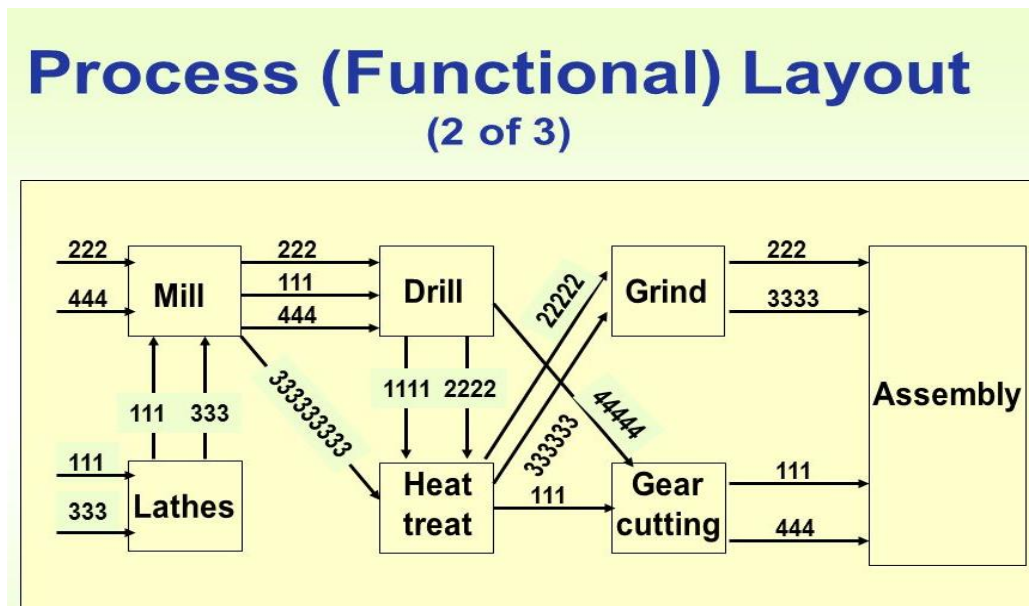


2. Process or Functional Layout

The process layout is particularly useful where low volume of production is needed. If the products are not standardized, the process layout is more low desirable, because it has creator process flexibility than other. In this type of layout, the machines and not arranged according to the sequence of operations but are arranged according to the nature or type of the operations. This layout is commonly suitable for non repetitive jobs.

Same type of operation facilities are grouped together such as lathes will be placed at one place, all the drill machines are at another place and so on. See Fig. 8.4 for process layout. Therefore, the process carried out in that area is according to the machine available in that area.



Advantages of Process Layout

- (i) There will be less duplication of machines. Thus, total investment in equipment purchase will be reduced.
- (ii) It offers better and more efficient supervision through specialization at various levels.
- (iii) There is a greater flexibility in equipment and man power thus load distribution is easily controlled.
- (iv) Better utilization of equipment available is possible.
- (v) Break down of equipment can be easily handled by transferring work to another machine/work station.
- (vi) There will be better control of complicated or precision processes, especially where much inspection is required.

Limitations of Process Layout

- (i) There are long material flow lines and hence the expensive handling is required.
- (ii) Total production cycle time is more owing to long distances and waiting at various points.
- (iii) Since more work is in queue and waiting for further operation hence bottle necks occur.
- (iv) Generally, more floor area is required.
- (v) Since work does not flow through definite lines, counting and scheduling is more tedious.
- (vi) Specialization creates monotony and there will be difficult for the laid workers to find job in other industries.

3. Fixed Position Layout

This type of layout is the least important for today's manufacturing industries. In this type of layout the major component remain in a fixed location, other materials, parts, tools, machinery, man power and other supporting equipment's are brought to this location.

The major component or body of the product remain in a fixed position because it is too heavy or too big and as such it is economical and convenient to bring the necessary tools and equipment's to work place along with the man power. This type of layout is used in the manufacture of boilers, hydraulic and steam turbines and ships etc.

