

## C H A P T E R - III

### CONCEPTUAL FRAMEWORK OF THE SUBJECT.

#### SECTION- I : PROCUREMENT.

- 3.1 Introduction.
- 3.2 Definitions of Purchasing.
- 3.3 Basic Parameters (Principles) of Purchasing.
- 3.4 Scientific Purchasing & Its Objectives.
- 3.5 Importance of Purchasing.
- 3.6 Classification of Purchasing.
- 3.7 Duties & Responsibilities of Purchasing Department.
- 3.8 Methods of Purchasing.
- 3.9 Purchasing Organisation.  
(Determination of Requisition).
- 3.10 Purchasing Procedures.
- 3.11 Purchasing Policies.
- 3.12 Import Procedures.

#### SECTION - II : 'YARN'

- 3.A i) Fibres ii) Textile Fibres.
- 3.B Classification of Fibres.
- 3.C Meaning and Definitions of Yarn.
- 3.D Classification of Yarn.
- 3.E Measures to Identify the Quality of Yarn.

CHAPTER - III

SECTION : I

3.1 INTRODUCTION :

Purchasing simply means going into the open market finding the lowest price at which a standard item is offered, and selecting a supplier who offers it at that price. Purchasing is one of the fundamental functions of materials management and forms a major part of it. The materials management involves many intricate discussions on what to buy, when to buy, where to buy, how much to buy, how much to pay and how much to stock. It also involves many creative functions such as development of new sources, introducing new materials and processes in the undertaking, standardisation, variety reduction and value analysis.

Purchasing is an everyday and basic function - occupies much of the time both of business houses and ultimate consumers. It needs considerable expertise not only in negotiating but also in the mechanics of competition and studying of economic trends in large quantities. The ultimate consumer is proverbially an inexperienced buyer; but even among business purchases, skilled and experienced as they are, errors are not infrequent. Erroneous buying raises the cost of materials, stores, equipments and

the finished products. In the words of Gantt "Two-third of all the gain possible through the most efficient management (of production) could be realised by having all the materials ready when you want it, where you want it and in the condition you want it."

Purchasing is a spending function and every rupee saved in purchasing goes directly to the profit column of the concern. In an average business organisation about 50% (approximately) of the total expenditure is due to procurement through purchases. On all other factors of production there is less expenditure than this and the range of these expenses in different industries varies from 20% to 90%. The financial aspect of purchasing is therefore of vital importance to business organisation in general. The first economies in a business start with purchasing and so the purchasing function should be entrusted to competent hands who will give an organisation the preliminary advantages in its endeavour to lower the overall cost. Proper buying of materials and merchandise and the control of stock are of great importance in any business.

In a sole proprietary concern the owner of the business keeps the purchasing function in his own hands or entrusts it to his trusted lieutenants and jealously guards the interests of the concern in his own interest. In large joint stock

companies in which salaried officials are responsible for purchasing. This interest gets diffused and identification of the companies interest with the interest of the purchasing authority is not discernible. Hence it is necessary to exercise close control and vigilance so as to make purchasing as efficient as in sole proprietary concern. Only by close and intelligent co-operation between financial and purchasing functions can the purchaser discharge his functions efficiently. This is well borne out by an old adage, " Well bought goods are already half sold."

### 3.2 DEFINITIONS OF PURCHASING :

Purchasing has been defined by several experts as follows :

- 1) "Purchasing is the procuring of material, supplies, machines, tools and services required for the equipment, maintainance and operation of manufacturing plant. "         - Alfred and Betty<sup>1</sup>
- 2) "Purchasing is to buy materials and services of the right quality, in the right quantity, at the right price, from the right source and at the right time".         - Lee and Dabler<sup>2</sup>

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1. Belagali B.N., Principles of Commerce. Kolhapur : Rhadke Book Sellers, 1979. p. 95.

2.

- 3) "Scientific purchasing is the procurement by purchase of the proper materials, machinery, equipment and supplies or stores used in the manufacture of a product adopted to marketing in the proper quantity and quality at the proper time and at the lowest price consistent with the quality desired." Dr. Walters<sup>1</sup>

- 4) "Business activity directed to securing the materials supplies and equipment required in the operation of an organisation" -

Westing and Fine<sup>2</sup>

- 5) "Purchasing is the aquisition by manufacture of any necessary primary materials, supplies equipment and so forth, by any method, whatsoever. The procurement includes extraction from owned mine, or forests, cultivation of owned agricultural lands, manufacture in owned plant and purchase. Theoritically, the essence of function does not really consist of purchasing even though most items are so obtained." - Lewis<sup>3</sup>

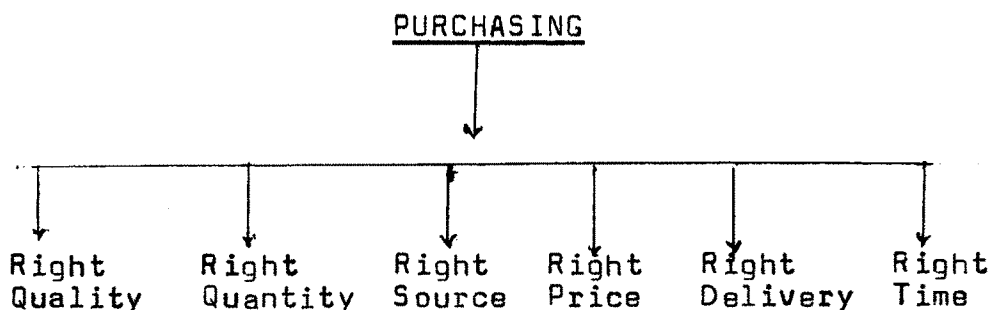
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1. Shukla M.C., Business Organisation & Managemement, Delhi : S.Chand & Co., 1970. p. 520.
  2. Gupta D.R. & Rajput R.K., Purchasing and Store Keeping. New Delhi: Tata McGraw-Hill Publishing Co.Ltd., 1982. p.176.
  3. Gupta D.R. & Rajput R.K., Purchasing and Store Keeping. New Delhi: Tata McGraw-Hill Publishing Co.Ltd., 1982 p.176

In recent years the experts have given the broader meaning of purchasing as follows.

Purchasing means a policy well planned, properly co-ordinated and covering a wide range of control to the selection of materials, sources of supply, the follow up to ensure timely deliveries, a complete inspection for quality and quantity, well planned procedures free from intricate formalities, and development of up-to-date methods and technique of higher standard to reveal efficiency and economy.

