FILE NAME: Engineering (ENG)

DATE: 1957

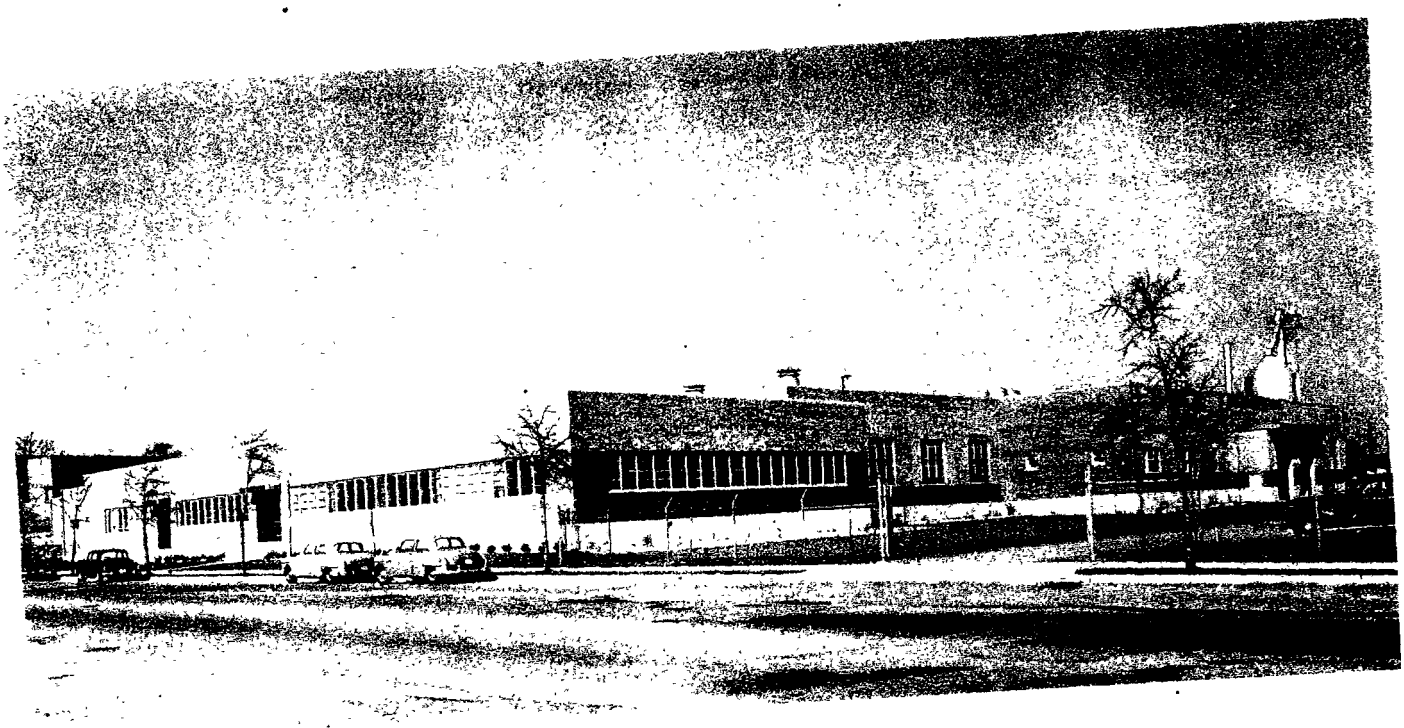
DOC#: ENG031

DOCUMENT DESCRIPTION: Book Excerpt - Plant Designed for Employees' Welfare

BUILDINGS FOR INDUSTRY

An Architectural Record Book

Published by F. W. Dodge Corporation



PLANT DESIGNED FOR EMPLOYEES' WELFARE

Asten-Hill Manufacturing Co.
Philadelphia, Penn.

