# Materials management flashcard



[pic] INTRODUCTION Materials are an important determinant of the total cost of production, as it constitutes around 50% to 60% of total cost. Materials as our input in production system are receiving attention of the industrialists from 1900 onwards. Since the beginning of 20th century, materials have been occupying a place of importance among the M's of Materials, Money, Man, Machine and this will continue to be so in the years to come. Materials management is one of the areas covered by the whole process of management.

The effective use of all manpower is looked after by the personnel management. But for a balanced growth and efficient running of the enterprise, it is necessary that materials cost, materials supply and materials utilization are so controlled that they lead to ? The maximization of production, ? The reduction in the cost of production and distribution, ? The maximization of the margin of profit. Materials management helps in reduction materials cost, preventing a large amount of capital being locked up for a longer period and improving the capital turnover ratio.

Materials management today is a distinct area of industrial management and plays a vital role in production and productivity. This concept aims at cost reduction, as a result of integrated approach towards the management of materials at all stages viz. , planning, purchasing, receiving, stocking and disposal. Materials management is concerned with the planning and programming of materials and equipments, market research for purchase, pre-design value analysis, procurement of all materials including capital goods, raw materials, components and assembles, finished material, packaging and packing of material, inventory control etc.

Materials management is a body of knowledge which helps the manger to improve the productivity of capital by reducing materials costs, preventing large amounts of capital being locked up for long periods and improving the CTR (capital turn over ratio). Materials management involves number of issues like the ? Determination of quantity and quality ? Purchasing ? Store issuing and dispatching etc. EVOLUTION OF MATERIALS MANAGEMENT The materials management concept began to be used only from 1940's.

Earlier to this, the activities were known as purchasing, inventory control and store keeping, each independent of the other. The Indian Institute of Materials Management (formerly Indian association of materials management) was founded in 1967. Over the year it has grown in status and is now a charter member of the International Federation of Purchasing and Materials Management (IFPMM). Materials management is more confined to manufacturing sector to service sector. This is for the simple economic reason, because every manufacturer is a converter of raw materials into finished products.

The concept of materials management is losing its significance's as the manufacturing sectors itself is receding in importance paving way for service sector. This is particularly true in rich economies like the U. S. A. The picture in our country is different our economy has moved from primary sector towards secondary sector. It may be a few decades hence our economy will shift form secondary to tertiary sector. As long as industrial sector is predominant, materials management will continue to receive the attention of planners, executives and academicians. MATERIALS MANAGEMENT DEFINITIONS:

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Bailey and Farmer define materials management as " the management of the flow of materials into an Organization to the point where those materials are converted into the firm's end product. " According to Ammer, materials management is " the process by which an Organization is supplied with goods and services that it needs to achieve its objectives. The materials management begins with the suppliers and ends when the material is either consumed or incorporated to some product. The executives who are engaged in materials management are concerned with 3 basic activities, buying, storage and materials and movement.

Lee and Dobler defines materials management " as a confederacy of traditional materials activities bound by common idea-the idea of and integrated management approach to planning, acquisition, conversion, flow and distribution of production materials form the raw materials state to the finished product state. " In short we can say that materials management refers to the " movement of production materials form the stage of their acquisition to the stage of their consumption. " BASIC CONCEPTS: Materials management aims at optimum stock level.

Materials manager aims at supporting a higher level of production or service with the same stock level, or supporting the same level of production or service with a lower stock level. Higher level of the stock results in higher carrying cost while lower stock level carries with it the risk of stock out position, involving shortage costs. A materials manager trades off between the two. There are five types of cost which are relevant for materials management: a) Purchasing cost: purchase cost consists of price paid to the

ample Page

suppliers and all expenses for bringing the materials to stores including freight insurance and transportation cost.

In case of MODVAT credit (under central excise law) is deducted from the price paid to the supplier. b) Ordering cost: this includes expenses incurred on requisition, preparing purchase order, following up with suppliers for early delivery, transportation, receiving supplies and placing the same in stores. c) Carrying cost: This includes opportunity cost of funds locked up in stock, storage cost, expenses on handling, insurance, rent and rates and losses due to obsolescence, opportunity cost in this context refers to contribution form alternative use of the fund which the firm has foregone by investing the same in stock.) Stock-out cost (shortage cost): When stock fails short of demand, it results in higher cost involved in crash procurement less efficient and uneconomic production schedule, customer dissatisfaction and loss of sales. (e) Quality cost: The quality of a product or services is its conformances with predetermined standards. Cost of quality can be classified into: ? Prevention costs, which are incurred to avoid the purchase of, best guality materials. ? Appraisal costs which are incurred to detect subquality materials. Internal failure costs which arise when defects are detected before shipment of products to customers. ? External failure costs which occur when defects are defected after shipment. REASONS FOR POPULARITY OF MATERIALS: Materials occupy a significant place among the M's of an industrial enterprise because of the following reasons: ? The amount spent on materials is higher than other inputs ? Materials offer considerable scope for reducing cost and improving profit. ? Improving return on investment depends on effect utilization of materials. ? Materials add

value to product. Quality of end product depends on materials. ? Materials management assumes responsibility for whatever happens in purchasing, storing, inventory or any other area connected with materials. ? Need for preservation of scarce resources for posterity. ? Increasing demand for ensuring environmental safety. ? The efficiency of any organization depends upon the availability of right materials, in right quantity, at right time and at right place. ? Materials are the lifeblood of man's development. OBJECTIVES OF MATERIALS MANAGEMENT: The objectives of materials management are classified into 2 namely: ) Primary objectives 2) Secondary objectives If the contribution is direct, the objectives may be called primary, if the contribution is indirect (materials department assisting some other department). The objectives may be called secondary. (Primary or secondary, the main focus of materials management is to procure right materials in right quality, of right quantity at right time bought from right sources and at right prices. Primary objectives: The primary objectives are as follows: • Low prices: This objective is important for all purchases of materials and services, including transportation.

If the purchasing department reduces the prices of the items it buys, operating costs are reduced and profits are enhanced. • Low cost acquisition and possession: acquisition and possession costs are low when he receiving and stores departments operate efficiently. They are also reduced when shipments are received in relatively large quantities. • Consistency of quality: Quality of end depends on the materials that go into it. When materials purchased are homogeneous and in a primitive stage quality is rarely a problem for purchasing personnel.

When a variety of items of different qualities are needed and meeting rigid specifications becomes a challenge to suppliers, quality may become the single most important objective. • Favorable supplier relations: the materials manager is often with the problem of last minute cancellation of existing commitments because of sudden shift in the demand for materials cooperative suppliers can do much to help he managers solve such problems. • High inventory turnover: when inventories are low in relation to sales, less capital is tied up in inventories.

