



RODA

High grade gas, by-product and steam coal from Wise County, Va., on the Interstate Railroad.

WENRO

High grade gas, by-product, steam and domestic coal from Wise County, Va., on the Interstate Railroad.

STONEGA

High grade, high volatile steam and by-product coal from Wise County, Va., on the Interstate Railroad.

PREMIX

A laboratory controlled product blended to meet exacting stoker requirements. From Wise County, Va., on the Interstate Railroad.

COKE

Roda and Stonega from Wise County, Va., and Connellsville Coke from Pennsylvania.

INTERSTATE COAL

High grade gas, by-product, steam and domestic coal—Pittsburgh seam from Irwin Basin, Westmoreland County, Pennsylvania, on the Penna. Railroad.

CROZER

Genuine Third Vena Pocahontas from McDowell County, W. Va., on the Norfolk & Western Railroad.

LYNCO

High fusion coking coal for by-product, industrial stoker and pulverizer use from Wyoming Co., W. Va., on the Vgn. Ry.

KENTUCKY

Hazard No. 4 and No. 7 steam and domestic coal from Wisconsin, Knott County, Kentucky, on the L. & N. Railroad.

CHARMCO

Unexcelled Steaming Coal from the Fire Creek Seam in Greenbrier County, W. Va., originating on the N.F. & G.R.R.

ANTHRACITE—Hazle Brook Premium
... Raven Run

General Coal Company
123 SOUTH BROAD STREET, PHILADELPHIA 9, PA.

BRANCHES:
BLUEFIELD, W. VA. BOSTON BUFFALO CHARLOTTE, N. C.
CINCINNATI NEW YORK NORFOLK PITTSBURGH

Hotwell pumps of this type are used for condensate service in steam power plants, Fig. 2. Where liquids are near the boiling point, low-velocity first-stage impellers are provided to prevent flashing at the suction side before pump pressure is developed.

Q 10—What information does the manufacturer need to select a vertical turbine pump?

A—Capacity (and variation, if any), liquid to be pumped, well diameter or sump data, water level when pumping, pump setting or over-all length, total head, discharge location, type and characteristics of drive should all be submitted. It's better to provide too much information than to furnish insufficient data which might result in improper pump application.

Q 11—How do capacity requirements influence selection of a vertical turbine pump?

A—For nearly constant capacity, select a pump to operate as closely as possible to its peak efficiency. Capacity requirements can vary, as in municipal water systems having peak loads in daytime, or in an industrial plant requiring more water in summer for cooling purposes. Complete information on possible capacity variations permits the manufacturer to recommend a pump with a capacity curve best suited to the expected operating conditions.

Q 12—What information should be given on the liquid to be pumped?

A—Any liquid other than clear cold water requires complete data, including, if possible, water analysis. River waters, mine waters, or sea water may require special material in the pump's construction if best service is to be obtained. Previous experience with material used in pumping the water is valuable information for a manufacturer. Also note high temperatures, vapor pressure, high aeration, or presence of gases in the liquid if they exist, because they influence pump selection and help determine submergence recommendations. Viscosity and specific gravity are important to proper pump selection because they affect bowl assembly, shafting and driver capacity.

Q 13—What constitutes total head on a vertical turbine pump?

A—On open-suction pumps total head is total lift in feet from discharge center line to the surface of the liquid pool when pumping required capacity, plus the discharge pressure in feet at the discharge center line.

On closed-suction pumps total head is the sum of the pressure in feet at discharge center line, plus distance to

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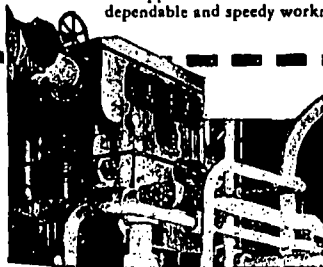
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