### 3.3. BASIC PRINCIPLES OF PURCHASING

Every skilful purchasing involves six principle features. Every prudent industrial enterprise must observe the principle of purchasing to fulfil the business objectives. Following are six noted principles known as six 'R's :



1) Right Quality :

The best quality is usually not the right quality. The suitability of an item for a given purpose is the right quality which should generally be purchased. A particular quality of an item may be right quality for a given job but the same may not be right quality for another job; quality, if superior for a given job, is a waste and is an unavoidable expense, where as an inferior quality for a given job is also a waste and is an expense which is neither worth it nor may result in a gain of confidence of the consumer.

For building goodwill, right production, avoidance of waste, standardisation of better results from men and machine, Right quality purchase is a must.

2) Right Quantity :

Maintainance of regular flow of materials for production continuity is the main aim of any purchase organisation. The decision of right quantity is related to the period for which it is to be purchased and also to the minimum total cost which may obviate shortage. Excess purchase which needs excess investment should be avoided. It also needs overstocking, and cost of inventory may go up.

In this connection, we have to take in to consideration the order quantity which is defined as "the quantity that is

ordered at a given time." This is calculated by dividing the total periodical (annual) requirements by the number of orders to be placed during the period. ( a year).

3) Right Source :

Source is related to suppliers. A right source of procurement of materials is that supplier who can supply the material. (a) in right quantity as ordered (b) in right quality as ordered (c) at right price (d) at right time (e) who should be in a position to honour the commitment without much follow-up. (f) should have necessary financial resources and adequate man power to handle the order and (g) be an established firm of proven business integrity.

There are four types of suppliers from whom one can buy his requirements.

- 1) Manufacturers
- 2) Stockists or wholesalers
- 3) Commission Agents or Distributors, and
- 4) Retailers.

There must be a full satisfaction from such suppliers. If unsatisfactory events take place the purchase from such sources should be closed.



4) Right Price :

Right price is not easy to determine but throughout cost analysis and value analysis one can assess what an item should cost. Thereafter, it is the purchasers' skill in negotiating, using the existing competition in the market and his relations with the suppliers which will determine the actual purchasing price.

5) Right Delivery :

Right delivery has two aspects, Firstly it determines when exactly the delivery is required and when the purchasing process should be initiated so as to obtain the requirements about the right time, with a short margin of safety. Otherwise, materials may arrive very much before the actual time of use and a large amount of money may unnecessarily be locked-up for an appreciable period. This is particularly the case in the large projects. Where various materials including capital equipment are required at different times during the project.

Secondly after the purchase order is placed, the right type of follow-up and expediting is done by the purchasers so that the materials arrive at the right time and avoid stock-out.

6) Right Time :

The right time for the procurement of an item is said to be the point of minimum stock at which point the materials are expected to arrive in the store house. The responsibility for procurement of materials is both of materials control and purchase departments. The materials control department sends the requisition to the purchase department as soon as the material touches the order level and the purchase department takes immediate steps to replenish the stock by calling quotations, approving one of them. Choosing the supplier, placing the orders, following up vigorously so as to procure the material by the time the material reaches the minimum level.

3.4 SCIENTIFIC PURCHASING :

The basic task of the purchasing department is buying, by which is meant to acquire the requirement in the open market at the lowest price from the supplier. This task is clerical. This does not need any skill but scientific or effective purchasing is much more than "buying", it is an executive job, involving co-operation with other functions, e.g. production, distribution etc. The purchaser therefore does not think solely in terms of buying. He thinks part of the time as if he were producing part of the time as if he were financing, and great deal of the time as if he were

managing the sales department. In all his varied thinking he works out ways in which purchasing can be most helpful to every phase of the business.

Objects of Scientific Purchasing :

- 1) Purchase of given quality and quantity of materials at the best "price" (not necessarily lowest.)
- 2) Purchase of materials at which best suit the product and the purposes for which they are intended.
- 3) Purchasing for time utility, by a schedule sufficiently in advance of the demands of production departments; so that there shall be no delay due to lack of materials to work up on.
- 4) Purchasing the quantity so that the stock at hand is not too much, involving locking up of capital, nor it is too little, militating against the regular supply or production.
- 5) Improvement of the product with reference to quality and distribution by means of selection of adequate material.

### 3.5 IMPORTANCE OF PURCHASING :

The purchasing function is to major importance on account of the following factors :

- 1) Sales depend upon purchasing. Under conditions of perfect competition products will have to be sold at the prevailing market price. In these circumstances profit will be maximised by controlling cost. Hence economy in purchasing is important in lowering the cost of production.
- 2) Business profit depends upon proper turnover of investment. The purchasing department procures materials of the proper quality in sufficient quantities so that production may be efficiently carried on and delivery schedules may be maintained. The procurement however must be made at the lowest ultimate costs so as to keep investment as low as possible commensurate with current needs and responsible factor safely.
- 3) The purchasing department comes in close contact with many other companies and the general market in course of discharging its functions. It is therefore competent to advise the company on the following matters :

- 1) New materials and parts which are available at lowest costs and may be used as substitutes while maintaining the standards of quality of the products.
- 2) Possible new products which may be added to the product lines or new product lines which may be introduced.
- 3) Business trends, such as rising or falling prices, in which the sales department may be interested.
- 4) Building up good trade relations, credit standing and goodwill in the sphere in which it operates.
- 5) Framing business plans relating to initiation of new products; scheduling production, marketing policies and other branches of industrial operations.

The relative importance of purchasing function in comparison with the other functions of an organisation varies with the industry depending on the ratio between the material cost and value added by manufacturer.

### 3.6 CLASSIFICATION OF PURCHASES :

Prior to the purchase of any item, classification of purchases is done. It is done according to the nature of

goods to be purchased, and has a bearing up on the method of purchase. In general there are four classes, such as raw materials, supplies, fabricated parts and machinery and equipment from purchasing point of view.

(I) Raw materials :

Prices of raw materials are governed by quotations in commodity markets and are subject to rapid and wide changes.

Information indicating price trends of these materials is readily available. They therefore tend themselves to forward buying and are procured in large quantities. Such materials are bulky and present storage difficulties. Their transportation and handling charges are usually high and appreciably increase their ultimate cost.

Raw materials are usually purchased on specification by chemical analysis or physical characteristics.

(II) Supplies :

Supplies are varied in character and are required for operation and maintainance of plant, shipping department, administrative office etc. They are generally standard items of manufacture and their prices and discounts are usually shown in published lists of suppliers. Because of their

varied nature, clerical labour involved in purchasing, receiving, checking, store-keeping and accounting is high, although stores keeping does not present considerable difficulty.