Also storage and carrying costs of inventories are lower when turnover is high. Secondary objectives: The secondary objectives are as follows: • Reciprocal relations: When a company deliberately buys as much as possible from its own customers, it is said to practice reciprocity, the purchasing manager must impress upon the marketing manager that the reciprocal relationship with the customer is in the best interest of the company. • Economic make or buy: Committees consisting of department heads generally make or buy decisions.

The purchasing manager should spot the need for a make or buy decisions and refers it to the committee for action. • Forecasts: This is one of the most important secondary objectives. In order to manage materials better," some conception of the future outlook for prices, costs and generally business is necessary. " • Interdepartmental harmony: Materials managers are aware of the need for good interdepartmental relations. To prevent disputes, they are careful to define departmental responsibilities clearly and also try to familiarize others with materials directives, policies and organizations. Conclusion:

To conclude we can say that primary or secondary, the main focus of materials management is to procure right materials in right quality of right quantity at right bought form right source and at right prices. MATERIAL COST: Material cost should include all incidental expenses incurred on placing the material in stores or at any other location as indicated in purchase requisition. The following items need special consideration: 1) MODAT: The scheme of Modified Values Added Tax allows relief to a manufacturer of a dutiable product on the duty element borne by him in respect of the raw materials (inputs) used by him.

The scheme entitles a manufacturer (except small-scale industrial units which are availing total exemption from the payment of excise duty) to take instant credit to central excise duty paid on the inputs. The scheme however does not cover some specified items. In case a particular item is covered under MODAT, excise duty paid on it should be deducted from the invoice price. 2) Customs Duty: In case of imported items, customs duty should form a part of material cost. 3) Trade Discount: This is a reduction given by a supplier to a retailer who is going to re-sell the material.) Quantity Discount: This is an allowance offered by the supplier to encourage bulk purchase. 5) Cash Discount: This is an allowance offered by the supplier for payment within a stipulated period. 6) Incidental expenses: It includes transport and storage charges, transit insurance, port clearance charges in case of imported materials etc. MATERIALS MANAGEMENT INVOLVES: i. Purchase of materials (purchasing function) ii. Receipt, storage and issue of materials (stores functions) iii. Inventory control iv. Purchasing policies v. Material handling i. PURCHASING FUNCTION Objectives and responsibilities:

The most important purchasing objectives is to ensure continuity of supplies at the lowest cost commensurate with acceptable standards of quality and delivery. It is the responsibility of purchase department to procure right type of material in the right quantity and at the right price and to provide the materials at the time and right place. Thus, the purchase department's responsibilities include: ? To know the exact specification of materials which are used in the organization ? To know the sources of such materials. ? To continuously have market information on the new sources ?

To continuously develop new sources of supply and to maintain an updated vendor list with vendor rating ii. STORES FUNCTION: Stores location and layout: The following factors should be considered while deciding the location and layout of stores: a) Stores should be closer to receiving sections. b) Bulky materials should be stored as close to the user department as possible. c) Location should be such as to facilitate easy access to production department. d) Special arrangement should be made for items affected by atmospheric conditions. RESPONSIBILITIES OF A STOREKEEPER:

The following are the responsibilities of storekeeper: a) To maintain stores in a tidy manner. b) To prevent entry of unauthorized persons. c) To maintain up to date records of receipt issue and balance of each item of material. d) To accept materials after proper verification of documents. e) To periodically reconcile bin-card balance with physical balances. f) To ensure good turnover of stock g) To issue materials against ' material requisition note' signed by an authorized official. DOCUMENTS USED IN STORES: 1. Material requisition note 2. Material transfer note 3. Material return note 4.

Page 10

Bin card 5. stores material control record 6. Stores ledger 7. Bill of material iii. INVENTORY CONTROL: Inventory management refers to the planning, organizing and controlling activities to ensure that stocks are kept at levels, which provide maximum services at minimum cost. Inventory management includes management of finished goods and work-in-process. There are the various techniques, which the companies employ to control the level of inventory. They are: ? Always better control (ABC) classification. ? High, medium and low (HML)classification ? Vital, essential and designable (VED) Just-in-time (JIT) ? Economic order quantity (EOQ) ? Materials requirement planning (MRP) EFFECIVE MANAGEMENT OF INVENTORIES: Inventory Management must be designed to meet the dictates of market place and support the company's Strategic Plan. The many changes in the market demand, new opportunities due to worldwide marketing, global sourcing of materials and new manufacturing technology means many companies need to change their Inventory Management approach and change the process for Inventory Control . ? Shorten operating cycle ? Explore use of alternate feed stock with lower lead time ?

Apply value analysis, value engineering leading to lower cost ? Reduce varieties to a barest minimum ? Develop new markets with reduced lead time for transportation of finished goods ? Adopt selective inventory control techniques ? Introduce computerized material requirement planning ? Much of the contribution will have to come from personnel in purchase, stores. iv. PURCHASING POLICIES: The purchasing function is influenced by certain policies, refer to a) Ancillarization b) Make or buy decision c) Tenders d) Speculative buying e) Vendor rating f) Ethics in purchasing ) Reciprocate h)

Purchasing for employees gifts Purchasing manual is a part of material management manual. But there could be purchasing manual without a materials management manual. There are two types of purchasing manualsone deals with the purchasing policies and the other with the purchasing procedures. The policy manual contains statement of operating policies, approved by top management; under states the procedures to be followed by the purchasing department in conducting its activities. Generally an organization will have one manual combining the policies and the procedures.

One of the central governments owned undertaking located in Bangalore has a manual for purchasing which runs into 115 pages. Of these first 86 pages contain policies and the remaining 29 pages contain procedures to be used in various transactions and rules to be observed. v. MATERIALS HANDLING: Material handling is yet another activity of materials management. This chapter is devoted to a detailed of all aspects of materials handling. To manufacture any product, it is necessary that movement of at least of the three basic elements of production i. . , materials, men or machines-takes place. Without this movement, mass production is not possible. In most industrial processes it is the material, rather than men or machines that move. Often, it is easier to move the men or machines or both than it is to move the materials; in the aircraft industry, for example, it is easier to move a man with his portable electric drill than to move the hull of an aircraft to him. Since it seems that materials are mostly moved, the term " materials handling" has been coined to describe problems of this nature.

