

J-1, etc. : Garib Rath chair car (formerly GC-1, etc.)

Garib Rath AC 3-tier coaches' designation is unchanged (G-1, etc.).