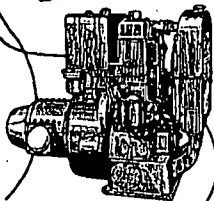


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for your money with
**NORDBERG
DIESELS**



**COST LESS
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In addition to the low initial cost of the 1, 2 and 3-cylinder Nordberg "4FS" series Diesel engines, the outstanding design and construction of these compact units assures extremely low fuel and lube oil consumption... which has been proved in a wide range of power jobs.

**MORE
EXTRAS**

Here are the "extras" that are all included in the low initial cost of Nordberg Diesel units: thermostatically controlled cooling system—heavy duty oil bath air cleaner—lube oil cooler—fuel and lube oil filters. Compare before you buy any 10 to 45 hp engine.

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Like all Nordberg Diesels, the "4FS" series engines are sturdily built to give years of reliable service with a minimum of maintenance time and expense.

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Send catalog covering Nordberg Type
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Your Name.....
Company Name.....
Address.....
City..... Zone..... State..... 4-553

313 ITEMS

Continued from page 238

- 18 Condensate flowmeter of recording type specified.
- 19 Tear-off device for strip-chart-type recorders.
- 20 Important recording meters have alarm contacts for warning.
- 21 Capillary and instrument-air tubing protected from damage.
- 22 Air compressors sized for not more than 50% operating time with all air-using equipment running.
- 23 Emergency or reserve air or oil supply for control equipment.
- 24 Low air-pressure alarm.
- 25 Controls lock or move to safe position in case of air failure.
- 26 Manual operating levers and locking clamps for all controlled equipment.
- 27 Controls grouped with corresponding instruments on boards for operating convenience.
- 28 Most-frequently-read meters near eye height on control boards.
- 29 Air supply and control piping accessible for checking leaks.
- 30 Adequate room around and above equipment at rear of control boards for maintenance and water-column calibration.
- 31 Protection of control-board electrical equipment from water leaks or spillage.
- 32 Thermostat element located well below desuperheater to get good steam-water mixing.
- 33 ASME-type sampling nozzles for evaporator vapor and other desired sampling points.
- 34 Tees and cleanout plugs on boiler draft lines, other points.
- 35 Orsat gas analyzer, extra, chemicals, spare parts, small amount of mercury on hand.
- 36 Line pressure-lap connections at least 1/2 in. in size.

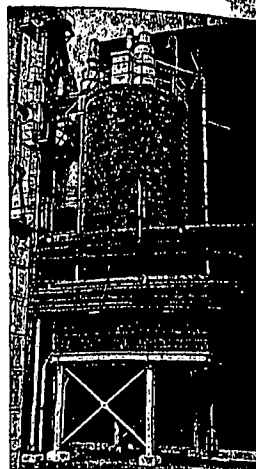
More POWER NEWS

Begins on page 150

The six members present at the conference were: Albert L. Baker, chairman of Vitro Corp and Vitro Mfg Co (who presided); Walker L. Claser, president, The Detroit Edison Co; Dr T Keith Glennan, president, Case Institute of Technology; Alfred Iddles, president, The Babcock & Wilcox Co; John R Menke, president, Nuclear Development Associates; and Admiral Earle W Mills, president, Foster-Wheeler Corp.

Engineering Enrollment Climbs

An almost unprecedented increase in the number of freshmen engineering students enrolled in 1952, tops by 30.5% the number for the previous year. The 51,631 new students entering in the fall of 1952 represent the third largest class ever to enter the engineer-



A "National" installation for American Cyanamid Co. plant at Bridgeville, Pa.

ASH REMOVAL the NATIONAL way assures you low-cost, dependable service

Ash removal costs a factor in cutting your profits? We suggest a survey by a National engineer. It will cost you nothing. It may avoid wasted dollars.

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COCHRANE WATER CONDITIONING STARTS WHERE NATURE STOPS

AT PENNSYLVANIA ELECTRIC CO.
IT'S A COCHRANE DEMINERALIZER

Cochrane Demineralizer installation at Pennsylvania Electric Co., Erie, Pa.—Gilbert Associates, Inc., Engineers, Reading, Pa.

• To supply high quality water for boilers operating at 1250 P.S.I.G. the Pennsylvania Electric Company installed a Cochrane Automatic Demineralizer in their Erie, Pa. Power Station. Designed for silica removal, this unit handles 400 GPM in preparing make-up for the boilers.

Demineralization is one of many "water problems" Cochrane's engineers solve every day. Water softening, dealkalization, and deaeration are others—all complex—all requiring expert and specialized knowledge. Whether for process or boiler feed water, Cochrane can supply the answer to your particular problem, backed by 90 years' experience in solving industrial water conditioning problems. You'll be sure of unbiased recommendations because Cochrane designs and builds all types of water conditioning equipment.

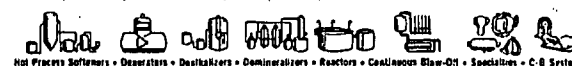


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