

# Manufacturing engineering and technology



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BUSTER**

It also defined as, Manufacturing engineering includes product design and manufacturing system design as well as operation of the factory'. It dealing with machines that turn raw materials to a new product. Engineering activities involved in the creation and operation of the technical processes that convert raw materials, energy, and purchased Items into components for sale to other manufacturers.

In particular, manufacturing engineering Involves the analysis and modification of product designs so as to assure ; the design, selection, specification and optimization of the required equipment, tooling, processes and operations and the determination of other technical matters required to make a given product according to the desired volume, timetable, quality level and other specifications. Manufacturing Engineering has many important branches. 1. Product design 2. Machinery and tooling 3. Process planning 4. Purchasing 5. Manufacturing 6. Marketing 7. Sales 8.

Shipping Manufacturing responsive to following demands; Design Quality Environmentally friendly Flexible Types of product Market demand Production rate This field also deals with the integration of different facilities and systems for producing quality products (with optimal expenditure) by applying the principles of physics and the results of manufacturing systems studies, such as the following: Craft Computer integrated manufacturing Agile manufacturing Putting-out system Computer-aided technologies in manufacturing History: ' Manufacture' time used in 1567 and ' Manufacturing time used in 1683.

The history can be known to factories in century in I-. However, home workshops were build in ancient China, ancient Rome and Middle East. Many historians believe Houston Manufacture as the first modern factory. Many historians regard Matthew Houston Coko Manufacture (established in 1761 in Birmingham) as the first modern factory. Manufacturing processes:

Manufacturing process is science and technology by which a material is converted into a useful shape, with a structure and properties. Simply, “ All that is done to convert stuff into things”.