Purchases of supplies are usually governed by quantity standard and there is little occasion for forward buying.

(III) Fabricated Parts :

Fabricated parts include parts and small tools or accessories which are brought for resale either as parts of manufactured products or in connection with it. Fabricated parts may include bearings, chucks, abrasive wheels, pumps, wrenches, tools etc. Their purchases are governed by margin or resale profit and future buying is restricted to manufacturing needs contained in production schedules. Purchases should be made on the basis of competitive quotations.

(IV) Industrial equipments :

Industrial equipment includes major items bought for the plant or office, such as machine tools, furnaces, boilers, blowers, safes, automobiles, trucks etc. Purchase requisitions for industrial equipment should be approved by the management before they may be dealt with by the purchasing department. In purchasing these items technical considerations are very

important and they should be carefully covered by careful specifications, purpose and performance aimed at.

### 3.7 DUTIES AND RESPONSIBILITIES OF THE PURCHASING DEPARTMENT :

The duties and responsibilities of the purchasing department differs from company to company. The purchasing department is responsible for all purchasing and contacts with outside suppliers. No contact or negotiations should be made with existing or prospective vendors by any other department except with cognizance of the purchasing department. The principal duties of the purchasing department are enumerated below :

- 1) Selecting sources of supply for materials and services to be purchased. For this purpose suppliers' advertisements, price list and quotations are consulted.
- 2) Interviewing vendors or their representatives and visiting their plants or sources of supply for information regarding quality, price and trade terms of materials needed.
- 3) Scrutinizing the purchase requisitions on which basis purchase are made.
- 4) Purchasing materials on the basis of purchase



requisition from competent sources. For this purpose purchase orders are sent to the suppliers.

5) Checking the qualities and quantities of purchased materials. The quantities are recorded in the receiving report submitted to the purchasing department in duplicate after the materials are received. Qualities are recorded in the inspection and testing report which is attached to each copy of the receiving report.

6) Handling rejections and adjustments on account of the received materials.

7) Approving suppliers' invoices on the basis of receiving reports; inspection and testing reports and adjustments made.

8) Maintaining purchase department records necessary for efficient operation of its functions.

9) Supplying information to the top management and the sales department on market conditions, demand and supply positions, price trends and other business conditions.

10) Disposing of scraps and suppliers which may arise in course of manufacturing operations.

### 3.8 METHODS OF PURCHASING :

Before pinning with any method, the head of the purchase department may call tenders. He may justify himself to select any supplier who should supply the best materials at the least price with many allowances and concessions or he may come across the advertisement catalogues, price lists, etc and later on he may select the source.

The different methods of purchasing may be classified as follows :

- 1) Purchase strictly by requirements.
- 2) Purchase for a specified future period.
- 3) Market purchasing.
- 4) Speculative purchasing.
- 5) Contract purchasing.
- 6) Group purchase of small items.
- 7) Schedule purchasing.
- 8) Bucket buying.
- 9) Visiting centres of supply.
- 10) Buying through sales representatives.
- 11) Co-operative Basis.
- 12) Visiting exhibitions.

There is some overlapping between these methods, for instance

contract purchasing may be any of the four methods listed respectively and same is true of group purchasing or scheduled purchasing.

1) Purchasing by requirements :

This method of purchasing applies to specialised materials and goods for emergency requirements which are not used regular stores material. The quantity purchased is just enough to serve the particular requirement. The purchasing department purchases the goods promptly without taking advantage of the situation. The prime consideration in selecting vendors is dependability to fill such orders and not the price advantage.

2) Purchase for a specified future period :

Purchase for a specified future period applies to goods which are regularly used but not in large quantities and on which price variations are negligible. Most of the supplies are purchased by this method. The period for which purchases are made is determined by (a) manufacturing (production) schedule; (b) the stores record of past use as shown from the stores; (c) cost of carrying the goods in inventory; (d) savings to be made by the purchase of a particular quantity. (e) Operating conditions

and (f) the quantities required. Under this method a fixed period is set for each item but the same period may not apply to all the items.

3) Market Purchasing (Open market buying) :

Market purchasing depends upon conditions of the market and takes full advantages of price fluctuations. Whenever there is a suitable price reduction in the market the purchaser will immediately rush to the market for buying the goods. His main purchase motive is not to meet with the immediate needs of his business but he wants to purchase them at the cheapest price level to make many profits. It is quite possible to buy with reference to demand and yet take advantage of market, fluctuations. As long as market purchasing confirms to the demand of the plant, it can not be called speculative purchaser.

Raw materials such as coal, coke, rubber and pig iron are procured on this basis invariably. Meeting the requirement of the plant and taking advantages of market conditions at the same time are possible when the work continues for a long period, as in rail-road, dam bridges and other construction work and in ship building. In these cases definite construction or manufacturing programmes are drawn up for long periods ahead. There are cases where it

is possible to do market purchasing and not take spot delivery or make immediate payment as in cases of fabricated or partly fabricated materials. The purchasing has two fundamental essentials. (1) comprehensive study of general market trends (2) the scheduled procurement of materials should suit or conform the schedule of production planning.

Advantages :

- a) Commodities are available at low prices.
- b) Increment in the margin of profits.
- c) Recurring expenses or carriage of materials are less due to the consolidation of purchases.

Disadvantages :

- a) If the prudent anticipation proves wrong procure material may fail.
- b) The procurement of materials may become obsolete due to the changes in the specification of materials.
- c) Higher inventory expenses.

Such open market purchases takes place on the assumption that the materials in future are not available, or the price level may be increasing, or the government may impose restrictions etc. If all such assumptions do not happen the procurement of material may be wrong.

4) Speculative Purchasing :

Speculative purchasing has two aspects one consists of buying in excess of requirements when the market is low, with the idea in mind of selling the surplus materials to users who may come on the market. By this speculating on the raw materials some firms earn a profit on both their materials and their fabricated items.

This method is rarely<sup>1</sup> practiced by any industrialist. The second aspect of speculative purchasing is buying in excess of current needs when the price is low, with the expectation that price will rise, thereby saving the company's considerable money. The object is not to sale the material but to use it at a later date. This system extensively used by the manufacturers or users of cotton cloth.

The speculative purchasing may bring profits but it has several shortages :

- 1) Unnecessarily capital is being locked up.
- 2) The expenses on inventory are increased.
- 3) Production schedules are ignored.
- 4) There is always a fear of obsolescence and deterioration.

Speculative purchasing is not properly a function of the purchase department. Such purchasing requires sanction

of the financial executive of the directors. The purchasing agent will however present the full facts including the hazards and possible advantages of a transaction together with its recommendations.

