

22. Definition Of Scrap :

Scrap can be defined as the material, which is no longer useful to the Railways for the purpose for which it was originally purchased or obtained. Scrap also consist of arisings of waste material from manufacturing and repairing processes such as turnings and borings, sweepings, foundry dross, off cuts of metals, waste paper, weeded out records, used tickets, wooden pieces and saw dust etc.

Types of Scrap : Scrap is a class by itself, and should be distinguished from surplus stores, and can be divided in two categories viz. :

(a) Ordinary scrap : These are the items, which have regular demands as raw material in the Railway Workshops such as cast iron, non-ferrous materials which are used for manufacturing various components of Rolling stock.

(b) Surplus Scrap : These are items which are not required by the Railways for their own use and are invariably disposed off by auction sale or other means. Even new or second hand material that is usable, may come in this category of scrap, if it is useless for the Railways. All surplus scrap is almost always `dead surplus`.

Reasons For Arisings Of Scrap : The various reasons for arising of scrap are :

(a) By use, various components are worn out to such a condition that they can't be reconditioned economically or are beyond repair.

(b) In a manufacturing process some wastages are unavoidable and therefore some quantity of scrap material is generally generated

Sources Of Scrap : As explained above Scrap is a normal natural arising in any manufacturing or maintenance activity. The annual arisings of ferrous scrap on the Indian Railways and Production Units come to around 6/7 lacks tonnes.

○ **The major sources of arisings are :**

(a) Railway workshops under Mechanical Engineering, Civil Engineering Electrical Engineering, Signal

&Telecommunication Engineering Department, Printing Presses etc.

(b) Condemned Rolling stock such as wagons, coaches, locomotives, boilers, etc. These are kept at nominated central locations or kept with different Chief/Head train examiners Carriage Foremen, Loco Foremen in the Divisions.

(c) Scrap permanent way materials such as released condemned Rails, Tie bars, M.S.& C.I. Sleepers, track fittings, Points & Crossings, etc.

(d) Scrap building material such as off-cuts of bars and rounds, structures, pipe and pipe fittings which arise with the Inspector of Works of various divisions, administrative offices and Railway colonies.

(e) Inactive/surplus items being declared as scrap by Survey Committees.

Scrap Schedule : All Railways maintain a detailed and unified schedule of scrap items under Group 98 and PL Nos. have been allotted to each item of scrap. The schedule has been prepared keeping in view the ultimate use of material in the market.

- **Some of the important sub-groups of group 98 in which scrap items have been classified are :**

Group no.	Description
01	Industrial scrap
03	Re-Rollable scrap
05	Melting scrap
08	Cast iron
11	Condemned Rolling stock
20	Bronze scrap
21	Copper scrap
23	Other non-ferrous scrap
32	Scrap machinery

Receipt Of Scrap :

Location And Layout Of Scrap Yard : The location of scrap yards is determined largely on consideration of freight charges, space availability and proximity to the market for disposal. Arrangements should be made to see that double handling is avoided, as far as possible.

- For facilitating expeditious disposal of scrap, system of twin yards should be followed where the receipt and delivery of scrap lots is regulated from different work areas and the chance of sold lots getting mixed up with fresh receipts is also eliminated to large extent. An extension of this may be 'Three yards' in which one yards is used for receiving scrap (say first four months), second yard for making lots and third yard for disposal of surveyed lots, as per classification in Scrap schedule.

The lay out of a scrap Yard may provide the following :

i) Central Sorting Yard : For receipt of mixed scrap and sorting them to make separate lots for ultimate disposal.

ii) Reclamation Section : Reclamation Section should be set up for salvaging such items of scrap that may be modified into other useful items. This section will pay huge dividends if it is properly worked.

iii) Yards (twin yard) : For Storage and Disposals, Bins in each of the twin yards for 'Lot' formation and storage of each particular item of scrap.

iv) Godowns : For Valuable scrap Materials, with bins & proper security arrangements for storage of non-ferrous metals, alloy sheet etc.

v) Facilities : Office, parking place for trucks, roads, adequate yard lighting, basic security (like boundary wall etc.), weigh bridge, beam scale.

Before sending materials other than waste materials, they have to be first declared unserviceable by the competent authority. For most of the materials Branch officers of the technical departments are competent to classify the materials as unserviceable.

- **All scrap/unserviceable materials are sent by different workshops and various subordinates in the field along with Advice Note for returned stores (form S-1539).**
- **Scrap materials are directly received in the scrap yard where they are weighed / measured / counted and then segregated / sorted. If twin yard system is being followed, then, all fresh receipts are received in the yard from which deliveries of sold materials are not being given at present.**
- **In any case it is to be ensured that there is no possibility of mix-up of fresh arisings with the materials already sold.**