

Choose WESTERN for Chemical Treatment of Water, Steam and Fuel



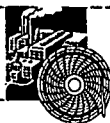
Look them over! Check your needs! Every Western product for treatment of water, steam or fuel is proved in use, technically formulated for each individual problem.

1 Steam + CORAVOL = Protection

CORAVOL circulating throughout your steam system protects it from corrosive attack; cleans out rust deposits; increases heating and operating efficiency; reduces maintenance and labor costs. CORAVOL is the original amine process developed by Western Chemical Company.

2 WESTERN BOILER FEED WATER TREATMENT

Special formulas for each individual boiler water and operating condition to eliminate scale, corrosion and foaming.



3 COOLING WATER TREATMENT AND ALGAEICIDE

Prevents scale deposit, corrosion, and algae growth in every type of cooling and condenser water system.

4 BRINE AND SWEET WATER TREATMENT

Prevents corrosion and protects tanks and equipment in refrigerating brine and sweet water systems.

5 WESTO HOT WATER TREATMENT

Stops corrosion and scaling in hot water supply tanks and lines, maintaining service without impairing potability.



6 WESTERN LIGHTNING TREATMENT

Disintegrates and removes scale quickly from water jackets, cylinder heads, condensers, compressors, lines, coils, pumps.

7 WESTERN ALUMINA NO. 45

Provides efficient coagulation in raw water ice manufacture, lime and soda softeners, water supply clarification.

8 WESTERN SOOT REMOVER

Removes and prevents soot deposits in combustion areas, thus increasing fuel economy and boiler capacity.



9 WESTERN FUEL OIL SLUDGE DISPERSANT

Eliminates sludge and moisture in fuel oil, effecting clean tanks, lines, and burners, and improved combustion.

Chemical Treatment
for Water,
Steam and Fuel

**WESTERN
CHEMICAL
COMPANY**

713 Washington Street
Kansas City 5, Missouri

MAIL THIS COUPON TODAY

Western Chemical Company
713 Washington Street
Kansas City 5, Missouri

Send me full information about products checked.

1 2 3 4 5 6 7 8 9

Name

Firm

Address

City

Zone

State

WITH OUR READERS

Continued from page 1

new volume, namely Volume IV, 1884, containing the "mystery"...

Lawrence Harbor, N. J.

ART CANNON

Old friend Art Cannon is so right in his arithmetic and our faces are a dull red for staring him on it through error. Somehow, we cited the first issue of *Power* as being Volume IV—actually it was Volume V, which fits exactly with his first set of suppositions regarding a start in 1880. At this writing, the situation is still confused but we're running down some leads on early volumes of *Steam* and may soon have a real answer to the apparent mystery. Here's hoping, anyway!

Incidentally, Art asks how come the present volume of *Power* is No. 97, which on a yearly basis takes you back to about 1887. Since this may puzzle others, here's the dope: As old readers may remember, *Power* was published weekly for many years. During that time, there were two volumes per year. Since 1932, when *Power* returned to monthly issues, we have changed volumes annually. Thus the number of volumes doesn't match the number of years of *Power's* long life.—Ed.

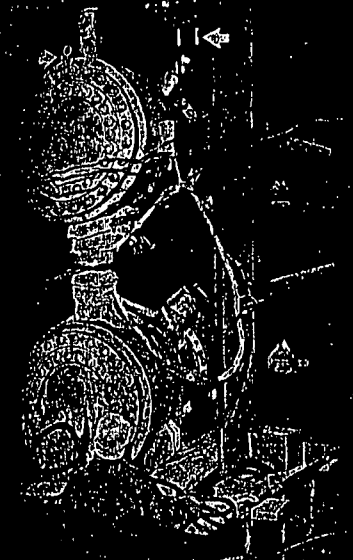
PUMPS

Continued from page 1

opened, pressure is relieved, spring swings the piston eccentric with the central valve and cylinder block, for the pump to operate and maintain the pressure.

The pump, in Fig. 4 is not a variable displacement unit in which the discharge can be preset to a given value, after which the pump will deliver that quantity at a pressure from zero to one that opens the relief valve. Instead, it delivers its rated quantity from zero pressure up to a value that throws the pump rotor into neutral for zero discharge. These pumps are built for pressures up to 2000 psi and 4.5 gpm, at speeds of 1000 to 4000 rpm.

Miss E'lise Harmon, an outstanding physicist and chemist long specializing in the printed-circuit, now heads printed-circuit activities of Aerovox Corp. This development has already attained the level of pilot runs in the laboratory and some radio-electronic manufacturers are now receiving actual production items. Aerovox version of printed-circuit technique differs radically from conventional methods. Pure silver is bonded mechanically to a plastic support. Chemical etching is eliminated entirely. The result is a meticulous control of lines, razor-sharp edges and the meeting of critical mechanical and electrical specifications.



Occasionally there arises a unique situation which demonstrates why Kellogg has been selected frequently to fabricate and erect the power piping for high temperature reheater units during the current expansion period.

Mishions occurred during the installation of the new for the Albany station of the Niagara Mohawk Power Corporation. In connection with improving the piping of the overall system, which includes the reheater, Niagara Mohawk engineers developed a simplified piping arrangement between the pressure extraction heaters... one which eliminated many expansion loops.

However, although this design had economic advantage at a pressure from zero to one that opens the relief valve. Instead, it delivers its rated quantity from zero pressure up to a value that throws the pump rotor into neutral for zero discharge. These pumps are built for pressures up to 2000 psi and 4.5 gpm, at speeds of 1000 to 4000 rpm.

Another specific reason why it's Kellogg... when reheat is the order!

forces with any accuracy, Kellogg called upon its stress analysis group to devise a procedure for controlling them. This was accomplished by the use of electrical strain gages mounted on supporting rods and on the heater shell as shown in the photograph. (See arrows)

As a result of readings taken throughout the cycle, standards were established for the field assembly of this design which assure protection of the flanged joints of these heaters. Special groups which specialize in stress analysis with its required knowledge of mechanics of materials—of plastic and elastic theory... continuous research and development towards further improvements in materials and in fabricating and erecting techniques... continuous accumulation of a tremendous store of experience in fabricating and installing piping for more than six million KW's of output—these are among the reasons why "Reheat Power Piping by Kellogg" is so often the specification... 40 times within the recent expansion period.

OTHER FABRICATED PRODUCTS including: Pressure Vessels... Vacuum Vessels... Fractionating Columns... Drums and Skids... Heat Exchangers... Process Piping... Reacts and Reactors... Forged and Welded Fittings... Concrete and Radial Brick Chimneys

FABRICATED PRODUCTS DIVISION M. W. KELLOGG

These leading companies are among the many major producers of power who use M. W. KELLOGG POWER PIPING...

- Societa Meridionale Di Elettrotecnica (Italy)
- Sociedad De Electricidad De Rosario (Argentina)
- Union D'Electricite (France)
- United Illuminating Co.
- Westinghouse Electric Corp.
- West Penn Power Co.
- Wisconsin Public Service Corp.



HIGH TEMPERATURE

HIGH PRESSURE

POWER PIPING



HIGH TEMPERATURE

HIGH PRESSURE

POWER PIPING



HIGH TEMPERATURE

HIGH PRESSURE

POWER PIPING



HIGH TEMPERATURE

HIGH PRESSURE

POWER PIPING