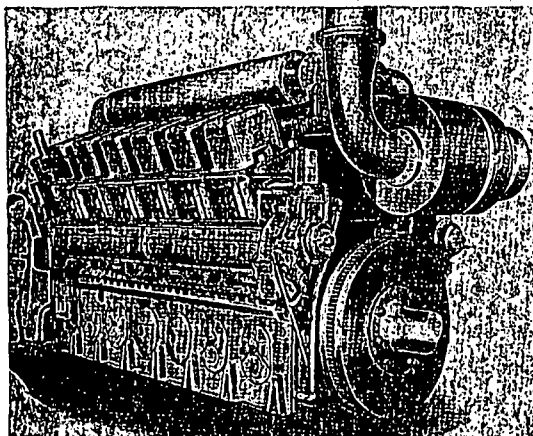


More EQUIPMENT NEWS



V-Type Diesel Engines Cover Range From 2400 to 4260 Hp

726 • Four-cycle Superthermal V-type engines for stationary and marine service are heavy-duty prime movers of moderate weight and small physical dimensions. With 12 or 16 cylinders (13 x 16½ in.), they cover a range from 2400 to 4260 hp at 450 to 600 rpm.

Built for liquid fuel, dual-fuel or spark-fired gas operation, design incorporates all performance features of 13-in. bore in-line Superthermal engines. Many of the important parts of the V-type engine are identical and interchangeable with in-line-type parts.

Included angle of cylinder banks is 45 degrees, offset between cylinders on each crankpin is 4½ in. Net weight of 12-cylinder engine is 96,000 lb, and of 16-cylinder, 122,000 lb, not including flywheel and extension shaft.

Inlet air manifold and single-duct exhaust manifold are directly under housing of 2-pass intercooler which runs full length of the engine. For stationary use, turbocharger is at free end, for marine use, at drive end.

Counterweighted crankshaft is carried in the frame, supported by lower transverse members. Steel bearing caps are keyed to these members and held in place by two steel through bolts.

Heat-treated alloy steel is used in engine frame, bedplate, crankshaft, connecting

rods, etc. Frame is welded and stress relieved.

Removable cast-iron cylinder liners seat in individual cast-iron jackets. This permits directed flow of cooling water. Entire cylinder assembly with liner is easily removable without disturbing liner water seals. Exhaust and intake valves seat directly in cylinder heads for maximum cooling.

All moving parts are pressure lubricated. Rotary lubricating-oil pumps are driven by roller chain from end of crankshaft.

For oil operation, a constant-stroke fuel injection pump of variable cut-off type is used. Easily removable fuel nozzle holders have spring-loaded valves and multiple-hole tips. For dual-fuel or spark-ignition operation a hydraulically-actuated gas admission valve is used. For spark-firing there are also two spark plugs per cylinder and low-tension impulse generators, rectifiers and transformers. Each engine has hydraulic-relay overspeed and control governors mounted at the flywheel end.

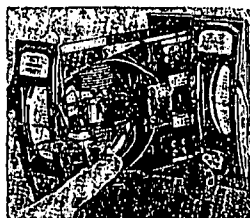
Engine is suited for continuous operation in many stationary applications. The marine engines are available in direct-reversing types for direct drive, single or multiple drive through reduction gears with electric or hydraulic couplings or for diesel-electric drive.

Nordberg Mfg Co, Milwaukee 1, Wis.

Plastic Electrical Tape

717 • New splicing tape for all electrical applications contains a pressure-sensitive compound. It is claimed to resist weather, corrosive chemicals, water, oils and abrasion. Tape is extra thin with high tensile strength and adhesive qualities, and is said

to conform readily to irregular surfaces. Dielectric strength averages over 1000 volts per mil of thickness, meeting UL specifications. Available in 60 and 20 ft rolls in ¾ in. widths, and a 12½-ft roll at ½ in. Boston Woven Hose & Rubber Co, P O Box 1071, Boston 3, Mass.