5) Contract Purchasing :

Contract purchasing is the purchasing under contract, usually formal, of needed materials. The contract will take place between the purchaser and the supplier for a period; the delivery of which is frequently spread over a period of time. Price may or may not be fixed. It may be subject to negotiation periodically. By thus contracting to purchase a large quantity price concessions are often available without the need for high inventories and investment. Low inventories and investment result because payment to the supplier is made only when material is received from him. Contract purchasing is frequently used by the large companies such as automotive concerns where overall production programme is known but the specific timing of output is not certain.

The content of contracts are as follows :

- a) The terms of delivery
- b) The payments of dues
- c) The quality and quantity of materials
- d) The period of contract(  $\frac{1}{2}$  or one year)

- e) The contract with carrying of materials.
- f) The rate of alternations of contracts.

The contract purchasing relieves the purchaser for the purchase research.

Advantages :

- 1) Economy in the receipt of materials, because the suppliers supply and deliver the goods.
- 2) Receipt of discount, allowances and concessions.
- 3) Less inventory expenses as deliveries take place when required.

6) Group Purchasing (Purchasers Association/Monopsony) :

Group purchasing has two aspects. One consists of purchasers association known as monopsony. This method will be helpful in purchasing a large quantity which may be purchased at a cheaper price; by incurring common expenses on carriage and other recurring expenses. The second aspect of group purchasing is applied in purchasing small items. The small order is one of the most costly elements in buying.

The clerical costs in purchasing these items, that is making out multicopy purchase order forms, typing, addressing,



handling, filing, invoice checking making payment are quite out of proportion to the invoice value when individually purchased. Thus the items of small value are grouped and listed in one order so that they may be delivered by the same supplier in one consignment and invoice is sent to the purchaser as in purchasing a single item. This method of purchasing may be used in case of pipe fitting, general hardware, electrical supplies and stationery.

It may be arranged that the items contained in a group purchasing order are supplied by adding a fixed percentage to the cost of the supplier. In this case the supplier's cost records should be open to inspection by the buyer on demand.

Often the practice is to secure quotations for supplying the group items from a reasonable a number of bidders and send out the order to the successful bidder without inquiry or bid.

Advantages :

- 1) This method ensures economical purchasing of a large number of small items.
- 2) Common expenses distributed among members will be economical.
- 3) The clerical costs in purchasing will be proportionate to the invoice value.

7) Schedule Purchasing :

The term scheduled purchasing is used to refer to the arrangements made by the purchasing agent to make purchases of materials which are used regularly in large quantities according to a purchase schedule planned in advance. The suppliers are given sufficient time to supply materials. This has an agreement of gentlemen with good co-operation and faith. Spreigel writes "Scheduled purchasing is closely related to carefully controlled production".

By this method inventories may be kept low, as purchase orders are placed whenever the materials are required. The suppliers known in advance what materials are to be supplied and when the purchase orders are expected to come. This information enables a supplier to undertake production work in hand at the most appropriate time for producing the proper quantities of the materials of the proper quality. It also enables the supplier to arrange for production of materials in the most economical manner, so that materials are purchased at lower costs.

Scheduled purchases should be restricted to items which are definitely known to be required within a closely limited period. Because difficulties will arise if requirements or specifications of the goods to be purchased are changed.

8) Bucket Buying :

This type is also known as hand to mouth purchasing. Small units usually prefer to purchase by this method. As they have no sufficient capital so they purchase in small quantity.

9) Visiting Centres of supply :

When the same class of goods are manufactured by different companies and when different qualities are available in the same class a visit may be made to the centres of supply for making a proper selection and getting acquainted with the qualities and features, Later on orders may be placed.

10) Buying, through sales representatives :

Many factories find it economical to test the samples brought by travelling salesman and order through them. As touring salesmen are always on the road for contacting dealers with new arrivals and futhering old connections the dealers can also be up to date with the latest developments. Reading sales literature they may also correspond with the suppliers to send miniature models or samples through their samesmen.



11) Co-operative Basis :

A co-operative society may be organised with capital contributed by the different purchasers in the manner agreed. The society purchases for supplying materials to all members companies.

12) Visiting Exhibition :

Those interested may attend exhibitions choose the materials they find useful, collect addresses and place orders to them.

All industrialists do not follow only one method for purchasing the materials. The bargain, in purchasing must gain again and again in the industrial undertakings. Hence, the industrialists may adhere to many methods of purchasing which would serve the purpose of the enterprise more and more. The methods should fulfil the objectives of purchasing the best quality at the least price level.

3.9 PURCHASING ORGANISATION :

Every business has departmental organisation which also needs a systematic, scientific and sound organisation. The purchase organisation is one of the important departments

of a sound industrial organisation and hence purchase department also needs an organisation. The purchase organisation which will help to purchase the apparent needed commodities in time, at low price and by the less investment of capital requires a technical staff to justify. The organisation of purchase department varies according to the nature and size of the purchase.

If an industry needs only one type of material then a centralised purchasing may be suitable but if the industry requires varieties of commodities from many sources decentralised purchasing may serve the business. The purchase organisation is responsible not only for the procurement of materials but also for all economic consequences which directly or indirectly reflect the working of the entire organisation.

The purchase department should be located in the central place where the purchase department may easily contact with store and production departments. At the same time, care should be taken not to locate the purchase department within the campus of the factory because of the outsiders who will naturally come and go, off and on, in and out of the purchase department.

### 3.9 QUALIFICATIONS AND DUTIES OF A PURCHASING OFFICER :

The successful purchasing is the base for the successful

enterprise. Hence, a well experienced purchasing executive is necessary. His qualifications and duties are as follows :

- 1) He must have considerable experience in buying and must be fully conversant with the purchasing technique.
- 2) He must possess high technical ability to discriminate judiciously between the commodities offered by different suppliers so as to decide upon the most suitable firm.
- 3) He should have organising ability.
- 4) He must know how to negotiate.
- 5) He must possess sound judgement, and all his activities should have the impress of method and precision.
- 6) He must be reliable and dependable.
- 7) He must keep himself in full touch with the markets and must acquaint himself closely with current quotations and sources of supply.
- 8) He should be able to make an intelligent forecast of probable future requirements of the several commodities sufficiently in advance, in order to take the fullest advantage of low markets due to seasonal fluctuations.

- 9) He must possess sound knowledge of finance and efficient business methods.
- 10) He should have good practical knowledge of industry.
- 11) It is his duty to insist on due fulfilment of deliveries by suppliers as indicated in the orders, and thus ensure a steady supply.
- 12) A complete and classified record of the minimum and maximum stocks required, quotations from suppliers, supplies ordered, price charged etc. should be maintained by him.
- 13) He should be honest.

