

## PIPE LINES

#### A MATTER OF PRINCIPLE

In Hot Varnish Problem, the feature article in this PUMPER, the sale depended on an explanation of how the Tri-Rotor pump works. You can sympathize with Louis M. Barish. You have probably had your troubles trying to explain the Tri-Rotor pumping principle.

That's why the new four-page bulletin, YALE positive displacement pumps, devotes a full page to the Tri-Rotor principle. The text is completely revised — we think it's the clearest we've published. And the brand new, three color drawings will help your customers see the even, overlapping pumping action of the piston and shuttle.



The rest of this bulletin has been just as carefully planned to help you sell Tri-Rotor advantages and special features.

But it's still up to you to make this salesaid work. Are you sure that it's in the hands of *every* prospect in your territory? And are you using it, yourself?

(Please turn to back page)

# PUMPER

# YALE & TOWNE

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

# HOT VARNISH PROBLEM SOLVED BY YALE PUMP

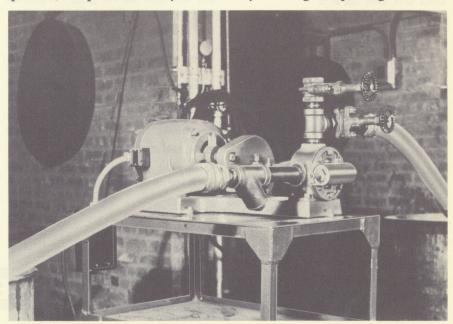
# LEAK-PROOF BEARING, SMOOTH TRI-ROTOR ACTION KEYS TO SAFETY, ECONOMY IN VARNISH HANDLING

When you pump varnish at 500° F with a viscosity of 150 SSU — varnish that thickens to 1,500 SSU at ambient temperatures — you have a real liquid handling problem on your hands. The Sun Chemical Corporation, Rutherford, New Jersey, faced this problem. But it has been no problem at all in the six years since they put a Tri-Rotor pump to work.

The Sun Chemical Corporation produces All Purpose varnish for the Fuchs and Lang Manufacturing Company in this installation. Both companies are divisions of the General Printing Ink Corporation.

The varnish is cooked in batches in three kettles. Pumping is required to move each batch from the kettle to the portable vat in which it is transported to the canning room.

Sun Chemical used both gear pumps and compressed air for this job before installing the Tri-Rotor pump. The presence of both compressed air and volatile, inflammable solvents produced a dangerous situation. Gear pumps solved this problem, but produced a very unsatisfactory kneading or squeezing action on



Dolly-mounted model 40-AXMO Tri-Rotor pump transferring cooked Fuchs and Lang varnish at the East Rutherford plant of the General Printing Ink Company.

### TRI-ROTOR PUMPER

#### **HOT VARNISH PROBLEM (Continued)**

the fresh varnish, and showed some cavitation in the suction line. Both systems suffered from leakage.

J. Hess, Sun Chemical's master mechanic, was looking for a solution to these difficulties when the New York Yale & Towne pump distributor, Louis M. Barish, demonstrated the Tri-Rotor advantages. Barish showed Hess how the Tri-Rotor principle of operation resulted in a gentle pushing action, with no squeezing and a minimum of pulsation. Barish pointed out that working parts fit tightly together, insuring a good vacuum, and that the long shaft housing eliminates leaks. The Tri-Rotor pump looked ideal for the varnish installation. Hess ordered

a model 40-AXMO iron-fitted pump powered by a drip-proof motor. The motor, a 3 hp, 3 phase, 60 cycle, 220/440-volt unit, operates at 1750 rpm to drive the pump, through reduction gears, at 350 rpm. Displacement is about 25 gpm.

The 40-AXMO pump unit is mounted on a dolly so that it can service each of the cooking kettles in turn. A conventional across-the-line motor control hangs on one side of the dolly. A coarse Y strainer on the input pipe and two gate valves on the output complete the hardware. Lengths of 2 in. neoprene hose coupled to the input pipes permit easy control of varnish flow.

The pump is equipped for high temperature operation with a Johns-Mannville asbestos-base gasket and Allpax #14 asbestos packing. In all other respects, however, it is a standard 40-AXMO.

Six more Tri-Rotor pumps, on fixed mounts, are used at the Sun Chemical plant for tank to tank transfer of similar varnish after it has cooled down.

The portable unit has operated continuously for the past six years without a single breakdown period for repairs. The suction remains excellent, with no evidence of cavitation. There has been no leaking at all.

## PIPE LINES (Continued)

### ONE ON THE HOUSE

Any businessman deserves a little help if he is going to buy a Yale & Towne pump to handle any material it has never handled before. If you have a customer who wants to try the Tri-Rotor pump on his pet liquid, you can offer him just this help. You can give him a money back guarantee that the pump will last a reasonable length of time. Send in your customer's commitment as to what he feels is a realistic life expectancy in his proposed installation. This is important: some jobs just cannot seem to wear out a Tri-Rotor pump; in other cases, the

user will agree that the pump has paid for itself in less than six months.

Our engineers will examine the details of the proposed installation. If they think his estimated length of service is reasonable, you can go ahead with the order on the guaranteed basis. If the experiment should fail, we pay for the pump.

Ask the Pump Sales Division for complete information.

#### **AMONG THE MISSING**

Speaking of new uses, where are the novel Tri-Rotor installations we should be hear-

ing about in the pioneering sections of the country? We mean areas like the Southwest and West. And how about the rapidly expanding industrial South?

We have already published three articles about new uses in the Mid-West, two in the Middle Atlantic area, and one each in New England and the West Coast. We have more stories on hand from these sections, too. But they are not the whole country. We know. We have a map.

THE EDITOR

YALE & TOWNE