

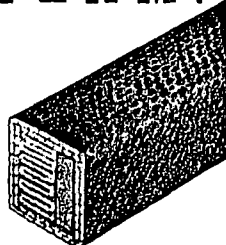
# SEAL THAT STEAM!

## Advertisement PACKINGS HOLD IMPORTANT PLACE IN MODERN PLANT

PHILADELPHIA, PA.—To keep pressure up and cost down, modern plants, "leak-proof" moving and stationary parts with Belmont Packings.

Since 1883, Belmont Packings have been solving these problems for industry with highly specialized packing designs and constructions to meet every industrial requirement. Here, we illustrate just two Belmont steam service leaders. Our catalog displays all.

Belmont No. 30, for high pressure steam rods and expansion joints. Made of closely woven asbestos cloth treated with special rubber compound. Center block pleated on itself (accordian fashion) at approx. 90° angle with rod, affording high resiliency and flexibility. Provides extra take-up and "edge-wear" if packing wears toward the rod.



Belmont No. 30  
High Pressure Asbestos  
Packing for rods, expansion  
joints, air and gas.

# BELMONT PACKINGS

Belmont No. 754, for reciprocating rods and plungers against high pressure steam, expansion joints, etc. Made of long fibre asbestos yarn with fine copper wire twisted with each strand, lubricated throughout and graphitized, this square braided packing retains its softness over a long period of use.

Belmont Packings are easy to obtain and convenient to see; distributors are located in every large industrial center, with sample kits displaying Belmont constructions and materials. Identification is simple. Belmont Packings wherever practicable, are packed in attractive and secure boxes, bearing our orange-colored trade-mark on a blue background.

The Belmont Catalog is available. This invaluable reference book reduces packing facts down to simplest forms. Write on your company letterhead for free copy. Investigate how Belmont can serve you! Contact our local distributor, or write us direct.



Belmont No. 754  
Square Braided Asbestos  
Wire Inserted Packing  
for reciprocating  
rods and plungers, expansion  
joints, etc.

THERE'S A BELMONT PACKING FOR EVERY SERVICE

Steam, Water, Oil,  
Gas, Air, Acids,  
Alkalies, Ammonia



Rings, Spirals, Coils,  
Rods, Spools, Shafts,  
Gaskets.

THE BELMONT PACKING & RUBBER COMPANY  
BUTLER AND SEPVIA STREETS • PHILADELPHIA 31, PA.

Lessons in Arc Welding, third edition, 158 pp., 5 1/2 x 8 1/2, 228 Illustrations, simulated leather, \$2.50. The Lincoln Electric Co., Cleveland, Ohio.

The completely revised third edition designed to assist both new and experienced welders as well as others interested in welding. A valuable feature is "Questions & Answers" in the back.

The book explains the fundamentals of arc welding and covers such subjects as alternating-current welding, new procedures with large electrodes, arc welding, electrodes and their use, and data on the qualification of welding operators.

## Plant Problems

(Continued from page 112)

### Slight Cut Is Justified

HE CAN MAKE A LIGHT CUT on his rotor if he takes barely enough to clear rubbed laminations.

In an induction motor the rotor current flows as the result of voltage induced by the magnetic field of the stator winding. The rotor bears the relation to its stator that a transformer secondary bears to its primary. Every effort is made in a transformer to keep the magnetic circuit closely fitted with continuous path of iron. In a motor there must be an air gap to give mechanical clearance. This distance should be small since the power factor of an induction motor varies inversely with the reactance. The reactance is reduced by a smaller air gap.

A light cut on the rotor will probably help the motor if care is taken to avoid dragging metal across from one lamination to another. The purpose of the laminations is then destroyed and their insulation against eddy currents reduced. These increased eddy currents cause heating and losses greater than that caused by a slight increase in the air gap. E. A. Roberts, Commissioner Waterworks System, Carlsbad, N. M.

### A 20% Cut Is Permissible

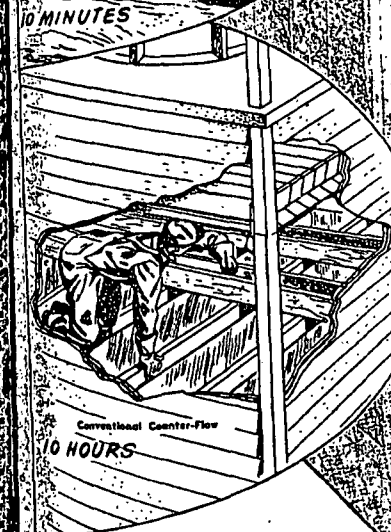
SIZE OF THE AIR GAP in an induction motor is largely a matter of compromise between performance and the clearance necessary for mechanical reasons.

Increasing the air gap up to 20% is permissible in an average motor. The power factor and the general characteristics of the motor will decrease within acceptable limits. The manufacturer will usually be glad to advise you on matters of this kind without charge, but how much the motor performance will be affected, a blanket answer cannot be given, as each case must be considered.

## Only a CLEAN Cooling Tower Is Efficient

ONLY A MARLEY

# Double-Flow IS EASILY CLEANED



To maintain efficiency in any cooling tower, the distribution system must be perfectly clean to permit maximum break-up of water. As sediment and algae accumulate, distribution is retarded, performance curve lowered.

Only in the Double-Flow open distribution system can tower condition be ascertained at a glance. It is not necessary to shut down entire tower for either inspection or cleaning. If cleaning is necessary, the Double-Flow may be cleaned in minutes, with no accident hazard involved.

Since it is so easy to keep the Double-Flow in perfect condition, operators accept cleaning as a routine part of operation. It is not an overtime task, nor is it shunned as laborious and dangerous.

Open distribution is just one of many exclusive features that make Double-Flow the industrial leader in cooling 8 Billion Gallons of water daily.



THE MARLEY COMPANY, INC. • KANSAS CITY 15, KANSAS

POWER • March 1948