Miniature Remote Indicator

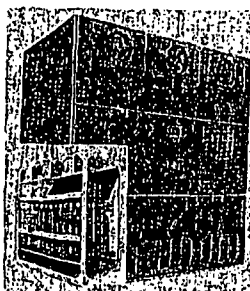
712 • Miniature indicator in new Rato-graphic series has total scale length of 5½ in., calibrated from 0 to 100. Scale is mounted on a rotating drum, and positioned by a pneumatic signal from any remotely located primary or secondary instrument. Accuracy is 0.5% of full scale.

A variety of alarms and operating guides can be incorporated into the instrument. These include: distinctive strip widths; adjustable color guides; automatic alarm contacts.

The indicator is pneumatically operated, with full scale travel obtained between 3 and 15 psi on standard models. Overall dimensions are 5% by 2% by 7% in.

Fischer & Porter Co, 11 Jacksonville Blvd, Hattboro, Pa.

For more data on these items, use post card p. 165. Identify your request with item number.



Dry-Type Dual-Rated Transformer

722 • New insulated transformer has two blowers mounted in the housing and a thermostat in the coils. One rating covers operation without the blowers, at which time the transformer is naturally cooled. When heat reaches a certain level, thermostat activates the blowers, and forced-air cooling increases transformer's rating by 33 1/3%.

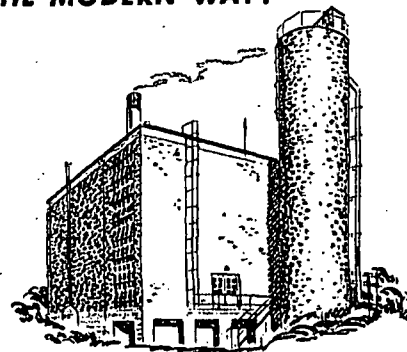
Available in ratings from 100 to 3000 kva and up to 15,000 v.

Marcus Transformer Co, Hillsdale, N. J. (Continued on page 160)

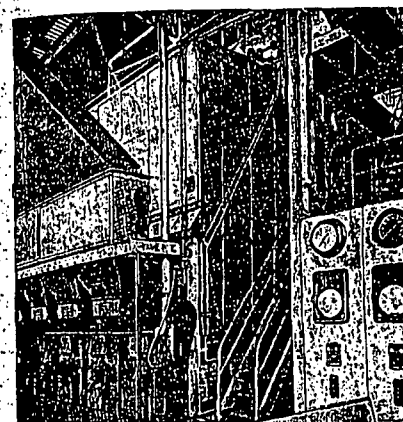
HOW WE SAVE MORE THAN \$90,000 A YEAR— BY BURNING COAL THE MODERN WAY!"

says W. M. FISHER, Plant Engineer, Kerr Bleaching and Finishing Works, Concord, North Carolina.

"Powering our plant used to take nine boilers—now one does the same job using 30% less fuel! 8 firemen now do the work of 18—thanks to modern coal-handling equipment and automatic controls. That's why we say, you can't beat bituminous coal burned with modern equipment."



Above is a view of the plant's modern, space-saving coal-storage silo. To the left is a close-up of the firing aisle, showing the spreader, stoker and the main control panel. Coal handling is automatic and dust-tight throughout. Automatic controls regulate firing, drafts and feed-water—give maximum efficiency at lowest cost.



Burning coal the modern way can save you money, too! First, labor costs can be cut to a minimum with up-to-date coal- and ash-handling equipment. On top of that, today's combustion installations give you 10 to 40% more power from each ton of coal than was possible a few years ago!

If you're planning to modernize, or if you're building a new plant, call in a consulting engineer. He'll show you how you can get big savings by burning coal in a modern plant designed to meet your specific needs.

America's coal reserves are virtually inexhaustible; America's coal industry is the world's most productive and efficient. That's why coal has a future dependability of supply that no other fuel can offer. That's why, of all fuels, the price of coal is most likely to remain stable.

BITUMINOUS COAL INSTITUTE

A Department of National Coal Association, Washington, D. C.

FOR HIGH EFFICIENCY • FOR LOW COST
YOU CAN COUNT ON COAL!