Thus, materials handling include all movement of materials in a manufacturing situation. It was James m. Apple defined materials handling as handling of material. Objectives of materials handling: The overall objectives of materials handling is to reduce production costs, this general objective can be subdivided into specific goals such as: 1. Increased capacity 2. Improved working conditions 3. Improved customer services 4. Increased equipment and space utilization 5. Reduced costs IMPORTANCE OF MATERIALS MANAGEMENT:

The importance of materials management is reflected by the fact that materials management has evolved as a separate subject of study by managers and academic. This is so because in some of the industries, particularly in heavy engineering industries, materials constitute 50 to 70 percent of the total cost of production. However, with changes in manufacturing environment the share of overhead in the total cost of production is increasing and correspondingly the share of materials management rather newer techniques have emerged to build the advanced manufacturing environment.

Though these developments are evolutionary, they often appear to be revolutionary, they often appear to be revolutionary because underlying assumptions are radically different form the assumptions which formed the basis for conventional materials management techniques. The significance of an efficient materials management system needs no emphasis. It will facilitate the accomplishment of the following objectives: 1. Lower prices for materials and equipment, 2. Faster inventory turnover, 3. continuity of supply, 4. Reduced lead time, 5. reduced transportation costs, 6. Less https://assignbuster.com/materials-management-flashcard/

duplication of efforts, . Elimination of buck-passing, 8. reduced materials obsolescence, 9. Improved supplier relationship and better records and information's, 10. better interdepartmental cooperation, and 11. Personnel development. [pic] According to Daire and others " a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure". The research design is the conceptual structure within which research is conducted. 1) TITLE: " STUDY OF THE MATERIALS MANAGEMENT SYSTEM AT BEML") STATEMENT OF PROBLEM: This project is a study of activities regarding the materials management in BHARATHHHH EARTH MOVING LIMITED (BEML) and the evaluation of materials management. The procedure followed the activities involved, the scope and its contribution towards the objectives of the firm. The evaluation has become imperative to measure the success of an organization's overall efforts. 3) SOURCES OF DATA The method adopted for the study can be divided into 2 categories. The data was collected by 2 sources, namely: • Primary sources. •

Secondary sources. PRIMARY DATA:

The primary sources of data are those which are originally collected in the process. The maximum information was attained from the employees of the stores department. The other methods used in this project were feedback's form the departments and the interview schedule. SECONDARY DATA: The secondary sources of data are those which are already in existence for some other purpose than the questions in hand. They are: a) Books and journals b) Company's past records c) Magazines and journals d) The documents of the materials management department 4) OBJECTIVES OF THE STUDY: ? To

study the department's current level of performance. To find out if there is any drawbacks in the present system of materials management and the reason. ? To is familiar with the procedure being adopted by the company in handling the materials. ? To know about the company's past and present insurance status and MODVAT status. ? To give suitable suggestions if any regarding the insurance claims and the MODVAT status, to improve the existing method being adopted. ? To check the known troublesome areas in the activity. ? To be familiar with the needs of the company regarding materials management and the activities involved. 5) SCOPE OF THE STUDY:

This is a study of confined to materials management-stores, purchase, and purchase policy, material handling, and inventory control, of one particular company. However, this study could also be used as reference by similar, placed companies. 6) DATA COLLECTION: The required data was collected from the company and direct person interview with the office of the company and also through company website. 7) PROFITIABILITY: This means ability of the company in making profits in relation to capital employed and sales. 1) OVER VIEW OF CHAPTER SCHEME: a) General back ground of the study.) Design of the study: this chapter will cover statements of the problems, objectives of the study, scope, methodology, data collection and the plan of the analysis for the study. c) Company profile: The details about the company from its arising. In this chapter, complete information about the BEML, form its history to present day status will be given. d) The fourth chapter deals with the study of materials management. e) The fifth chapter deals with the analysis and findings. f) The sixth chapter deals with the suggestions and conclusion. g) The seventh chapter deals with the

bibliography. 2) LIMITATIONS: ) Materials management of only one product is studies. b) The analysis is confined to Beml only therefore giving only part of the picture. c) Because of the time factor the analysis was confined only to the stores, and purchase department. d) The study covers only one company and for a period of 5 terms that is form1999-2000 to 2004-2005. [pic]

and for a period of 5 terms that is form1999-2000 to 2004-2005. [pic] PROFILE OF BHARATHHHHH EARTH MOVERS LIMITED: 1) Name of the company : BHARATHHHH EARTH MOVERS LIMITED [BEML] 2) Registered office, Corporate office and marketing: " BEML SOUDHA" Division No, 23/1, 1V main, S, R, Nagar Bangalore-560027. 3) Group : Public sector undertaking. ) Date of establishment: January 1, 1965. 5) Activity : Manufacture of earth moving equipment's, Manufacture of rail coaches, Manufacture of defense equipment's 1) Bankers: STATE BANK OF INDIA. CANARA BANK. STATE BANK OF MYSORE. PUNJAB NATIONAL BANK. STATE BANK OF PATIALA. BANK OF INDIA. STATE BANK OF BIKANER AND JAIPUR. CENTRAL OF BARODA. BANK OF BARODA UNION BANK OF INDIA. Vision & Mission Vision To become a market leader, as a diversified company supplying products and services to Mining & Construction, Railway & Metro and Defense Services and emerge as an International Player. Mission

Improve competitiveness through organizational transformation and collaboration / strategic alliances / joint ventures in technology. Grow profitably by aggressively pursuing opportunities in national and international markets. Attract and build people in a rewarding and inspiring environment by fostering creativity and innovation. Objectives To maintain a dominant position in design, development, manufacture and marketing of Defence, Earthmoving & Construction and Rail & Metro equipment. To

Page 16

diversify and grow. To provide total engineering solutions to its customers. To internationalise operations by enhancing exports.

