

Modern look to
quality in terms of



Modern economics under competitive market conditions insists on quality and also on cost reduction. A customer, particularly in industrial market, is a shrewd buyer and he insists on both quality and price.

Of course, quality is not considered in absolute terms. It is always considered in relation to price and purpose, i. e., the end use of products.

It is directly related to definable and measurable characteristics of the product involved. Quality is governed by acceptable or tolerable deviations by the producer or the consumer. In this sense, it connotes reliability. Similarly, quality manufacturing cost and sales price are closely inter connected. High quality means higher cost of production and therefore, higher sale price. A little quality relaxation can lead to lower price.

Then again quantity and quality are mutually dependent. Insistence on higher quality means tighter and comprehensive mechanism of control and supervision, which in turn creates difficulty in achieving quantity targets in practice. A customer, of course, look to quality in terms of performance, service and fulfillment of purpose for which the things are bought. Quality control detects the causes of variations in the characteristics of the products and indicates necessary adjustments by which these variations or deviations from the norms of standards can be controlled and brought down within the tolerance limit. The absolute parity between actual result and planned result is neither feasible nor desirable. Bethal, Atwater and Stockman have defined the quality control as: “ Quality Control is the systematic control of those variables (in the manufacturing process) which affect the excellence of the

end product. These variables result from the application of materials, men, machines and manufacturing conditions.

The production system processes these inputs to produce desirable output. Only the variables in the inputs are regulated to the extent that they do not deviate unnecessarily from the excellence (prescribed norms) of the manufacturing process as reflected in the quality of the finished product can the control of quality be said to exist.”

Objectives of Quality Control:

The objectives of quality control may be stated as follows: 1.

To take the necessary corrective steps to keep the quality of the product from dropping below the desired level during manufacturing. 2. To analyze the trend and extent of quality deviation in a part or product during manufacture and to determine the cause of such deviation by statistical techniques when it cannot reasonably be attributed to chance.

3. To avoid as far as reasonably possible, having products reach the customer which are of lower quality than that which is considered acceptable. 4.

To establish standards of quality those are readily acceptable to the customer and economical to maintain.

Procedure of Quality Control:

The process of quality control consists of the following steps (Fig. 20. 1).

Thus, the quality control involves inspection of raw materials, parts, gauge,

tools and finished products. It starts from when materials and parts are purchased during the process and operates till the finished product comes out as ready to sell.