### 3.9-8 DETERMINATION OF PURCHASE REQUIREMENTS :

There are several departments in an industry unit they require several elements and factors for the functioning of their department. They must convey their needs to the procurement department or procurement anticipates the demands, and to store adequate stock of the articles so that rush orders should not be taken place, while placing an orders. The procurement department must consider the prices trend and anticipating the increase/decrease the prices.

The request for the purchase must be made by the concerned departments to the procuring officer. "When the orders in larger quantities but made in smaller units are placed known as the rush orders" ( i.e. small orders can be treated as rush orders). When emergency articles are needed those can be satisfied by rush orders. When there is a sudden change in design or style or when the market is unexpectedly changed or when to meet the demand the rush orders are justifiable. But when there is a faulty inventory control or poor production planning or faulty purchasing policies one cannot justify rush orders.

The problem of rush orders must be handled carefully. For this proper training regarding purchases may be provided to the purchase officers. By placing large number of small orders may create several problems. For such an orders the permission from the various officers of general sections must be obtained. By this procedure there is every possibility that the number of rush orders may come down. The purchasing officers must know that the emergency and whether the need is a real or artificial and after that he must permit to rush orders. At the same time he must compare the data with the last years orders. He should fix the responsibility on the officers of the company who are responsible for placing such rush orders.

In order to avoid rush orders following methods can



be followed :

- A) Only the orders of standardised articles be placed.
- B) Another method is for the purchasing department to hold small requisitions until a justifiable total in rupees has been accumulated.
- C) A requisition calander be established.
- D) To draw up a request for quotation under certain general heading and to send a copy of this form each month to a group of approved suppliers.

There is no much more difference between rush and small orders. It may in fact represent a real emergency item and justify all possible haste.

### 3.10 PURCHASE PROCEDURES :

In the factory organisation, purchasing has an important place. The purchasing officer should have to plan purchase the materials at cheaper rate and a suitable quality. Therefore the purchasing officer is a student of markets. He should have to study where the goods are available at cheaper price and such goods suit the production plan. He should have to search for the suitable substitutes and therefore he may take tours to abroad for the availability of novel goods for the new design of goods.

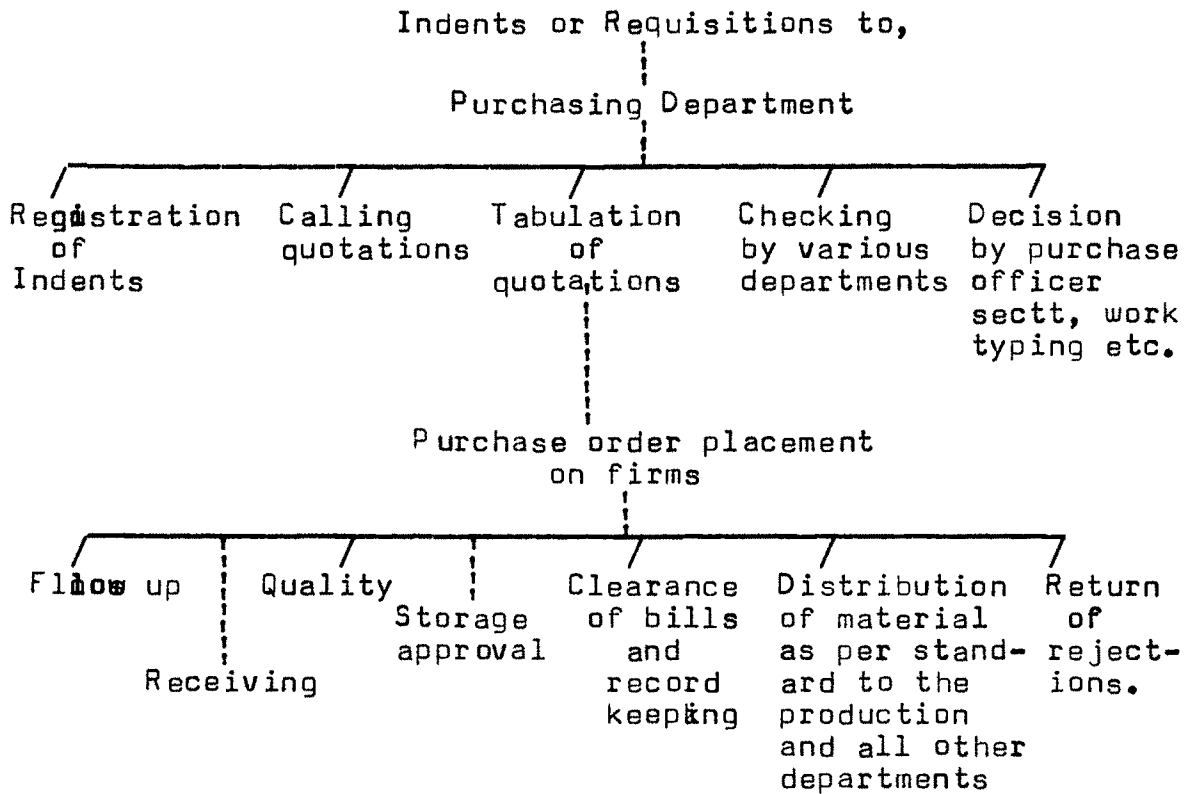
Steps of Purchasing :

The following steps are useful for carrying out effective purchasing :

- 1) Initiation of request in the form of a purchase requisition from the department requiring the goods.
- 2) Ascertainment of an accurate statement of character and amount of material needed, preferably based upon specifications.
- 3) Selection and development of desirable and dependable sources of supply.
- 4) Negotiations with the sources.
- 5) Analysis of the proposal.
- 6) Selection of the vendors.
- 7) Placing of the order.
- 8) Follow-up of the order.
- 9) Routing the order.
- 10) Receiving the goods.
- 11) Checking invoices and goods.
- 12) Returning defective goods in exchange for proper quality materials or credit note.
- 13) Keeping materials in a place where they will be safe and readily accessible.

Afterwards, the payment will take place after deducting all concession.

3.10-A CYCLE OF PURCHASING ACTIVITIES :



3.10-B PURCHASE REQUISITION :

The department requiring material makes out purchase requisition and sends it to the stores control, which if the material is not in stock, passes it on to the purchase section. The requisition note indicates :

- 1) the department requisitioning the goods.
- 2) the description of goods.
- 3) whether the goods required are for stock or sale and

- 4) the time within which the delivery is required/  
Occasionally the price within which the supplies  
should be obtained is also mentioned.