To improve profitability. To maintain State-of-the-Art technology for all products. Re-orientation of the business operations to match present scenario. Continuous building of skills and competencies to bring about Executive Effectiveness for Management Succession. [pic][pic][pic] BEML has three production units and they are situated at the following address: UNIT NO, 1: BANGALORE COMPLEX, P. B. NO, 7501 NEW THIPPASANDRA POST BANGALORE-560075. UNIT NO, 2: KGF COMPLEX, BEML NAGAR KOLAR GOLD FIELDS-538115. UNIT NO, 3: MYSORE COMPLEX, BELAVADI POST, MYSORE-571186. Functional Directors Shri V. MOHANShri M. POONGAVANAM

Director (Defence)Director (Mining & Construction) 5th Floor, Unity Buildings, KGF Complex, BEML Nagar, J. C. Road, Bangalore-560 002. Kolar Gold Fields-563 115. Shri P. DWARAKANATHSHRI M. PITCHIAH Director (Metro & Railway)Director (Finance) New Thippasandra Post,'BEML Soudha', 23/1, 4th Main, Bangalore-560075. SR Nagar, Bangalore-560 027. SHRI M. NELLAIAPPAN Director (Human Resources) ' BEML Soudha', 23/1, 4th Main, SR Nagar, Bangalore-560 027. Government Directors Shri SATYAJEET RAJANShri DILIP BISWAS Jt. Secretary (Exports), Jt. Secretary & Addt. Financial Advisor, Dept. of Defence Production, Dept. of Defence Production,

Ministry of Defence, Ministry of Defence, South Block, South Block, New Delhi-110 011. New Delhi-110 011. Independent Directors Dr. ARABINDA TRIPATHYProf SN CHARY Institute of Petroleum Mgt., Professor, IIM, Gandhinagar-382 007. Bangalore-560 076. Shri N R MOHANTYDr. JAYANTA

Page 17

BAGCHI Former Chairman, HAL, Former Secretary to GOI, SCION Court, Apartment # 302, C-105, Aandlok Housing, III Floor, I Cross, Mayur Vihar, Phase-I, Kaggadasapura Road, New Delhi-110 091. C. V. Raman Nagar, Bangalore-560 093. HISTORY OF BEML: BEML, is a public sector undertaking under the effective administration of ministry of defense (department of defense supply).

The organization was set up in the late forties as a part of Hindustan Aircraft's limited now known as HINDUSTHAN AERONAUTICS LIMITED to earth moving equipments in gradually diversified into earth moving equipments in 1964. After 1 years I. e. 1965 the organization has its own entity I. E. BEML. The company was incorporated in the first 5 years plan when India was very weak in the economy. The main purpose for setting up this organization was to manufacture heavy earth moving equipments, railway coaches, heavy duty trucks, truck laying equipments, overhead respection cars, aggregates etc. Later in few years the organization had a tremendous and they were strong enough to diversify to sectors such as coal mining, steel cement, power, irrigation, defense construction of roads, building etc., In the last few decades it has further brought new technical high quality inventions like hydraulics, heavy-duty diesel engines welding robots and undertaking of heavy fabrication jobs. Over the years the growth of the company has been phenomenal. The company has the distinction of making profits right from its inception. Commencing its operations with a turnover of around Rs. crores in 1964-65, the company has achieved a turnover of around Rs1421 crores for the year 2001-2002. The product range has also under gone drastic changes in terms of numbers and technology. Also the customer profile has

undergone significant changes whilst in the company's defense and railways constituted the major market for BEML's products over the years the position has been taken over by mining sector particularly M/S Coal India Ltd. (CIL). RAIL COACHES: Rail coach division of BEML is one such undertaking, which is making significant contribution to the transport requirements of the country.

The unit has since passed through many phases of rail coach building industry-the first all metal III class tier coach was built on standard Rs 1 under frame in 1948. In 1958 the first all steel type III class coach was delivered to railway. In 1965 the rail coach division was separated from HAL and made the nucleus of a new public sector company, the earth movers division of BEML, raised from rail coach division and subsequently located at BEML nagar, near Kolar Gold Fields [KGF] and Mysore manufacturers a wide range of earth moving equipments. BEML started in 1964 with railway equipment division at Bangalore. The first aincoat factory in the Indian subcontinent, this unit has consolidated its status as a major supplier of integral rail coaches, meeting about 25% of the country's demand. It has a production capacity of over 800 coaches P. A. The Bangalore unit also manufactures heavy-duty trucks and trailer and also defenses aggregates to meet the needs of the armed forces. A number of variants such as crash fire tenders, Recovery vehicles, missile transported have been developed on the Heavy-duty truck. BEML offers application of engineering service and under takes preparation of pre-feasibility of project reports and equipments selection studies.

Recommendation of user proper studies [RUP] is done at customer sites to improve productivity and to reduce cost. The unit has taken up production of https://assignbuster.com/materials-management-flashcard/

Direct current electrical multiple units [DCEMU] and rail bus and Alternate current electrical multiple units [ACEMU]. ? PRODUCTS PRODUCED: BEML produce gigantic/durable international standard equipments and system designed to with stand tough working environment under varied climatic condition. Company products are of wide range, which help to growth of the economy such as: - (BANGALORE COMPLEX) I. RAILWAY PRODUCTS. II. DEFENCE PRODUCTS. III. SPARES AND OTHERS. PRODUCTS PRODUCED: I. RAILWAY PRODUCTS: - a) ACEMU - Alternate current electrical multiple units. b) DCEMU – Direct current electrical multiple units. c) Rail bus. II. DEFENCE PRODUCTS: - a) TATRA TRUCKS and its variants. b) IGMP - Integrated guided missile project. c) HRV and ARV – Heavy Required Vehicle. Armed Required Vehicle. d) 50 ton trailers. e) Ejector and Air cleaner Assemble. f) Mail rails and wagons. III. SPARES AND OTHERS. ? MANUFACTURING UNITS: - BEML is the second largest earth moving manufacture in ASIA. It has 3 production units with hi-tech facilities. 1. BANGALORE. 2. KOLAR GOLD FIELD. 3. MYSORE.

These have high forced technology manufacturing facilities. Steel foundry at Tarikere is meeting the requirement of quality steel castings of the company various units. Its Rs 300 million composite research and development centre at Kolar Gold Field has laboratories in fluid power engineering material science, structural engineering and power line testing with state of the art facilities. The company's R&D division continues to make significant strides not only is the indigenization of collaborated products faster but also in the design and development of high technology, sophisticated new products and aggregates. WORKERS: – Manpower is the main sources for an successful

Page 20

industrial empire. There are about 13800 employees working round the clock for the betterment of BEML ? MARKETING: – A nation wide network of 10 regional officers and 15 district offices provides customers with immediate access to the companies wide range of products and services. Marketing activities include field operations intensive training of customer personnel in operations and maintenance of equipments. Additionally, BEML offers application engineering services and fleet optimization solutions. ? CUSTOMER SERVICES: –

BEMLNET- a satellite communication (satcom) network, which provides continuous spare parts to the customer in taking, services to the doorstep of customers. BEML also undertakes to service machines all its lifetime. ? RESEARCH AND DEVELOPMENT: – R&D made rich contribution over the years by designing, developing and producing a number of high technology products and aggregates for the core sector such as contribution to mining, defense and rail. Development of high technology products likes power transmission, planetary axles, calipers, disc brakes and computerized transmissions contract system.

