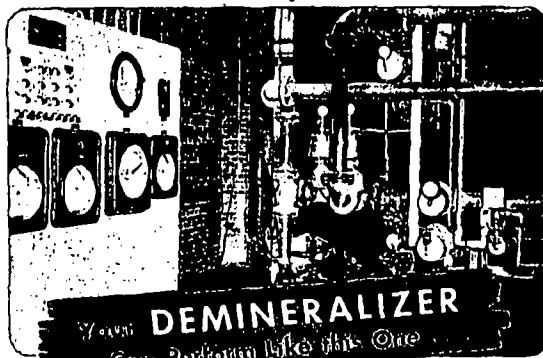




Nalcite

**HIGH CAPACITY
HIGH TEMPERATURE
ION EXCHANGE
RESINS**

500 gallons per minute of clarified Missouri River water are completely deionized for 100% make-up to a 1250 psig boiler by this Nalcite-charged unit at a large Midwestern utility. Whether your water conditioning problem is large or small, Nalcite HCR cation exchange resin, together with either Nalcite SAR or SBR anion exchanger gives you performance that means longer on-line operation, with removal of both strong and weak acids including silica.

Full information on Nalcite Ion Exchange Materials is yours for the asking. Write today.

* Reg. Trademark of the Dow Chemical Company

NATIONAL ALUMINATE CORPORATION
6122 West 64th Place Chicago 28, Illinois
In Canada: Alchem Limited, Burlington, Ontario

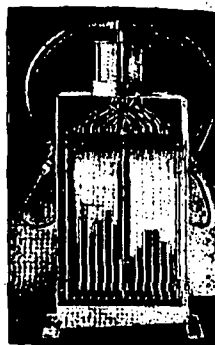
Nalco

PRODUCTS • When you use Nalcite resins, you take advantage of Nalco's long and broad experience in water and process technology.

More EQUIPMENT NEWS

Registy on page 122

signed for production in bronze to meet continuous water recirculation requirements. Model 4300 features sealed, permanently-lubricated bearings. Pressed fit of stainless steel shaft into inner ball bearing race restricts lateral movement of rotor, minimizes end-thrust wear within pump. Pump impeller, self-lubricated with water, will deliver approximately 7 gpm at 50 lb pressure and 1750 rpm. Pressure ranges from 0 to 75 psi, weight is 4 1/4 lb, recommended speeds up to 1800 rpm. Hypro Engrs. Inc., 404 N Washington Ave., Minneapolis 1, Minnesota



Nozzle Spray Tester

1214 • New portable device provides fast low-cost measurement of nozzle spray dispersion in jet and diesel engines. It provides immediate facilities for time and labor saving pre-installation tests to insure proper atomization, permits accurate low-cost development and production tests.

Called the *Patternator*, unit is easily portable, weighs 25 lb, measures 10x6x20 in. It requires no electric current and no installation, operates by automatically collecting and measuring flow in each segment of atomized spray. It is adjustable to nozzle sizes of varying sizes and types. Jet-Tect, Inc., Englewood, N. J.

For more data on these items, use post card # 147. Identify your request with item number.

Non-Flammable Hydraulic Fluid

1254 • New non-flammable hydraulic fluid, *Haughton-Safe*, reportedly satisfies need for a safe, non-toxic, non-corrosive liquid that can be used in hydraulic equipment operated near open flames or adjacent to extreme heat conditions. Liquid is a water-base, "emulser type" material rated as an "acceptable hydraulic fluid from the fire hazard standpoint" by Factory Mutual Engineering Division of Associated Mutual Fire Insurance Companies.

Fluid has shown lubricating abilities of high grade petroleum. It will not freeze. (Continued on page 124)

WHY EUCLID SWITCHED TO COAL!



"We cut costs and provided our expanding plant with a flexible heating system by burning coal instead of gas."

says D. L. Lawrence, Plant Engineer
The Euclid Road Machinery Co.
Cleveland, Ohio

"Upon expanding our St. Clair Plant, we found we could save money by replacing our gas-fired heating system with a modern coal-burning installation. After we made this change, our plant again doubled in size. Yet the stoker-fed boilers shown on the left continued to supply all our heating needs."

Additional case histories, showing how other types of plants save money by burning coal with modern equipment, are available upon request.

What does it cost you to operate your steam plant? Chances are that, unless you've modernized in the past few years, you could reduce that cost substantially with modern, bituminous coal-burning equipment.

Modern combustion equipment can give you 10% to 40% more steam from a ton of coal. Up-to-date coal and ash handling equipment can cut your labor costs and provide you with a clean, convenient, dust-free operation.

And with bituminous coal, you will continue to enjoy these advantages for years and years.

BITUMINOUS COAL INSTITUTE

A Department of National Coal Association
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If you operate a steam plant, you can't afford to ignore these facts!

- BITUMINOUS COAL** in most places is today's lowest cost fuel, and coal reserves in America are adequate for hundreds of years to come.
- COAL** production in the U.S.A. is highly mechanized and by far the most efficient in the world.
- COAL** prices will therefore remain the most stable of all fuels.
- COAL** is the safest fuel to store and use.
- COAL** is the fuel that industry counts on more and more for with modern combustion and handling equipment, the inherent advantages of well-prepared coal net even bigger savings.

FOR HIGH EFFICIENCY • FOR LOW COST

YOU CAN COUNT ON COAL!