### 3.10-C SPECIFICATION :

By specifications is usually meant the material standards which are established by an enterprise to define its major material requirements, specifications define the form shape, composition, performance etc. of the material involved and are established in writing by the purchasing and production departments. These specifications in respect of materials to be purchased are supplied to the suppliers.

### 3.10-D SOURCES OF SUPPLY :

After determining the quality and quantity of goods to be bought, the sources of supply are to be tapped. For this the following are very helpful.

- 1) Trade directives.
- 2) Telephone directories.
- 3) Purchasing periodicals.
- 4) News papers and commerce magazines.
- 5) Catalogues, blue prints and other literature of advertising nature.
- 6) Suppliers index files.

- 7) Display of film data.
- 8) Exhibitions and trade shows.
- 9) Interviews with salesmen.
- 10) Market surveys.
- 11) Professional organisation.
- 12) Quotations.
- 13) Experience.

While considering a suitable source of supply the following factors should be given due consideration.

- 1) Whether the purchase from a single supplier or a multiple of them at the same time.
- 2) Whether to purchase from the local sources or from some distant place.
- 3) Whether to purchase directly from the manufacturer or through a whole sales.

The selection of right supplier is of paramount importance because if the supplier turns out to be bad, the competence, organising ability of the buyer and all other qualities will go waste.

### 3.10-E APPROVED SUPPLIERS :

Several Government departments, public sector undertaking and large business houses maintain a list of approved suppliers. The following points are normally checked before putting suppliers on the approved list.

- 1) Manufacturing capabilities.
- 2) Financial condition.
- 3) Management of the factory.
- 4) Service facilities.
- 5) Specifications to which products are manufactured.
- 6) Business reputation and value of business.

3.10-F INVITING TENDERS AND QUOTATIONS :

Usually tenders are invited when time permits and the money involved is large.

The following are the different methods of obtaining tenders :

- 1) Open tender ( i.e. by advertisement)
- 2) Limited tender ( by direct invitation to limited number of firms)
- 3) Single tender ( by invitation to one firm only)
- 4) Oral tender.

3.10-G PURCHASE ORDER :

The purchase order is the vendors authority to ship and charge for the goods specified and is the buyers commitment to the vendor for the value of goods ordered.

The purchase order should cover definitely and precisely the essential elements of purchase to be made in a manner which will render future misunderstandings impossible

and minimise the necessity of correspondence.

Purchase order should include the following data.

- 1) Number
- 2) Quantity ordered
- 3) Description
- 4) Delivery and shipping instructions
- 5) Billing and terms
- 6) Prices
- 7) Miscellaneous clauses.

3.10HH FOLLOW-UP OF PURCHASE ORDER :

The follow-up section should see that delivery date is kept or learn of unavoidable delays in time to prevent crippling of plant for lack of materials. The followup section should normally carry out the following functions :

- 1) To secure an acknowledgement or acceptance of order.
- 2) To secure a promise of delivery consistent with requirements.
- 3) To check with vendor or progress of filling the order several times if the order is highly important.
- 4) To see finally that the delivery promise is kept.

In case the acknowledgement is not received after a

reasonable lapse of time for exchange of mail, the follow-up section should write requesting acknowledgement. After acknowledgement is secured with a statement of delivery date, the follow-up section, if order is important or special, will make later checks on the vendor by letter post card, or in urgent cases by telephone or telegraph.

### 3.10-I PURCHASE DEPARTMENT RECORDS :

The purchase department maintains the following most important records :

- 1) Purchase record.
- 2) Contract record.
- 3) Vendor record.
- 4) Price or quotation record.
- 5) Summary of purchase work.
- 6) Miscellaneous record.

### 3.11 POLICIES OF PURCHASING :

The technician purchaser should have to determine and accent the sound policies for purchasing as the purchasing is the basic factor of the industrial material management. He should have to device whether he should purchase from the sources of the native country or from the foreign countries. On the whole, his purchase function should not be an execution at random. His purchases should embrace



the best quality at the cheapest price with many concessions. The various policies of the purchase manager are as follows :

1) Policy towards suppliers :

The problem may arise, how to discover the suppliers who will fulfil the expectations. The purchase manager may call for tenders or he may refer the advertisements of suppliers or he may place the advertisement of his needs, or he may select other means to choose the supplier. Instead of adicting to only one supplier, the purchase manager may contact and contract many other suppliers from whom he may purchase. Hence a number of sale representatives may approach the purchase manager to explain the use, the price, the durability and other qualities of the commodities. Therefore the purchase manager should have to determine the policy of selecting the source.

2) Policy as to Quantity :

The purchase should be in large quantity or in small lots, should be determined by the purchase manager. The purchase in bulk would yield the merits of low price and other regular allowances and concessions. But the capital investments will also be in large quantity. Then the capital should be invested in such unwanted materials or not.

Small business units will accept the policy in purchasing in small lots only. Though the concessions may not be available over the purchase of small lots, the subsequent expenses are not incurred like storage, carriage insurance etc. Even the locking of capital is also not necessary. But in future, if the commodities needed are not available or, if the Government is imposing any restrictions the bulk purchase will be the policy. On the contrary, the needed commodities are available in the open market at all levels at any time, the purchase of small lots are suitable.

For such small lot, there will be less price fluctuations. If the goods are to be imported from other countries only the large quantity of purchase is acceptable.

3) Policy as to Quality :

According to the needs of people, the quality should be determined. Quality is not absolute and it is subject for constant changes. The modern quality is the outcome of intelligence of three experts, engineers, economists and accountants.

4) Policy as to time :

Time element is important in the economic analysis.

The purchase manager should have to fix the time in purchasing the goods in which they are available at cheaper price. The industrial purchase officer may fix his purchases at season to purchase at low prices. However, if the production departments needs materials in non-seasons, the commodities may be costly. Even then, to remove idleness of the industry the needs may be purchased at odd hours.

Thus, the purchase manager should have to determine the policy of time.

5) Policy as to Price :

The purchase officer seeks the low market for his purchases. He may use any power, contacts to reduce price levels. If the price level is high, the cost of production will also be light and the production is bound to be sold at high price-level. At that price-level the expected number of consumers will not purchase the goods.

In this way, the purchase manager should have to determine his own purchase policy. Which will purchase the best quality of goods at the lowest price-level.