R&D has also carried out detailed studies for the introduction products catering to the requirement of mining, railway and defense sector. The studies include assessment of existing indigenous technological base, introduction of new products, like road headers, side discharge loader, wheeled loader etc. in the product range and also the feasibility of manufacturing a number product like field services equipment for defense sector. Benefits: – Rail bus and Spoil disposal units has been successfully developed and production started. ? EXPORTS: – The year ended 2001-2002 https://assignbuster.com/materials-management-flashcard/

on export turnover is 115 crores which includes Rs 36. crores towards deemed exports. The company received a certificate of merit from the government of India recently for outstanding exports. BEML machines reach over 30 countries world wide, covering ASIA, AFRICA, EUROPE, LATIN AMERICA and the MIDDLE EAST. BEML is an export house with star exporter status. Its strengths in handling large-scale trading and counter-trade have helped it push exports of engineering goods and non-military items. ? COLLABORATIONS: - BEML had technology collaborations with leading international manufactures the most important are: - 1) TATRA [SLOVAKLA]. ) KOMATSU [JAPAN]. 3) OMNIPOL. 4) INDRECO. 5) VOEST ALPINE. 6) IGM (Austria). 7) BUMAR LABEDY. 8) ROTEM [KOREA]. ? QUALITY CONTROL: - GOOD QUALITY BRINGS NAME, POOR QUALITY BRINGS SHAME. Quality control is given the utmost importance at BEML and the company has adopted an integrated company wide corporate policy on total quality management. At every stage of production, the components are listed. Field trails in actual working conditions are conducted at BEML's own testing grounds and tracks. This approach has enabled to get the ISO-9000 accreditation.

Bangalore complex is accredited with ISO-9001 engine division Mysore complex has been qualified for ISO-9002 BEML is now working towards geeing ISO-9000 accreditation for its other units. ? COMPETITORS: – a) HINDUSTAN MOTORS. b) ASHOK LEYLAND. c) TATRA UDYOG. d) L&T e) ESCORTS. f) JESSOP ENGINEERING & OTHERS. ? FINANCIAL PERFORMANCE: – During the fiscal year 1998-99, BEML recorded Rs. 12, 126 millions in sales, Rs. 12442 millions in production and Rs. 105 millions in exports. The new projects of BEML are: – ? PANTOONS MAINSTREAM [PMS] BRIDGE. ? MAILRAIL VARIANTS. ? DELHI METRO RAIL CORPORATION [DMRC]. ABBREVATION DESIGNATION

MD. MANAGING DIRECTOR. FD. FINANCE DIRECTOR. TD. TECHNICAL DIRECTOR. MD. MARKETING DIRECTOR. CS. COMPANY SECRETARY. CS. CHIEF SECRETARY. GM. GENERAL MANAGER. CFM. CHIEF FINANCE MANAGER. CHM. CHIEF HUMAN RESOURCE MANAGER. CVO. CHIEF VIGILANCE OFFICER. JS. JOINT SECRETARY. CGM. CHIEF GENERAL MANAGER. DGM. DEPUTY GENERAL MANAGER. SM. SENIOR MANAGER. ORGANISATION CHART OF BEML BOARD OF DIRECTORS. EXECUTIVE DIRECTOR. CHIEF GENERAL MANAGERS. GENERAL MANAGERS. DEPUTY GENERAL MANAGERS. ASSISTANT GENERAL MANAGERS. SENIOR MANAGERS. MANAGERS. ASSISTANT GENERAL MANAGERS. SENIOR MANAGERS. MANAGERS. ASSISTANT MANAGERS. OFFICERS. ASSISTANT OFFICERS. WORKMEN. (Rs. IN LAKHS) (RS IN CRORES) [pic]

BEML, as a public sector is popularly known for BHARATH EARTH MOVING LIMITED. They have 3 manufacturing units, among which the following products are manufactured by BEML. 1. CRAWLER EQUIPEMENT. 2. WHEELED EQUIPEMENT. 3. DEFENCE 4. RAILWAY. 5. ENERGY. 6. ROBOTICS & AUTOMATION. 7. HYDRAULIC AGGREGATES. BHARATHHHH EARTH MOVING LIMITED is a premier ISO 9000 company in India and the second largest manufactures of earthmoving equipment in Asia. A public sector undertaking under ministry of Defense, BEML commands a major market share in domestic earthmover industry. Nearly 40% of its equity has been divested to financial institutions and public.

BEML has its corporate headquarters and central marketing division Bangalore. I ORGANISATION OF MATERIALS MANAGEMENT The basic structure of materials management in BEML involves the following main function books: I. THE ACTIVITIES INVOLVED IN MATERIAL PLANNING AND CONTROL ARE: ? Requirement planning. ? Indent generation / Indent amendment generation. ? Material clearance. ? Inventory analysis and control. II. THE ACTIVITIES OF PURCHASING ARE: ? Receipt of indent amendments thereof and registration. ? Tendering. ? Placement of purchase order and amendments thereof. ? Follow up of purchase order. ? Vendor performance evaluation. Insurance coverage. ? Licensing for imported items. ? Clearance of imported consignments. III. THE ACTIVITIES OF STORES FUNCTION CONSISTS ARE: ? Insurance coverage. ? Clearance of domestic consignments. ? Material receipt and identification. ? SRV generation and accounts. ? Storage, preservation and issue of material. ? Rejected / Nonconforming material accounts. ? Insurance claims. ? EDGP processing for MODVAT. ? Scrap disposal. ? Material handling ? Selection of approved transport carriers. ? Stock verification. FUNCTIONAL INTERFACE OF MATERIAL MANAGEMENT: I MATERIAL PLANNING AND CONTROL PROCEDURE FOLLOWED IN BEML

Materials planning and control are grouped into four namely: a) Requirement planning b) Indent monitoring follow up c) Materials clearance d) Inventory analysis and control a) REQUIREMENT PLANNING Requirement planning is where the recognition of need arises and the needed item is officially brought to the attention of the materials management department. In BEML, firstly when a customer places orders with the company for any particular project, the marketing department passes the details to commercial department for monitoring the project. Commercial department will issue various manufacturing orders (M.

O. ) for each product, like SEE, AVR, MMI etc. Based on these MOs, Engineering department design the equipment form where the actual job of material planning and control is seen. The Engineering Department before preparing final bills of materials (BOM), prepares a slip called materials requirements (MR) in order to reduce procurement cycle. A material requirement includes different types of materials required, with their quantities. The material requirements are scanned once in a week by material planning and control (MPC) for additions and changing requirements MPC consolidates all these requirements.

