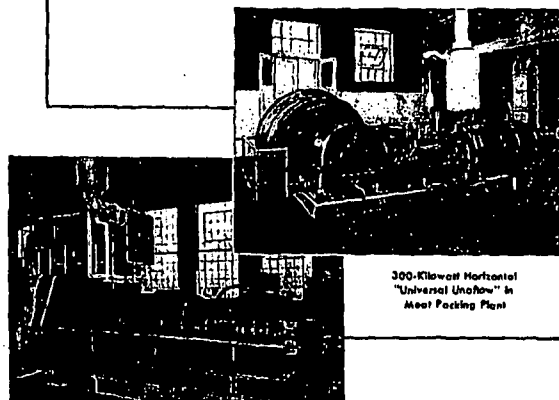


Skinner "UNIVERSAL UNAFLOW"

The Most Economical STEAM ENGINE Built

for Generating Electric Power or Driving Compressors, Blowers, Pumps, Lineshafts . . .



300-Kilowatt Horizontal "Universal Unaflow" in Meat Packing Plant

4-Cylinder Vertical 800-Kilowatt "Universal Unaflow" in Plant of Machine Tool Manufacturer

YEAR after year the sales of Skinner "Universal Unaflow" Steam Engines continue to grow; old customers install additional units; new customers replace purchased power with power generated under their own roof, or replace other types of prime movers with "Universal Unaflow" engines.

The "Universal Unaflow" is not just another steam engine; it is the outstanding reciprocating steam prime mover of this era. The performance of thousands of "Universal Unaflow" engines, in almost every type of industry and institution, daily demonstrates the truth of our claim—that they are "the most economical steam engines built."

"Universal Unaflow" engines are correctly designed for simplicity, dependability, heavy duty service, flexibility, and permanently maintained economy. They are built for direct connection, coupling, or belt drive, to electric generators, compressors, blowers, pumps, lineshafts, or other load. They are available in sizes ranging from 50 to 2000 hp., and in horizontal or multi-cylinder vertical types.

Write us for details, and for information about the performance of "Universal Unaflow" Steam Engines in your particular type of industry.

For Over 75 Years, Doing One Thing Well—Building Steam Engines
SKINNER ENGINE COMPANY, ERIE, PA.

considered individually. Only a design engineer in possession of original design and performance should be consulted. J. A. C. Hamilton, Ont.

Misalignment Causes Rubbing

TURNING THE ROTOR DOWN will affect the motor's performance. The air gap of induction motors is small, varying between 0.8 on 3.0 mils; therefore rotor will rub the stator if the bearings are worn or out of alignment to an appreciable degree. Hence a small is needed.

In designing a motor, the engineer will work out a rough design for various values; those giving the best results at a minimum cost will be chosen. Often the finished motor will fall short of design calculations, complicating the problem of predicting what changes would occur if the rotor were of Richard Arnot, Kearny, N. J.

Give Bearings Attention

ROTORS MAY BE TURNED, but at the expense of efficiency. Motors are designed to give this maximum efficiency with small air gap. Turning down the rotor reduces the torque per ampere, speed, and the maximum power available, the amount depending on the design of the motor. A similar condition occurs with unequal air gaps. It is much better to maintain the correct gap by proper attention to the bearings. Turning rotors should be avoided as it always affects the motor's running characteristics and may cause imbalance. W. E. Warner, Woodford Green, England.

Standardization

(Continued from page 75)

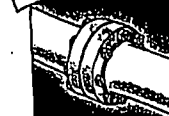
would be the chief beneficiaries. Look at the future. Recognition by manufacturers and users of steam turbines that both will gain from standardization is necessary before any progress can be made. The first step ahead might well be the establishment of users' committees to work with manufacturers' committees in setting up guides for the building of new power plants, and recommendations for the extensions of existing power plants. These standards should be progressive, should be capable of future advancement, and should lead to economies in the initial cost of power-generating equipment, and economies in operating cost of this equipment.

How to S-T-R-E-T-C-H your fuel supply

K&M "Featherweight" 85% MAGNESIA

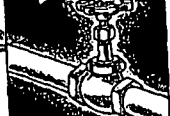
3 TIPS TO HELP YOU SAVE FUEL!

Tip 1



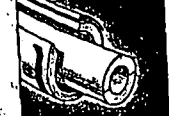
COVER THOSE FLANGES!
On a 10" line of 150 lb. steam pressure, you can save approximately 1/4 ton of coal per flange per year... simply by insulating all bare flanges with "Featherweight" 85% Magnesia.

Tip 2



COVER THESE, TOO!
Similarly, gain further fuel savings by covering all valves, elbows and other fittings in the steam lines.

Tip 3



SPECIFY THE BEST
To be sure of maximum fuel efficiency, minimum heat loss, be sure all lines are covered with "Featherweight" 85% Magnesia.



With coal so hard to get these days... and all fuel a costly item... it's more important than ever to squeeze that last BTU out of your fuel supply.

You can be sure of minimum heat loss and low fuel consumption if you standardize on K&M "Featherweight" 85% Magnesia insulation. Designed for pipes carrying up to 600°F., "Featherweight"—under various service conditions—has proved to be the most efficient insulation of the moulded type. It is light in weight, fire-proof and extremely durable.

Send for full technical information about "Featherweight"... and find out how it can help you gain more power with less fuel, at less cost.

Nature made Asbestos... Keasbey & Mattison has been making it serve mankind since 1873.



KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA
IN CANADA—ATLAS ASBESTOS CO., LTD., MONTREAL, TORONTO, WINDSOR and VANCOUVER