

PUMPER

YALE & TOWNE

THE YALE & TOWNE MANUFACTURING CO., STAMFORD, CONN.

PIPE LINES

NEW SALES PROGRAM

As this issue of the PUMPER goes to press, the new 1953 sales program to help you to greater Tri-Rotor pump profits is already under way.

The Customers Service Department will keep you up to date on all new engineering techniques and developments. New printed and pictorial material and demonstrator models will give you still more selling ammunition. A direct mail program will augment increased national advertising.

NEW FACES

Tied in with the new Yale & Towne sales program is the recent appointment of three outstanding engineering firms as Yale & Towne pump distributors. The M. N. Dannenbaum Co., Houston 23, Texas, is now the exclusive Tri-Rotor pump distributor in the Houston area. The Diehl Pump and Supply Co., Inc., Louisville 4, Ky., has as their exclusive territory the state of Kentucky. The state of Maryland is similarly the exclusive territory of the William A. Milby Co., Inc., Baltimore 11, Md.

These distributors have complete warehousing and service facilities, large, well trained and experienced engineering staffs, and well rounded lines of allied equipment. They are all noted for service to their customers. You may well be proud to welcome them to your ranks as Tri-Rotor distributors.

Future *Pipelines* will describe each of the new distributors in detail.



AND PLEASE give us your best Tri-Rotor pump sales story for a future issue of the PUMPER. You have solved tough problems by putting the Tri-Rotor pump to work on interesting jobs. Tell us about it.

THE EDITOR

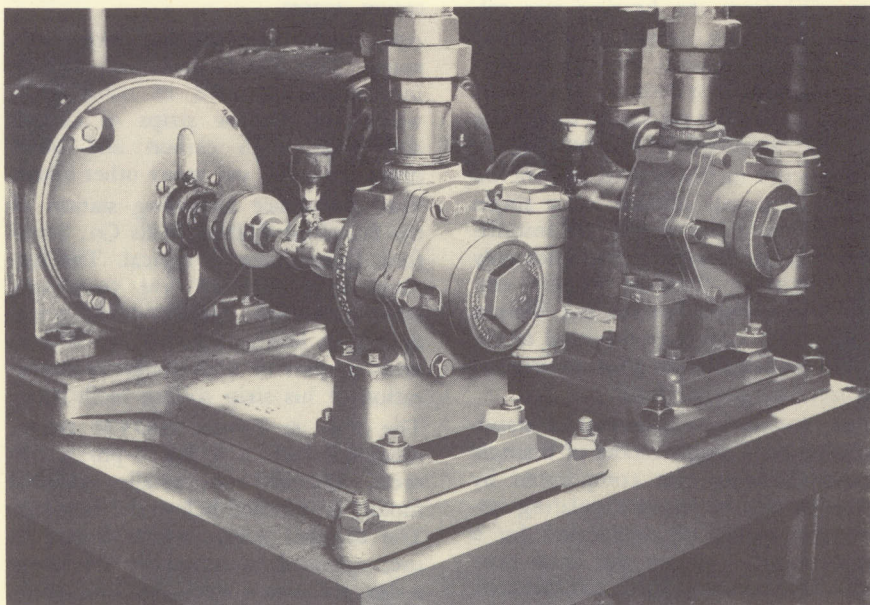
VARIABLE DISPLACEMENT HEAD KEY TO LUBE-OIL PUMP SALES

TRI-ROTOR PUMPS NOW STANDARD EQUIPMENT FOR COIL ANNEALING FURNACE INSTALLATIONS

A pump that can distribute the right amount of lubricating oil to handle either one bearing or ten bearings can often solve a manufacturer's problem. Such a pump must be economical to install and operate when it services a single bearing; it must also be dependable and maintenance-free when the load is ten times as heavy.

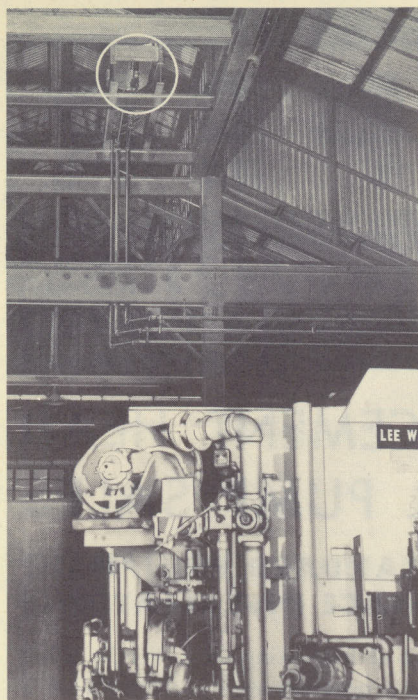
Late in 1946, the F. & W. Ursem Company, northern Ohio Yale & Towne pump distributors, met this problem. Their solution made the model 20DVM Tri-Rotor pump standard equipment in all installations of Lee Wilson radiant convector coil annealing furnaces.

The Lee Wilson Engineering Company was developing an entirely new type of annealing furnace in 1946. The new furnace was designed to supply radiant heat to coils of narrow metal strip, to provide more rapid and more even annealing. Lee Wilson engineers had found a method of edge-heating the coils of metal for better heat radiation. This, in turn, was accomplished by circulating gases at temperatures as high as 1300°F.

