

INVENTORY CONTROL

INVENTORY: Inventory means various items of Stores kept in Stock for future requirements.

It may be from raw materials to processed items including spare parts.

Inventory management is the branch of business management concerned with the planning and control of inventories.

Turn Over Ratio (TOR): = Closing Balance/ Total issue during the year to the users or Consignee or Consignees.

Closing Balance is the balance on hand on 31st March on every financial year.

On 1st April Closing Balance will be the Opening Balance for next financial year or ensuing year.

Closing Balance of the present year= (Opening Balance of that year on 1st April + Receipt during the year up to 31st March) - Issued during the year to the users or Consignee.

Consignee: The person to whom merchandise is delivered over.

Consignee Code: It is allotted to all the Consignees of a spending unit.
It consists of five digits.

There are three types of Analysis used in Indian Railway for Inventory Control. They are a) ABC Analysis, b) VED Analysis and FSN Analysis.

ABC Analysis: Always Better Control system commonly referred to as **ABC Analysis.**

In that Analysis, “A” stands for always control, “B” stands for Better control and “C” for Control control or Ordinary control.

It is an Inventory Control method based upon a Statistical Principle discovered by an Italian Economist, Vilfredo Pareto in the 19th Century. It is an analytical technique which gives the greatest result to the Management with minimum efforts.

This analysis is based upon the Annual Consumption. During this analysis, it is considered that the items issued from Stores are consumed by the consumers during the year.

Mechanism of ABC Analysis:

- Money value is the total value on which it is calculated. It is assumed that 100 lakh is the total value of all items then 70% i.e. 70 lakh is under “A” category, 20 % and 10 % for “B” and “C” category respectively.
- Annual quantity usage of each item is determined for money value calculated.
- Multiplication of annual quantity usage of each item and cost per unit is done for finding out the total value in terms of total Annual usage of each item.
- Percentage calculation is done for each item with respect to total value.
- A list is made according to descending order by percentage of aggregate usage.
- Reviewed annual usage distribution and classified the items as A, B, or C.

• ABC Analysis in the tabulated form is given below:

Sl. No.	Category	Monetary Ceiling	Monitoring Authority	Frequency of Monitoring	% of Total Item	% of Total Value
1.	“A”	Rs. 32 lakhs	PCMM Personally	Monthly	10	70
2.	“B”	Above Rs. 8lakhs but below Rs. 32 lakhs	CMM Personally	Once in every 6 Months	20	20
3.	“C”	Below Rs. 8lakhs	SMM Personally	Once in every 12 Months	70	10

VED Analysis:

In that analysis “V” stands for Vital, “E” stands for Essential and “D” stands for Desirable.

VED Analysis is based upon the utility or importance on which the performance of the system depends or simply on criticality of the item.

VED Analysis is a device utilized to measure service level and to avoid **Stock Out Cost**.

➤ **Vital Items:**

These are the items without which the equipment stops working and there is no time left for correction and also for procurement.

Examples: Transformers, Wheels, Bogie, Pantograph, CBC (Centre Buffer Coupling), Buffer, Crank shaft etc.

➤ **Essential Items:**

These are the items without which the equipment may work but with less efficiency and there is time left for corrective action.

Examples: Grease, Lubricating oils, OH (Over Hauling) kits of valves etc.

➤ **Desirable Items:**

These are the items without which the equipment may work with much more efficiency than essential items.

Examples: Passenger amenities items in coaches, Paints for painting purpose etc.

FSN (Fast, Slow & Non Moving) Analysis:

FSN Analysis is another method of inventory control besides ABC & VED Analysis under which the materials are analyzed with reference to the speed of consumption of the materials, frequency of demands and their utility.

Under this system materials stocked in Depots are classified into three broad categories viz. Fast Moving, Slow Moving and Non Moving items.

➤ **Fast Moving Items:**

These are the items which are issued / consumed repeatedly, continuously, rapidly and also require frequent **recouplement** to meet the demands of the Indentors.

Examples: FIP (Fuel Injection Pump), Circuit breakers, OH kits for brake valves, Brake Blocks, Carbon Brush etc.

➤ **Slow Moving Items:**

These are the items which are occasionally utilized but essential and issued at less frequency when demand arises.

By this classification it should be ensured that there should be no accumulation of items and also no blocking of capital for prolonged periods which affects the fund provisions.

Examples: FIP supporting Covers, Crank Case Covers, Supporting Clamps, Electrical cables for loco purpose etc.

➤ **Non Moving Items:**

These are the items which have not been issued for the periods of 24 months but are **anticipated** to be used in near future or items which are not likely to be utilized for further period exceeding 24 months and are classified as Dead Surplus.

By this classification it should be ensured that there should be no accumulation of items and also no blocking of capital for prolonged periods which affects the fund provisions.

Examples: All obsolete or may become obsolete items are the examples of those items. This may arise due to modification or technology up gradation etc.