A detailed diagrammatic representation of all the jobs performed by the mpc. Especially during the first step, i. e. , requirements planning are as follows: Thus, the MR's so got are processed using the MRP software developed in house. For each item the system will check the quantity required for the next 5 quarters with the existing stock and allocates to each project / contract as per the planning delivery of production program. In case, the stocks are not available for the full requirement, the materials in the pipeline are scanned and allocated accordingly.

Thus, the materials required for different contracts are being allocated from pending purchase orders. If the total requirement is not met by the above cases, an indent is prepared for that particular item. All the items to be indented will be captured into a file. b) INDENT MONITORING AND FOLLOW

Page 25

UP The MPC coordinates with the purchasing and production planning And control (PPC) Department for the procurement activities. Based on the MOs planned, a shortage list for all the materials that are not available in the stores is prepared. All the indents are checked and a report is generated for the pendancy of indents.

This storage list is discussed with the purchase executives to find out the Probable Date of Completion (PDC). The following chart represents the indent monitoring function. C)MATERIAL CLEARANCE In this step, the concerned group manager of MPC is authorised to clear the material against issue of documents through computer or the hard copy as the case may be. When shop rejections are brought to the notice of MPC. MPC will take action to repair/rework/replace the materials. In case items required for urgent production needs, prior to verification a request for release of material under the concerned executives will issue positive recall.

D)INVENTORY ANALYSIS AND CONTROL The term inventory includes raw materials, finished goods, work in process, spares, packaging and others stocked in order to meet an unexpected demand or distribution in the future. Inventory include several costs like ordering costs, carrying costs, capital costs, storage space costs, inventory service costs, handling equipment costs, inventory risk costs, out of stock costs etc. Maintenance of all these costs properly is one of the main objectives of inventory management.

Inventory management stresses the need for integrated information flow and decision-making, as it relates to inventory policies and overall systems. Inventory control, on the other hand, refers to the actual steps taken to maintain the stock records or stock levels. THE FOLLOWING ARE THE ACTIVITIES OF INVENTORY CONTROL: a) It is concerned with raw materials and purchased parts. b) Regulates the investments in inventories. c) Investments are decided on the basis of predetermined limits and these limits are prescribed by the inventory policy followed by the management.

THE PROCEDURE WHICH IS FOLLOWED AND THE INVENTORY CONTROL TECHNIQUES AND ANALYSIS ARE AS FOLLOWS: Firstly review of inventory analysis is done once in a year for identification of non-moving and slow moving items. The list of non-moving items is then circulated to all engineering departments and other user departments for identifying possible application for contracts or spares. These lists are also circulated to other units of BEML for similar action. Based on the feed back, action is initiated for retention or charging off as surplus charged off in the books of account.

Different analyses are being used in BEML such as ABC analysis, VED classification, XYZ analysis, etc. The most commonly used technique in any company is the ABC analysis, based on which the other techniques are followed. The ABC approach is a means of categorizing inventory items into three classes-A, b and c according to the potential amount to be controlled. The materials are treated according to the categories in each technique and thus the inventory is controlled. II PURCHASING The purchase functions of BEML are decentralized and each division is responsible for procurement of its requirements.

The head of the purchase department is directly accountable for efficient discharge of his functions, duties and responsibilities. He is assisted by a

team of officers and staff for carrying out the purchase functions. OBJECTIVES:- The main objectives of the purchase department are as follows: – h) To ensure uninterrupted flow of materials for production services. ii) To procure the materials required at the best price keeping abreast of price trends and market conditions. iii) To keep the investment in inventory at the minimum. iv) To ensure continuous search for alternate sources of supply.) To promote and develop indigenous sources of supplies wherever possible and to minimise reliance on imports. vi) To strive for cordial, enduring and beneficial business relationship with the suppliers. FUNCTIONS: - The functions of the purchase organization can be broadly defined as under: i) Identification and selection of suitable sources of supply including promotion and development of potential sources for indigenisation. ii) Analysing of bids and prices ensuring fair opportunity to tenders/ suppliers and competitive prices to the company. ii) Conducting negotiations with regard to prices, quality, delivery schedule and terms of payment. iv) Issues of purchase orders, follow-up for suppliers and periodical review for closure of purchase orders. v) To co-ordinate and assist in payment of suppliers bills and recoveries from suppliers. vi) To assist in standardization of material, suppliers and equipment. vii) Market research for improved methods and products. vii) To keep abreast of government regulations in regard to taxes and levels relating to purchases. PURCHASE COMMITTEE:- The pre-requisites to achieve, economy in procurement are: -) Availing the offers within the validity period. ii) Minimising delays in placing purchase orders. iii) Aiding in effective decision making. This calls for making purchase management broad based and responsive. To achieve this end, officers from other department like production, finance, material, planning, stores etc., are also associated

according two committees viz., a) Purchase tender committee (PTC). b) Material tender committee (MPC). Are constituted by the management for examination of the cases as also to recommend /decide the course of action on problems that may arise while scrutinizing the tenders for acceptance.

The procurement value based on the quotation for the item/items covered in the MPR initially shall form the basis for reference to PTC. MATERIAL PURCHASE REQUEST:- Material purchase request (MRP) is the basic document required by purchase department for initiating procurement action. The MPR is raised by he indenting department furnishing interalia, the details of material specification and description, quantity and delivery schedule, reasons for requesting etc. , TENDERS: –

Tender system is adopted to procure materials at competitive rate conforming to ethics of tendering different types of tenders are in vogue viz. , Open tender, Global tender, Limited tender and Single tender. i. OPEN TENDER: – Open /public tender shall refer to calling for quotations by advertising tender enquiry in Indian trade journal and or in selected national newspapers. Besides advertisement, the attention of all known and established sources in drawn to this enquiry for a quote. ii. GLOBAL TENDER: – Global tender is a public/open tender inviting quotation form foreign supplier as well.

Besides advertising in selected national news papers and for /or Indian trade journal, tender forms are sent directly to established foreign suppliers as also to selected countries through foreign consulates/embassies as may be decided by the purchase manager. Where the nature of the item justifies it or where the foreign exchange sanction stipulates it global tender is issued. iii. LIMITED TENDER: - Limited tender shall refer to tender enquiry sent to suppliers as per the list of approved sources of suppliers. iv. SINGLE TENDER: - Single tender shall refer to the case where tender enquiry is forwarded to only one supplier/vendor.

