

Compact, low-cost tableting plants

Innovative layout concept

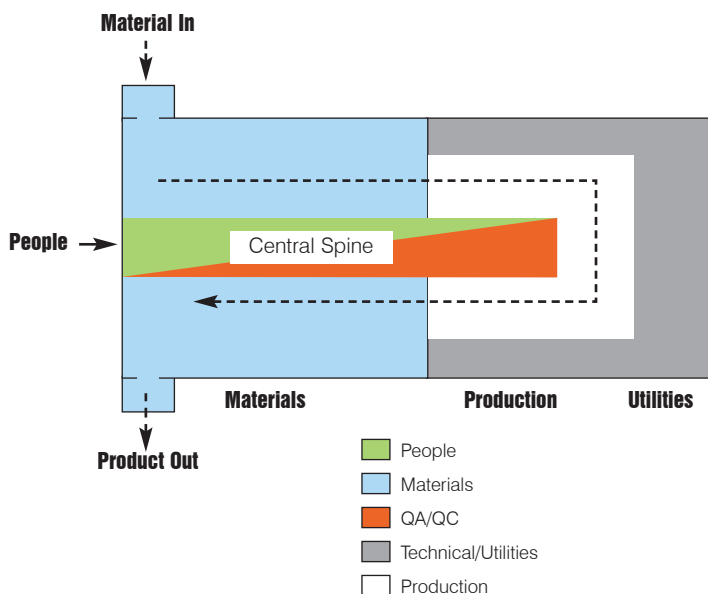
Our Singapore office recently completed the basic engineering of a tableting plant incorporating the new patent-pending layout concept by Singapore-based pharmaceutical company Beacons Pharmaceuticals (Pte) Limited.

Challenging convention

In conventional tablet plant layouts, the typically linear arrangement of the clean production rooms and the use of a separate technical floor can add unnecessary facility cost. In addition, depending on the overall arrangements, the material flow paths through the facility can be sub-optimized.

Step-change in space utilization

The objective of the new layout concept is to create a more compact, operationally-efficient and lower-cost facility, meeting GMP requirements. The fundamental layout concept is to create a facility with a service 'spine' around which process materials move in 'U' configuration. In the production area, a hub is created, around which the production rooms are located, all surrounded by the technical support area.



During basic engineering, Foster Wheeler developed this concept into a greenfield facility design for Beacons, incorporating office space, warehousing, production, quality assurance support, a research and development pilot plant and all utilities needed to operate the plant.

This meets Beacons' requirement for a new corporate headquarters, with new product development and flexible manufacturing capability.

Smaller and cheaper

A preliminary analysis indicates that this layout requires a smaller area than conventional designs and so is cheaper to build. Beacons believes that the overall facility design has GMP and operational benefits and can be utilized as a 'model' for many other manufacturers who need to create such facilities in the future.