3.12 IMPORT PROCEDURES AND DOCUMENTS :

An industrial or business organisation may require certain materials, plant, machinery and equipment which are

either not available in India or which can be imported from a foreign country at a cheaper price. It is the duty of the purchase department to make all arrangements for importing such items and to procure them at the earliest possible time from the right source. For some organisations, there may be regular consumption of certain raw materials or items from abroad for which it may be necessary for its purchase department to arrange for import licence or quota on a regular basis. It is, therefore, important for every person concerned with purchasing function to be conversant with import procedure and documents.

3.12-A      IMPORT TRADE PROCEDURE :

Stages in the procedure of import trade transaction are as follows :

- 1) Procurement of licence and quota.
- 2) Obtaining foreign exchange.
- 3) Booking of indent or order.
- 4) Despatching of letter of credit.
- 5) Despatch of orders by the indent house to shipper.
- 6) Shipping of goods.
- 7) Preparation of Invoice and bill for payment.
- 8) Clearing of goods.
- 9) Transportation of goods to warehouse.
- 10) Payment for goods imported.

3.12-B      IMPORT DOCUMENTS :

The following three documents issued every year are of vital importance for import of goods for various categories of importers.

- 1)    Import Trade control (ITC) Handbook of rules and procedures.
  - 2)    Import Trade control Policy (popularly called Red Book) Vol. I.
  - 3)    Import Trade Control Policy ( Red Book) Vol.II.
- These are issued by the ministry of Commerce, Government of India.

In addition, the following legislations are also relevant to the study of import trade control.

- 1)    Import and Export (Control) Act, 1947.
- 2)    Import Control order 1955.

3.12-C      ESTABLISHED IMPORTERS :

An established importer is a person/firm actually engaged in the import trade. An established importer is entitled to quota certificate for import of item during a given period. It is for one financial year (viz. from April to March ). For the purpose of fixation of quotas only normal and regular items of imports of the established importers are taken into consideration.

An established importer may be (1) an individual (2) a partnership firm (3) a Karta or a Hindu undivided family (4) a limited company or (5) an association.

3.12-D METHODS OF PAYMENT :

At the time of sales transaction the exporter wants to be satisfied that payment for the goods will be forthcoming and the importer wants to be sure that when he pays for the goods they will be delivered to him.

The various methods of obtaining payment of exports are given below :

- 1) Draft term.
- 2) Letter of Credit.
- 3) Payment by remittance.
- 4) Cash against documents.
- 5) Telegraphic transfer etc.

SECTION - II

" Y A R N "

A salesperson in a speciality shop was assisting a young business woman in co-ordinating a blazer and skirt. The latter seemed favourable but hesitated " Can I wash it or must I send it to the cleaners? And will it wear well"? she asked.

The sales person had studied the federally required labels and knew that material was polyester and cotton and was machine washable she replied " It's a combination of polyester and cotton. The cotton launders easily, absorbs moisture and is comfortable. The polyester is durable, crease-resistant, and retains its shape well." This specific information about the fibre content of the material clinched the sale. This illustration shows how important it is to know about the fibres from the view point of the consumer as well as the sales person and manufacturer.

3.1-A FIBRES :

A fibre is a hair like unit of raw material of which cloths are made-for example, cotton, linen, rayon, silk, wool, nylon and polyester.

A "fibre" or "Textile fibre" is a "unit of matter which is capable of being spun into yarn or made into fabric

by bonding or by interlacing in a variety of methods - including, knitting, weaving braiding, felting, twisting or webbing and which is the basic structured element of textile products.<sup>1</sup>

Each of the tiny hairs that make up the yarn is a fibre.

### 3.2-2 TEXTILE FIBRES :

Together with length and strength the fibre must be fine enough to allow the construction of a yarn of desirable size and weight. A harsh fabric is not suitable for clothing; therefore a textile fibre for this use must be soft and pleasing to the touch.

It is necessary that a fibre possesses the ability to absorb liquids readily in order that it may be bleached or dyed. Except for this property of fibres, man's clothing would have lacked its colour possibilities.

Some few fibres such as wool, silk, cotton and linen possess in their natural state the properties necessary to permit their use in the production of fabrics. With the aid of science man has been able to produce new fibres, so we now have natural fibres and synthetic or man-made fibres. The natural fibres are divided, according to their source

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1. Isabel B. Wingate & June F. Mohler, Textile Fabrics & Their Selection. New Jersey : Prentice-Hall, Inc, Englewood-cliffs, 1984. p. 23.



and their chemical composition. The synthetic fibres are classified according to their chemical source.

A classification of the most important fibres used in the textile industries is as follows :

### 3.8 CLASSIFICATION<sup>1</sup>

#### I) NATURAL FIBRES :

##### 1) Animal :

a) Hair fibres : Sheep's wool, mohair, camel's hair, alpaca, vicuna, Llama.

b) Cocoon Fibres-silk

##### 2) Vegetable :

a) Seed hairs : Cotton, Kopak, milkweed.

b) Bast fibres : Flax, hemp, jute, ramie.

c) Leaf fibres : abaca ( manila hemp)  
Pineapple fibre.

##### 3) Minerals :

a) Asbestos.

#### II) SYNTHETIC FIBRES :

##### 1) Regenerated cellulose - Rayon

a) Viscose.

b) Cuprammonium

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1. HESS K.P., Textile Fibers & Their Uses :  
Calcutta : Oxford & IBH Publishing Co., 1966. p. 158.

c) Fortisan - (1) Regular (2) Fartisan - 56.

2) Cellulose esters :

a) Acetate.

b) Arnel.

3) Protein fibres :

a) Animal - Casein.

b) Vegetable, corn - vicara.

4) Glons.

5) Metal : Gold, Silver, aluminium

6) Nylon : (a) type-66 (b) type-6.

7) Polyster fibre : (a) Dacron.

8) Acrylic fibres : (a) Orlon (b) Acrilon (c) Dynel.

9) Vinyl derivatives : Vinyon H.H. (b) Saran.

The classification of textile fibres as natural and synthetic has been the subject of controversy for some time.

### 3.C MEANING AND DEFINITIONS OF YARN :

The derivation of this word from "garm" is ~~inx~~ a word common to the Scandinavian languages, "guts" is interesting since today "cat-gut", which may be the drawn-out "guts" of

the silk-worm, is a well known commodity, and the same 'guts' spun by the silk-worm, itself into a fine filament are the basis of the best silk yarn produced. The silk-worm, however, in its "spinning" simply thins out the silk fluid to double microscopic strand - some 500 to 1,000 yards long, several of which are combined by mechanical means to form a yarn. While the human spinner usually combines a number of much shorter fibres or filaments, also by mechanical means, in to a continuous strand often much longer than the 1,000 yards filament of the silk worm, and this also is spoken of as a yarn.<sup>1</sup>

Definitions :

- 1) A generic term for a group of fibres or filaments, either natural or synthetic, twisted or laid together to form a continuous strand suitable for use in weaving, knitting or some other method of inter winning to form textile fabrics.<sup>2</sup>
- 2) A strand of textile fibre in a form suitable for weaving, knitting, braiding felting, webbing or otherwise fabricating into a fabric.<sup>3</sup>

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1. ED. Encyclopaedia - Britannica - Volume 23. London : Encyclopaedia Bri. Ltd. 1968. p.878.
  2. Isabel B. Wingate & June F. Mohler, Textile Fabrics and Their Selection. New Jersey : Prentice-Hall, INC; Englewood cliffs. 1984. p. 46.
  3. Ibid. p. 72.

