

MAINTENANCE SHOP in the new Mennen Co plant at Morris Township, N. J., is well equipped with machine tools of various types that are a big help in keeping production facilities, building and the grounds in top-notch condition at all times

How to Build Easy Maintenance Into Your New Heating Plant

At some time or another, almost every operator complains about the design of his plant. Minor beefs are bound to pop up but the major ones shouldn't if you follow the schemes used by this modern firm

► The Mennen Co, manufacturers of men's toiletries and baby products, have a new plant at Morris Township, N. J., that should be an eye-opener to all operators with maintenance problems. For this is a plant in which the maintenance crew had its say from the earliest planning stages.

Maintenance Plans. When management decided to build a new plant, members of the maintenance department sat in on all meetings held among department heads. All essential needs for best care of building and grounds were studied. Maintenance head John Kuhl could request facilities, machinery and tools that would help his department alone. All he had to do was justify the expenses involved.

Work Crews. There are two groups in this plant. The general plant-maintenance crew is responsible for plant and grounds upkeep. Their work includes painting, electrical, carpentry, sanitation, heating, plumbing, grounds and plant protection. Production and warehouse personnel are responsible only to their own warehouse and maintenance-department heads.

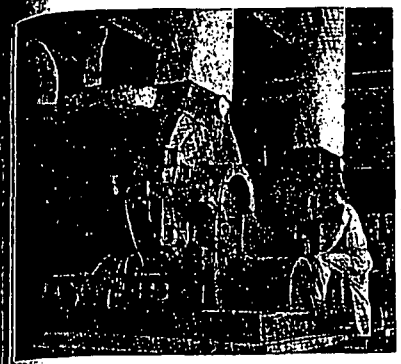
Safety: While the general plant-maintenance crew is responsible for plant protection, two committees take care of safety. One committee is made up of employe personnel; the other of supervisory groups. Safety recommendations are thoroughly studied before being accepted or rejected.

Maintenance Ease. Now just what can be done in a plant of this type to make maintenance easier? Here are a few examples that may help your plant.

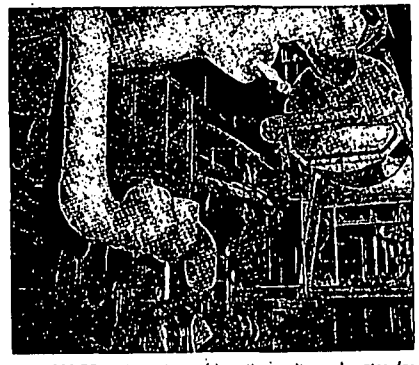
Wherever possible, ceramic tile, asphalt tile and soundproof acoustical board are used to keep maintenance painting at a minimum. Locker-room cabinets are placed on setback cement platforms that act as dust barriers. Service closets are strategically spot-zoned throughout office areas.

Aisle spaces throughout the plant are extra wide for easy passage. Dust-free floor in powder-manufacturing room keeps cleaning to a minimum in an area that is usually considered a problem child. Covered garbage-disposal dock allows easy removal, day or night, without entering plant.

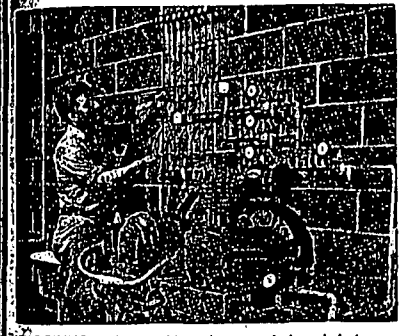
Egg-crate lighting with vertical louvers reduces amount of dust and dirt that can collect on fixtures. Louvers



BOILER INSTALLATION has two units, each rated at about 17,000 lb per hr, to supply heating, air-conditioning steam



TWO 180-TON absorption refrigerating units cool water for use in the air-conditioning system, use 6840 lb steam per hr



HEAT PIPING hookup to this tank-mounted air-cooled air compressor permits easy checks of unit's output and condition



WORKING SPACE around a machine is always important from the maintenance angle. Operator here has plenty of room, light

be arranged to be washed mechanically. All utilities and sprinklers are above the luminous ceiling, so that entire area served by this lighting has a single uninterrupted ceiling.

Power Equipment. Two Cyclotherm Package-type boilers, each rated at 12,000 lb per hr, supply steam for product processing, air conditioning, plant and office heating. Boilers provide 6840 lb per hr of steam to two 180-ton Carrier absorption refrigerating units. Plant and office spaces heated have a total floor area of 264,000 sq ft.

Chilled water from refrigeration units flows to centrally located spray-coil air-conditioning units where it is used for cooling and dehumidification. High-velocity ducts, about one-eighth the size of conventional heating ducts, carry cooled or heated air from the central unit to Weathermaster room units.

As it passes through the room units, the conditioned air induces a flow of room air over a coil in each unit. Chilled or warm water is circulated through the coil in the room unit. This gives room occupant individual control of the air temperature, since he can adjust water flow through coil to vary the amount of heating or cooling that takes place.

Seven central-system units supply conditioned air to factory areas. Another unit serves the cafeteria, two others the interior areas of the office space. All these use chilled water for cooling and dehumidification, and steam for heating the air.

Maintenance shop is well equipped with machine tools. By starting with a large area reserved only *for maintenance* operations, a better program can be set up and carried out. Storeroom location, directly behind the maintenance shop, saves time and steps.

Water Supply. A decorative water pool fronting the new building provides water for process cooling and is a secondary source of supply in the event of a fire.

Volatile liquids used in manufacturing toiletries are stored in underground tanks on the plant grounds. Liquid ingredients of the various products are piped through meters to control stations. Valves, meters, gages and other units are located at the station so manufacturing processes can be controlled from one spot. Having the controls in one spot also simplifies plant maintenance.