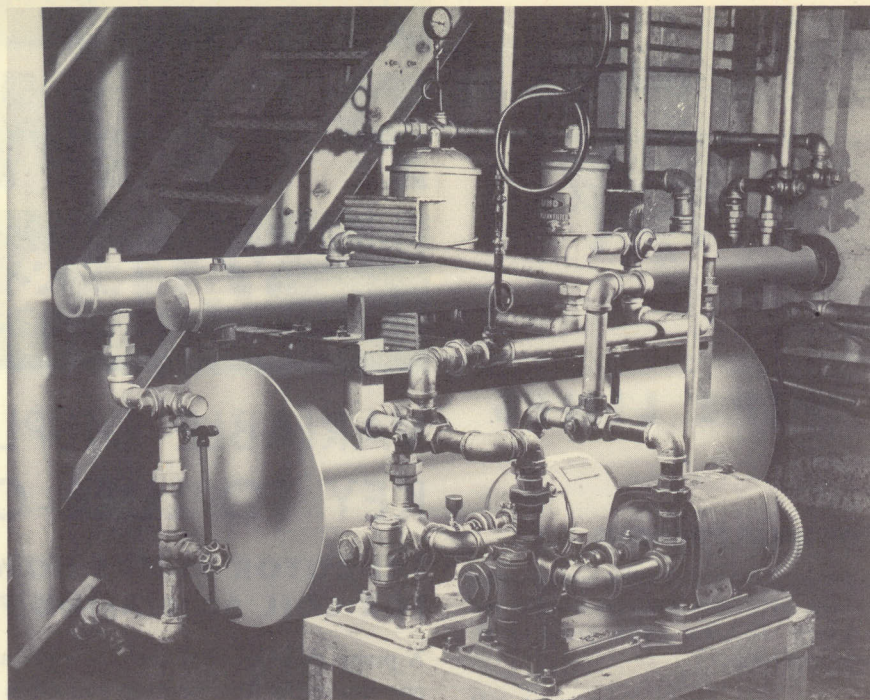


Twin Tri-Rotor 20DVM installation at Stamford Rolling Mills. One pump maintains fan bearing lubricating oil circulation while the other is on standby. The older unit, at right, was used continuously for four years without breakdown or repair.

TRI-ROTOR PUMPER



Oil stored in the tank just below the roof is fed by gravity to the high temperature bearing of each of the annealing furnace fans.



Oil from the annealing furnace fans is collected in this tank, then pumped through coolers (long horizontal cylinders) and filters (thicker vertical cylinders), and up to the storage tank.

Maintaining enough of a flow of hot gases to do this job called for a 15 hp fan. The shaft bearing nearest the blades required a constant flow of from one to one and a half quarts per minute of cool SAE 20 lubricating oil. In circulating the lubricant, it was important to avoid aeration.

The experimental furnace being tested when Ursem demonstrated the Tri-Rotor pump was equipped with an external fan bearing lubrication system. Oil from the bearing was collected in a sump. It was then pumped by a gear-type pump, through a filtering and cooling system, to an elevated storage tank. The oil flowed by gravity from elevated tank to fan bearing.

Weak point in this system was the oil pump. A pump suitable for a single furnace could not handle an installation of several furnaces. And not only are annealing furnaces usually employed in groups, but the Lee Wilson Engineering Company expected to expand each installation after an original furnace had proven itself.

Thus, the obvious economy of standardizing on a single model of a single brand of pump was complicated by the need to have an oil circulating system that would be economical for a single furnace and at the same time capable of handling up to ten furnaces. Ursem demonstrated the Yale & Towne pump, using a dolly-mounted 20DV unit. He showed J. R. Arnold, chief

engineer of the Lee Wilson Engineering Co., that the same unit could be set to pump any desired amount from 0.25 gpm to 5.0 gpm. He also demonstrated the complete lack of aeration at any displacement.

The Lee Wilson engineers were impressed. Since that demonstration, every installation of Lee Wilson radiation convector annealing furnaces has had a model 20DVM Tri-Rotor pump as the heart of its fan bearing lubrication system.

And such installations have been many. This highly successful annealing furnace is used in many mills which roll narrow strips of copper and brass, high carbon and other grades of steel, and many other alloys. The six-furnace annealing station of the Stamford Rolling Mills Co., Stamford, Connecticut, is typical. The furnaces were installed five years ago, when Stamford Rolling Mills president J. O. McCue selected Lee Wilson units as part of a thorough modernization of his strip rolling facilities.

The Yale & Towne 20DVM pump, mounted with a 1 hp, 3-phase, 60-cycle, 220/440-volt, totally enclosed motor, is installed below the furnaces. The original pump, which is still in use, operated continuously 24 hours a day, six days a week, for four years. Then another 20DVM was added. Now one pump is used for a few weeks, then the other is used while

the first pump lies idle. This was intended to provide for pump maintenance without interrupting the furnace schedule, but so far no repairs have been necessary.

The oil is discharged at 31 psi at 1,140 rpm. It flows through a double cooling and filtering system, and then rises more than 30 feet to a storage tank just under the roof of the building. This involves over 80 feet of pipe. A gravity feed distributes the oil from the ceiling tank to the six fan bearings.

This plant can be expanded by at least four more annealing furnaces without enlarging the fan bearing lubrication system.

The Stamford Rolling Mills Company is typical, too, in that many pumps are required in other phases of its manufacturing processes. Several of these are also Tri-Rotor units.

The Lee Wilson Engineering Company is also typical. It is one of many manufacturing concerns which must incorporate pumps in their products. When a Yale & Towne pump distributor can show such a manufacturer how Tri-Rotor construction can make his product more efficient or more economical, that will mean not one sale, but a continuing series of sales. When a manufacturer makes Tri-Rotor pumps a standard component of his equipment, his rising sales can make him your best customer.

YALE & TOWNE