OFFERS: – An offer is the response from a source to a tender enquiry. An offer is considered to be varied if it is not a late/regret/unsolicited offer. It refers to the submission of quotation by a firm in the form of price for supplying the item in required specification and quantity or for a service to be rendered in response to an enquiry. The quotations submitted by tenders may be classified as regular, regret, unsolicited, delayed and late. i. REGULAR OFFER: – Regular offer refers to valid offer received in time against a tender enquiry. ii. REGRET OFFER: –

Regret offer refers to ' Nil' quotation from the tenderer indicating that the tenderer in not interested in the tender enquiry. iii. UNSOLICITED OFFER: – Unsolicited offer shall refer to submission/receipt of quotation from a supplier who has not been contacted to whom no enquiry was sent in a limited tender. iv. DELAY OFFER: – An offer posted on or before the closing date but received after the closing date is deemed as delayed offer. Such offer identified marked as delayed offer may be treated as regular offer for all purposes. Whether an offer has been posted on reference to the postal seal on the envelope containing the quotation. LATE OFFER: – Late offer is one, which is posted after the closing date. COMPETENT AUTHORITY: – Competent authority shall refer to the authority competent to sanction/ approve purchase orders upto prescribed value in terms of monetary limits given in https://assignbuster.com/materials-management-flashcard/

the "Delegation of powers". The purchase order value refers to total value indicated in the purchase order in respect of indigenous items (excluding off loading orders where the value for approval shall be including the cost of materials) and the estimated landed cost in rupees in respect of imported items.

EMERGENT /EXPRESS MPR: – Emergent/express MPR shall refers to initiating the MPR by the indenting department for urgent procurement action by the purchase department without calling for tender and based on the recommendations of PTC/PMC, wherever necessary. IMPORT LICENCE: – Import of items is subject to release of import license, which is issued by the chief controller of imports and exports. The import policy us announced by the government of India by means of public notices in the gazette of India extra-ordinary.

The chief controller of imports and exports by issuing notice, may evolve any special procedure for the issue of import licenses in respect of any licensing period or commodity or any category of importers. LETTER OF CREDIT: – It is an authorization by a bank to a supplier to draw on it for funds within a stated amount and time, in payment for specified goods to be shipped. CAPITAL ITEM: – An item is said to be of capital nature when there is enduring benefit spread over a longer period. It relates to addition to the fixed assets of the company. It is in the form of acquisition of a new asset duly covered in the capital budget.

LOCAL/BAZAAR PURCHASSES: - This refers to purchases made on the basis of hand quotations (oral or written) obtained by representatives of purchase

department. Purchases of stores nor exceeding Rs 500/-will come under this category. RATE CONTRACT: – This refers to procurement of materials by availing the rate contracts finalized by the director general of suppliers and disposal for placing either a supply order over direct order availing the rate contract prices. SUB CONTRACT/OFF-LOADING:- This refers to orders placed for machining fabrication for further processing like heat treatment, plating, shot blasting etc. on our materials. LETTER OF INTENT: – Letter of intent is an authorization to the supplier for taking up production and supply of the item mentioned therein subject to regulation by a purchase order. PURCHASE POLICY: – It is the primary responsibility of the purchase department to procure materials required of the right quality, at right time and price ensuring that the best value is obtained for the money spent. 1. In order to keep down investment in inventory to the barest minimum, it is necessary to

purchase. 2.

The generally accepted method for procurement by tender system will be followed. There are three kinds of tenders namely, open tender, limited tender and single tender. Global tende4 is resorted to when the item is required to be imported and where the foreign exchange sanctions stipulate it. 3. Where a relaxation is required form calling for limited tender the item being a proprietary one or urgently required or to be procured, on a single tender basis, the delegation of power under clause 19 (b) shall be followed and the tender accepted as a single tender by the authority competent as per delegation of powers.

ensure that utmost economy is enforced form the time of raising request for

With preference to limited tender for all items, it is essential that a scientific and systematic approach is made for achieving the goal of utmost economy in purchase and the procedure given hereunder is followed. 1. Market survey and registration of suppliers. 2. List of approved sources of supply. 3. Number of firms to be contracted. 4. Material purchase request. 5. Capital equipments 6. R&D development projects 7. Construction division 8. Spare parts 9. Sub-contract/off-loading orders DIVISION OF PATRONAGE: –

As a policy, it is necessary to have more than one source, dividing the tendered quantity amongst 2 or 3 sources. General: – MRP for stock items and capital items can only be initiated by stores and facilities planning department respectively and not by the department requiring the items. At best the department requiring the items will raise MPRR which will be converted into MPR by stores of facilities planning department as the case may be. PURCHASE PROCEDURE: – MATERIAL PURCHASE REQUEST Material purchase request (called in brief MPR) shall be the basis for procurement by purchase department.

Before initiating procurement action, sanction for procurement has to be endured in accordance with the requirements under PURCHASE POLICY. In parts department of marketing divisions, order projection will take the place of MPR for procurement of spare parts. 1. One MPR should be raised for item or a group of related items, which have to be tendered out or ordered simultaneously. 2. The agencies competent to initiate MPRs for procurement are: – a. Material planning department for production items duly linking up with approved production/provisioning schedule. Where material planning and purchase functions are integrated as in the case of castings/forging and https://assignbuster.com/materials-management-flashcard/

steel items in Em division, the MPR is made out by the respective cell). b. Facilities planning department for capital items duly linking up with approved capital budget/CAR. c. Parts department for spare parts based on firm orders received form customers and/ or for stock and sale (including initial spares and warranty) based on the forecast of spare parts sales for budget years after making due allowance for stock on hand, on order and under manufacture subject to prescribed inventory norms.

MPRRs raised by parts department and coordinated by marketing accounts will serve as the basis for procuring as additional quantity or for in-house manufacture in the divisions. d. Stores department for stock-control and nonstock-control items based on MPRRs received form user/indenting departments. e. The nominated officer for stationery, printing and capital items required for corporate office and marketing division head quarters. For this purpose, an office and marketing division headquarters, who will coordinate with the user department.

The officer so nominated separately for corporate office and marketing division will be authorized to approve MPRs for procurement action. This arrangement will be extended to regional offices under the marketing division with their annual projection of requirements for stationery and printing items duly approved by the general manager/F. D. f. R&D department for developmental process, product improvement and indigenisation items. Production engineering department also for indigensation items. g. Construction department for civil works items. h.