3) The formation of the fibre into a continuous strand or length known as yarn.<sup>1</sup>

In general, yarn may be defined as a linear assemblage of fibres or filaments formed into a continuous strand, having textile-like characteristics. ( The textile like characters referred to include good tensile strength and high flexibility)

### 3.D CLASSIFICATION OF YARNS :

Mainly yarns may be classified :

- 1) According to their use and
- 2) According to the number of strands they contain.
- ~~3) According to their use and~~

#### 1) According to use :

Yarn may be divided into two classifications according to their use : Weaving yarns and Knitting yarns.

##### a) Weaving yarns :

Yarns for woven cloth are prepared for the intended end use. Yarns to be used in the warp. The lengthwise, direction of a cloth, are generally stronger, have a tighter

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1. HESS K.P., Textile Fibres & Their Uses.  
Calcutta : Oxford & IBH Publishing Co., 1966. p.72

twist and are smoother and more even than are yarns used for filling the cross wise direction of a cloth. Novelty yarns may be used in the warp; but they are generally found in the filling. Highly twisted crepe yarns are usually found used as filling yarns.

b) Knitting Yarns :

These may be divided into yarns for hand knitting and yarns for machine knitting. Knitting yarn are more slackly twisted than yarns for weaving.

II) According to the number of strands they contain :

Again yarns may be classified in two different ways, according to the number of strands they contains as single, multiple strand or ply, and cable; and according to their structure as simple and complex.

Strand will represent a continuous length of fibres more or less twisted together. Simple yarns are the type commonly used for utility fabrics. As the term implies, simple yarns are alike in all their parts. Complex yarns are used to produce a decorative or unusual effect in the fabric. They may vary in the structure of a single strand; in the character of multiple strands, or the manner in which these are combined.<sup>1</sup>

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1. For details - Refer 'TEXTILE FIBERS & THEIR USES' by HESS, p. 80.

### 3.E MEASURES TO IDENTIFY THE QUALITY OF YARN & CLOTH :

Fashions change faster than seasons. Reasons may be many and varied, However, one thing remains the same and that is "quality yarn". The life of the present day is so diversified, and clothing of higher quality is always sought for. To meet the market demand, machines that can produce quality yarn with high efficiency are desired.

#### 3.E-i HOW TO IDENTITY ORDINARY OR CONVENTIONAL YARN :

Yarns used in clothing and home furnishings may be classified in two general types.

- 1) Ordinary or conventional,
- 2) Novelty.

It is important to know the fibre content of a yarn first in order to tell what has been its processing. If the fibres are cotton or wool or a blend of these fibres, carding and combing will be the processes required in manufacture. If manmade staple fibres are spun into yarn to resemble cotton or wool, these yarns will be spun on the cotton or wool systems and therefore will be carded and combed too.

To identify a carded cotton yarn, untwist the yarn

to the point where it pulls apart. Discard one piece of the yarn that has pulled apart. From the broken end of yarn, pluck out several fibres. Note whether the fibres are very short less than 1 inch. Also note whether the fibres seem to branch out in all directions - are not parallel. If this is the case, the cotton yarn is probably carded only. If the yarn pulls apart and does not separate into two or three distinct yarns then the yarn is a single. If the cotton yarn has long fibre (approximately 1 inch or over), all about the same length and lying parallel, the yarn is probably combed.

After identifying the yarns, the whole cloth should be studied. Notice whether the diameters of the yarns are quite even and smooth. If so, the yarns are probably combed. A very fine, even yarn, like one found in organdy is combed.

Novelty yarns are made on a novelty yarn twisting machines by combing different types of yarns in various ways. The weight of novelty yarns may vary from a few hundred yards per pound to as few as 20,000 yards per pound or more.<sup>1</sup>

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1. Isabel B. Wingate & June F. Mohler, Textile Fabrics & Their Selection. New Jersey : Prentice-Hall, INC, Englewood, cliffs. 1984. 0.62.

3.E-ii      SIZE OR COUNT OF YARN :

The discription of the yarn includes its size or count. A skein of cotton yarn, 840 yards in length, known as a hank, is the basis for determining the count of cotton yarn by the cotton system. The size is the number of these hanks requires to weigh one pound. That is, if a hank or 840 yards weighs one pound, the yarn is a number ones, written as 1<sup>S</sup>; if two hanks weigh one pound, the yarn is a 2<sup>S</sup>. The size or count of yarns made from other fibres is determined in a similar different textile fibres and is so arranged that the size of yarns for convenience, usually falls between 1 and 100. This method of measuring the size of yarn does not permit an easy comparison of different types of yarns. For example a 50<sup>S</sup> cotton yarn is smaller than a 50<sup>S</sup> woolen yarn.

There are another two methods also for numbering all yarns ( viz - "Typp" (pronounced tip) and "Grey" system)<sup>1</sup>

In the past, fine yarns of more than 100<sup>S</sup> were not spun but now some yarns as fine as 200<sup>S</sup> are spun. This increase in the range of yarn size has accompanied the

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1.      HESS K.P., Textile Fibers & Their Uses.  
Calcutta : Oxford & IBH Publishing Co., 1966. p.79.



development of spinning industry. Yarns vary in the yards that may be spun per hour and the weight per pound, depending upon the fibres used, the counts, the twist per inch, and the method of spinning. The usual method of reporting the amount of yarn produced is to give the number of active spindles.

3.E-iii     COUNT OF CLOTH (Pick) :

The closeness or looseness of the weave is measured by the count of the cloth. This is determined by the number of picks and ends. (filling and warps) to the square inch. (A small pocket magnifying glass, called a pick glass or linen tester, is used for this purpose.)

If the count of the cloth is 80 warps ( ends ) and 80 fillings (picks) to the inch, the count is expressed as 80 x 80 or 80 square. If there are 60 warps and 50 weft to the inch the count is expressed as 60 x 50.