

## 2.7 YARDS

A **rail yard**, **railway yard**, or **railroad yard** is a complex series of railroad tracks for storing, sorting, or loading and unloading railroad cars and locomotives. Railroad yards have many tracks in parallel for keeping rolling stock or unused locomotives stored off the mainline, so that they do not obstruct the flow of traffic. Railroad cars are moved around by specially designed yard switchers, a type of locomotive. Cars in a railroad yard may be sorted by numerous categories, including railway company, loaded or unloaded, destination, car type, or whether they need repairs. Railroad yards are normally built where there is a need to store cars while they are not being loaded or unloaded, or are waiting to be assembled into trains. Large yards may have a tower to control operations.

### TYPES OF RAILWAY YARDS

The system of tracks laid usually on a fairly level ground for receiving, storing, sorting, making up trains and dispatch of vehicles, is known as railway yards.

The railway yards are broadly classified as under

1. Passenger yards
2. Goods yards
3. Marshalling yards
4. Locomotive yards

#### 1. PASSENGER YARDS

The main function of passenger yards is to provide facilities for the safe movement of passengers and passenger bogies. Passenger platforms are used as passenger yards. At the terminal stations and station junctions, separate sidings are provided to accommodate passenger trains during their idle period and also for washing, cleaning and storing the vehicles.

## 2. GOODS YARDS

The yards which are provided for receiving, loading and unloading the goods and for the movement of goods vehicles, are called goods yards. Goods platforms are treated as goods yards. Separate goods siding are generally provided for storing and delivery of goods at important stations. Goods sidings are so located and designed that goods trains can be placed and wagons attached from up and down directions with equal facility.

## 3. MARSHALLING YARDS

The arrangement made with an elaborate set of sidings for sorting of wagons at important stations according to traffic requirements, is called marshalling yard. Goods trains are marshaled so that wagons are placed in the order of the stations at which these are to be detached. Marshalling yards are provided only at important junction stations which act as distributing centre for various destinations. The functions of a marshalling yard can be compared with those of the heart in a human body. The important functions of a marshalling yard are: reception, sorting and departure.

For efficient working of a marshalling yard, the following points must be considered.

1. The marshalling yard should be so located that shunting operations do not disturb the time table of the regular trains.
2. The design of marshalling yards should be such that maximum number of wagons, may be sorted and dispatched in given period.
3. While designing a marshalling yards, its future extension for increased goods traffic, should be kept in mind.
4. The marshalling yards should be so designed that wagons move in one direction only to avoid uneconomic and delay.
5. The marshalling yards should preferably kept parallel to the running lines.
6. Marshalling yards should be properly lighted.

7. Transship platforms for the exchange of goods, should be provided on one or more siding of the marshalling yards.

#### 4. LOCOMOTIVE YARDS

The yards in which locomotives are housed for servicing and also for coaling, watering, repairing, oiling, cleaning etc are called locomotive yards. Loco yards are generally constructed on the same sides as the marshalling yard.

The essential requirements of an ideal loco yard are:

1. The line from traffic yard to turn table should be clear.
2. An extra emergency entrance from the traffic yard should be provided for emergency cases.
3. The turn table should be located at one of its remotest corner so that it does not obstruct the movement of engines from the yard.
4. Sufficient number of sidings should be provided to accommodate the maximum number of engines at the same time.
5. An easy access to sick siding should be provided from the loco yard.
6. The overhead tank should be near the loco yard.
7. Sufficient space required for the yard for further expansion, should be provided if need arises.