Plant maintenance department for items required for minor repairs and maintenance of plant and machinery, factory and office buildings, guest house, colony etc., i. Tool planning department for tools jigs and fixtures. 3. MPRs/order projections should be approved by the officers duly authorised by the respective general manager/functional director and in accordance with the delegation of powers. 4. MPRs for capital equipment shall invariably be accompanied by duly approved capital appropriation request (CAR); in addition, items exceeding Rs. 0, 000/- in value individually should have the approval of the central technical committee. 5. MPRs for express/ emergent purchases shall be accompanied by approval of the competent authority as per delegation of powers based on the recommendations of PTC/MPC. The item/items may be procured without calling for tenders. 6. While obtaining the sanction for procurement, as above, it should be ensured that requirements are not split up so as to bring them either under the powers of lower authority or within the value portion of the limit of Rs. 5, 000/- form the point of financial concurrence. 7. MPRs for proprietory items will specify the sources of supply duly supported by a proprietory article certificate issued by the concerned assistant general manager. PURCHASE FROM OUR COLLABORATORS: - Purchases form our collaborators covered by collaboration/price agreement do not come under tender system but the sanction of MPR for procurement and approval on purchase order of the competent authority as per delegation of powers have to be obtained as in

Purchase orders will be placed only after getting clearance from the corporate office for availability of foreign exchange and import license. The

the case of indigenous procurement.

import license wills be obtained by the purchase department after the items have been cleared by DGTD form indigenous angle and foreign exchange released to cover the import of items. The projection of requirements in quantity and value in terms of foreign exchange has to be planned well in advance. It is imprerative that the items are ordered with in a reasonable period so that shipment could be got effected within the validity period of the license.

Application for license has to be submitted against FE allotment in terms of import policy in vogue. III. STORES: – The aim of manufacturing operation, which is an important facet of the business activity, is also timely manufacturing of the desired products of specified quality, in proper quantities at the least possible cost. The efficiency of manufacturing operations largely depends on the efficient functioning of the receiving and stores operations. Stores or storage is the function of receiving. Storing and issuing the materials.

It is concerned with the physical handling and well being of the stocks. The stores is either subordinated to the purchasing deportment or is grouped with purchasing in a materials management department. The direct production cost is reduced by strategic location of stores ensuring quick issue and elimination of production stoppages caused by waiting for materials. It indirectly reduces the production costs in terms of reduced investment in materials, storage space and insurance, elimination of pilferage and theft, obsoletion, reduced handling cost etc. ,

Page 35

The stores department of BEML, the main objective is to ensure correct and complete integration of guality requirements in materials receipt, identification and accounting of materials form receipt till handed over to holding stores. Stores function of BEML consists of the following activities. 1. Insurance coverage 2. Clearance of domestic consignments 3. SRV generation and accounts 4. Storage, preservation and issue of materials 5. Rejected/ non-conforming material accounts 6. Insurance claims 7. EDGP processing for MODVAT 8. Scrap disposal 9. Material handling 10. Selection of approved transport carriers 1. Stock verification The stores department is the custodian of all inventory held by BEML and is charged with the responsibility of receipt of goods processing, storage and maintenance, issues, reclamation of salvage items and also maintenance of proper records for accounting of all stores transaction. The stores department is a wing of materials management and is under the overall charge of chief of stores Bangalore complex. A team of officers and staff for carrying out the stores functions assists him. The stores department comprises of different branches as given below: - Receiving stores ? Holding stores ? Tool stores & tool cribs ? Rejected stores ? Shipping or dispatching section ? Salvage stores ? Stock control ? Central excise. The function and responsibility of each of the branches are enumerated in the succeeding chapters. The various branches of stores department are treated as separate responsibility centers for their functions under the administrative control of chief of stores, however it shall be ensured that movements/ handling of the incoming confinements and items are kept at the minimum to minimize loss without scarifying the controls.

The functions of stores department: - • Receiving of all materials (brought out customers supplied items) and offer for inspection. • Control of nonconforming products in receiving stage. • Proper storage and issue of accepted materials. • Storing, issue and maintenance of tools, gauges and instruments. • Dealing with non-project items. • Disposing of scrap items. • Receipt, storage and issue of customers supplied product. • Production identification and tractability. • Implementing statutory/regulatory requirements whenever required. • Handling field failure items. Maintaining guality records. • Document and data control. • Control of non-conforming product during storage. • Corrective and preventive action. DUTIES AND RESPONSIBILITIES OF OFFICERS: - SENIOR MANAGER (STORES): - Organizing, directing and controlling the function of stores activities of activities of receiving, processing delivery and holding stores, salvage, disposal, rejected and shipping stores, central excise actives, inventory stores computer terminals etc overall stores division head for the integrated of the stores department.

MANAGER (STORES): - • Responsible for receiving of goods, processing, storage, maintenance. • Assist the senior manager in review of various stores activities for keeping the inventory to the barest minimum monitoring too crib activities. • Attend various meetings to sort out any problems connected with the stores activities. • To keep close check on stock control functions. Review non- moving materials and process disposals. • Review disposal of rejected store for liquidation. MATERIAL HANDLING: –

A material handling is one of the important objectives of any company. The storekeeper should take due care while handling the materials and see that https://assignbuster.com/materials-management-flashcard/ the materials are non subjected to damage or deterioration. BEML follows certain procedures while handling the materials. They are: – 1. Light items are handled carefully by the concerned storekeeper. The stores department is looking this after. 2. After receipt of materials the store keeper handover accepted materials to holding stores by using appropriate pallets and equipment like hand trolley or fork lift. 3.

Items of different never clubbed while moving the materials from one place to other place. 4. Medium items are handling by using wooden pallet/ metal pallet. 5. Heavy items are handled by using forklift. 6. Miscellaneous is stores and handled at the inflammable stores thus avoiding multiple handling and probable damage. 7. Care is taken while handling chemical/ acids to ensure no breakage's to the containers that in turn may cause damage both to the materials and men. 8. Thus the procedure followed is applied to both goods inwards as well as holding stores.

TABLE -1 CARDE OF EMPLOYEES IN MATERIALS MANAGEMENT DEPARTMENT | SL. NO. | DESIGNATION | NO OF PERSONNEL | | I. | GENERAL MANAGER | 1 | | II | DEPUTY G. M. | 1 | | III | ASSISTANT G. M | 2 | | IV | SENIOR G. M. 4 | | V | MANAGER | 2 | | VI | ASSISTANT MANAGER | 4 | | VII | PURCHASE OFFICE | 5 | | VIII | ASSISTANT P. O. | 6 | The table represents the cadre of the employees in the materials management department of BEML. CHART-1 TABLE-2 COST/EXPENDITURE CONTRIBUTION OF TURNOVER | SL. NO. PARTICULARS | VALUE IN LAKHS | | 1. | DIRECT MATERIALS | 90318. 12 | | 2. | PERSONNEL PAYMENT | 32562. 34 | | 3. | OTHER EXPEN