

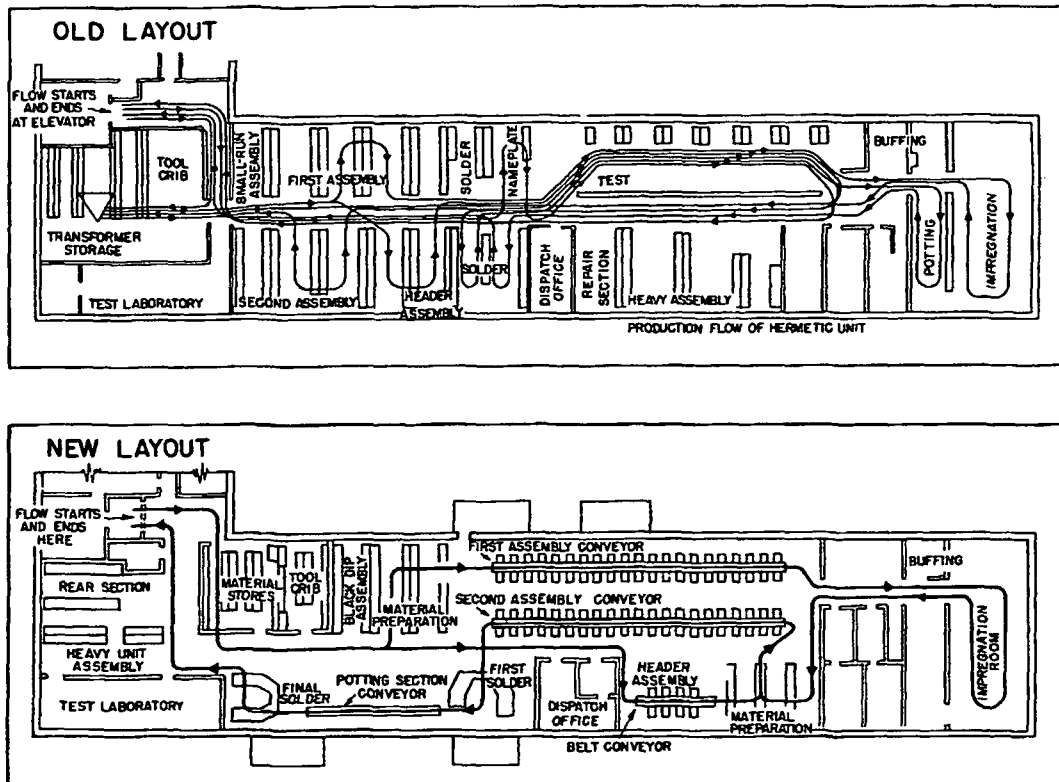


Fig 16-4 – The new layout greatly reduced the hazards incidental to materials handling in this transformer manufacturing operation

handling of materials, many unnecessary movements, and result in bad housekeeping – in itself a prolific source of accidents

Insufficient headroom at aisles, platforms, pipelines, overhead conveyors, other parts of the structure, and other installations is disclosed in studying the models. A vertical distance of at least 7 ft generally is specified between passageways and stairways, and overhead structures to provide ample clearance. Overhead cranes and conveyors require at least 24 in of vertical and horizontal clearance.

Trucks and other vehicles require enough room for movement without endangering men and equipment and need space to back and turn near machines. Aisles should be wide enough to permit trucks to pass without colliding. For one-way traffic, aisles should be not less than 3 ft wider than the widest

vehicles. Aisles for two-way traffic should be not less than 3 ft wider than twice the width of the widest vehicle. These minimum widths are exceeded considerably in some new buildings where, because of anticipated heavy traffic, aisles from 12 to 20 ft wide have been specified.

Safe layout of aisles requires that there be no blind corners and that adequate radius be provided to allow for vehicle turns. A 6-ft radius is large enough for small industrial trucks.

Aisles should be clearly defined with approved markings of either traffic paint or striping material. Follow ASI Standard Z53.1, *Safety Color Code for Marking Physical Hazards and the Identification of Certain Equipment*. Plastic buttons that are glued or fastened with metal fasteners to the floor are used by many because of their durability.