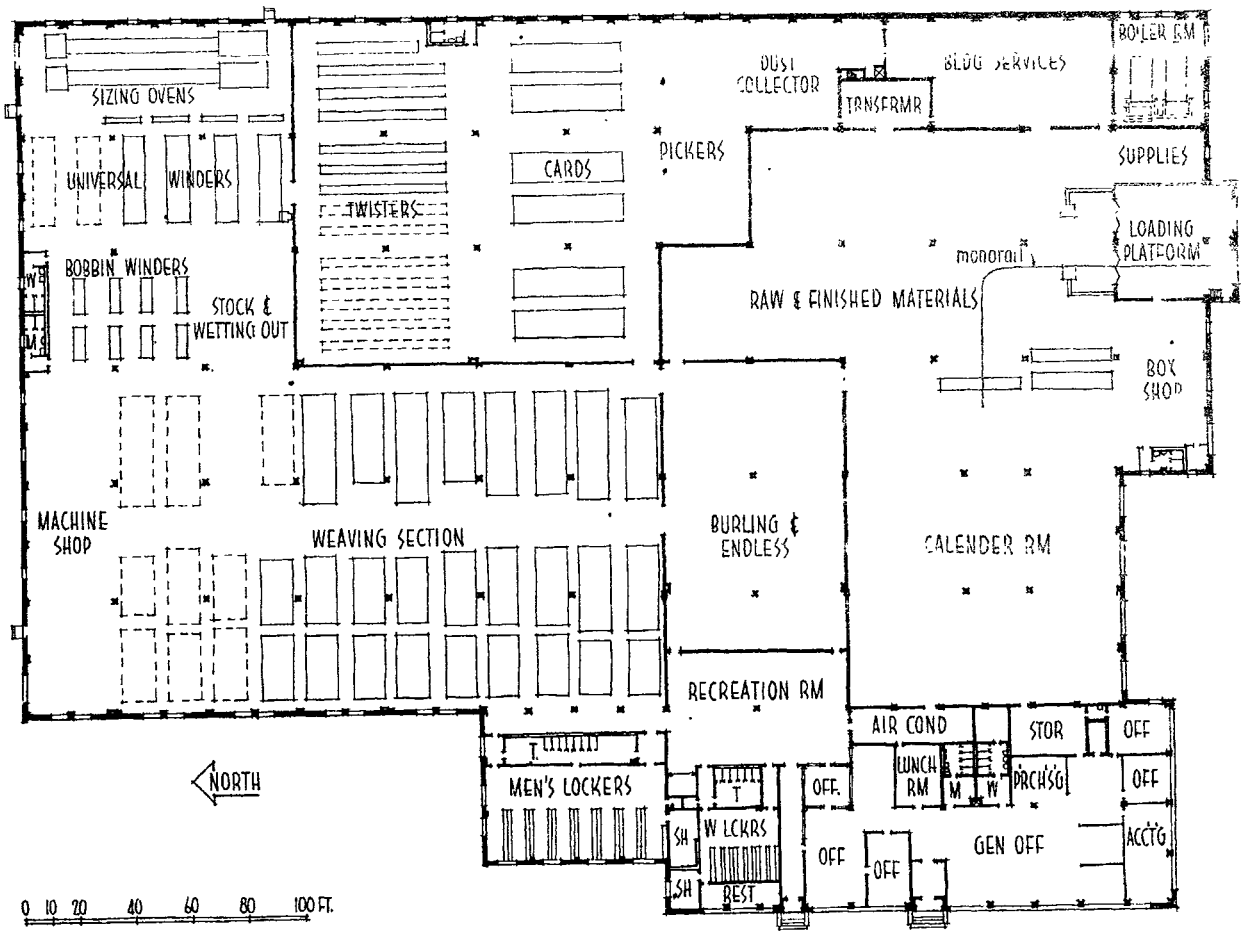
The Ballinger Co., Architects and Engineers

APART FROM THE USUAL CONSIDERATIONS for efficient processing layouts, the designers of this asbestos dryer felt plant were faced with a major problem of controlling asbestos dust. Uncontrolled, the dust accumulates on all projections and rough surfaces in process areas, and presents a silicosis-like health hazard to employees. Dependable control of temperature and humidity is also vital in manufacturing the felts. The goal of the owners was to construct a plant which would combine production efficiency and product control with pleasant and healthy working conditions.

The resulting design succeeds in providing good solutions to these problems within a neat, attractive structure. Especial attention was given to the employees' welfare, even to selection of a site near the workers' homes, although it was known that the deeply filled ground would require pilings. Other provisions include a parking area, pleasant locker, shower and toilet rooms, good lighting, and a general purpose room for lunch and recreation. Asbestos dust is removed from segregated process areas by a carefully planned system of hoods, ducts and fans, together with tunnels under the floor. The dust is then conveyed to electro-static filters and to a cyclone tower where it is salvaged for other use. A portion of the air is reconditioned for recirculation. Separate comfort air conditioning is provided in the office areas.

Joseph Molitor Photos

The one story plant is surfaced with bands of light and dark brick, limestone trim, polychrome terracotta at main door. Flat roof employs special regulated drainage discharge system



Provision of clean, comfortable working areas has considerably improved employees' morale, with resultant increased efficiency. The well-lighted, air conditioned weaving section (left) is typical of these areas. The steel frame structure is designed around a continuous materials flow line, passing successively through the blending, carding, twisting, spooling, spinning, weaving and calendering departments. Expansion space for additional equipment (dotted lines on plan) is provided in each section. Glazed tile walls and hung plaster ceilings in these areas help minimize dust problem. Ceilings are left exposed in such other rooms as the raw and finished materials section (top right). Offices (bottom right) have plaster walls, acoustic ceilings, asphalt tile floors.