

## PLANT LAYOUTS' ANALYSIS AND DESIGN

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[Cite this publication](#)**Charles Chikwendu Okpala**

1.83 · Nnamdi Azikiwe University, Awka

## Abstract

The paper provided a detailed definition of plant layout; and listed efficient labour utilization, manufacturing and maintenance ease, enhanced productivity, manufacturing flexibility, effective utilization of staff, machines, materials, and equipment, as well as reduction of accidents, hazards, and inventory handling cost as some of the benefits of a well-designed plant layout. The numerous factors that determine the designing of a plant layout were also discussed in full, after which the various types of plant layout were analysed. The plant layout design, its major objectives, and the equations for analytical calculations of work in progress and efficiency in plant layout design

were also discussed, before the paper concluded on the need for manufacturers to have a well-designed functional plant layout that will be able to switch from one line of product to another without major alterations.

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