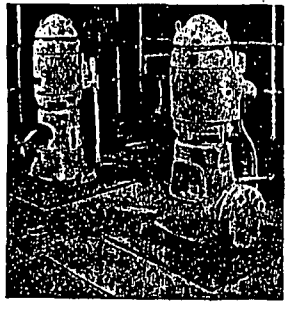


UNITED NATIONS
served by
DEMING PUMPS

Here's another example of the versatility of Deming Vertical Turbine Pumps. Designed originally for deep well pumping, the efficiency and adaptability of these pumps has extended their application to a diversity of liquid handling services.



The two Deming Turbine Pumps illustrated are part of the air conditioning system at the United Nations Building in New York City. Salt river water from the East River flows through conduits to the third basement level and is pumped through rotating drum type screens to free it of foreign matter before use in the air conditioning systems. The Deming Pumps wash the rotating screens to prevent them from clogging.

The installation was made by Kerby Saunders, Inc. Each unit pumps 200 gallons per minute against a 35 foot head. Pumps are powered by 5 H.P. motors.

Deming Vertical Turbine Pumps are available in a full range of capacities up to 3500 G.P.H.



write for bulletin 4700

This illustrated bulletin gives essential facts about Deming Vertical Turbine Pumps.

THE DEMING COMPANY
547 BROADWAY • SALEM, OHIO

DEMING PUMPS

More TECHNICAL BRIEFS

panel. Panels consisting of ... breakers which can be applied ... 460-v system are somewhat more ... sive than the panel boards ... single-pole breakers which ... when the lights are connected ... line to neutral. *AIEE Paper No. ...*

Electric Power Systems 240-... Volt, 3-Phase Power and Lighting ... ply for Modern Industrial Plants — *William Shuler, Dayton Power ... Co.*

The use of 277-480-v, 3-phase ... grounded neutral distribution ... has been suggested for manufacturing plants. This system permits ... power and lamps from the same ... by connecting the 440-v motors ... other large loads to the 3-phase ... tor and the lamps from phase to ... conductors. The author disagrees ... this suggestion, but while ... the advantages of a 3-phase ... grounded neutral system for both ... and lighting, the superiority of ... 416-v system over the 277-480-v ... is demonstrated. The 240-416-v ... is, he said, preferable for at least *reasons:*

1. It permits the use of fluorescent lamps which have already been developed and cataloged and will not require the development of another complete line of accessories.

2. The Underwriters' Laboratories have placed a 250-v limit on general purpose switches for lighting circuits. The phase to neutral voltage of the 240-416-v system is below this limit. The 277-480-v system requires remote control *for all lighting circuits* and hence adds more expense as well as complication to the distribution system.

3. It will permit the use, in ... banks, of single-phase transformers having a low-voltage winding rated at ...

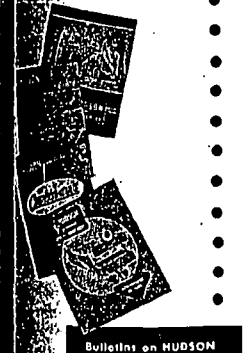
4. The principal reason for favoring a lower voltage system is that many manufacturing plants are now equipped with individual motor-driven machines operating at an average load that is below their rating. When these motors operate at 480 v, 460 v, or even the designed voltage of 440, their power factor is low and efficiency is reduced. It appears from test data which has been taken that the improvement in power factor and efficiency when operated at 416 v results in less current in the secondary feeder then when operated at the higher voltages.

On the author's company low-voltage network system they plan to carry ... 122 to 124 v from phase to neutral ...

Directions for ordering papers on page ...



HUDSON *Solo-aire* EXCHANGERS



Bulletins on HUDSON TOP PERFORMANCE cooling equipment mailed upon request.

At the Diamond M-Sharon Ridge gas processing plant in Scurry County, West Texas, most of the heat from gas compressed in three stages is dissipated directly to the air in the SOLO-AIRE units shown above. Other SOLO-AIRE units are employed in this plant for oil cooling, acid gas condensing, still overhead condensing, propane and butane condensing, and jacket water cooling. In this and many other plants in water-scarce West Texas, Hudson SOLO-AIRE units have established their reputation for dependable, trouble-free operation.

HUDSON
ENGINEERING CORPORATION
FAIRVIEW STATION • HOUSTON, TEXAS