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## Best Practices in Production

Best practices in production coincide with many of the principles of lean manufacturing, a system focused on eliminating waste at every level. Production is closely allied to demand to achieve reductions in inventory, shipping costs, and idle capacity.

To reach these goals, manufacturers that apply best practices organize their production to improve process flow, apply principles of cell manufacturing, balance the production line, and streamline material handling procedures.

Specialized software helps in evaluating plant operations required to undertake efforts at improvement required to achieve goals set out in many of these best practices.

**Process Flow:** In flow manufacturing, processes are linked sequentially to achieve a rational movement of components from one stage to the next.

The goal is to eliminate all wasted activity — that is, any step that does not add value to the product.

**Cell Manufacturing:** Grouping similar products, parts, and assemblies, known as cell manufacturing, helps to simplify the manufacturing process. As part of this effort, related activities are situated close to each other on the shop floor.

Organizing work into production cells streamlines schedules, reduces movement of materials and finished products, eases supervision, and reduces the number and variety of parts required.

**Line Balancing:** Evenly distributing the workload maximizes production and enhances asset utilization. By taking projected cycle time and distinctive machine characteristics into account during production planning, manufacturers achieve higher throughput rates.

**Material Handling:** Product-focused cellular layout of the work floor reduces both the number of moves material must undergo during production and the distance involved in those moves.

