

PROBLEM:

To produce 250,000 pounds of steam per hour from CO gas and fluid coke.

Neither of the by-product fuels were available in sufficient quantities. Fluid coke, being low in volatile matter, has a high ignition temperature and must be finely pulverized. CO gas is extremely low in heating value (276 BTU/lb.) and must be fed to the furnace with its own air supply in an active high temperature zone.

SOLUTION:

Residual oil was selected as a third fuel to supplement the energy available in the by-product fuels.

A Riley Turbo Furnace Boiler with Riley Directional Flame Burners to fire the low volatile fluid coke and oil in the hot zone at the furnace bottom.

Riley CO Gas Burners to admit the CO gas above the hot zone throat of the Turbo Furnace. Ignition of CO gas is effected by the hot gases from the other fuels.

A Riley Ball Tube Mill with the extra capacity necessary (twice that needed for an equivalent amount of bituminous coal) to pulverize the fluid coke.

RESULT:

A Well-Satisfied Customer

Riley specializes in developing efficient equipment to burn the by-product fuels of the petroleum industry. We have solved by-product fuel problems of equal complexities for other types of industry, too . . . steel, pulp and paper, chemical, etc.

If you have a special fuel problem, call a specialist—your Riley representative, or write—

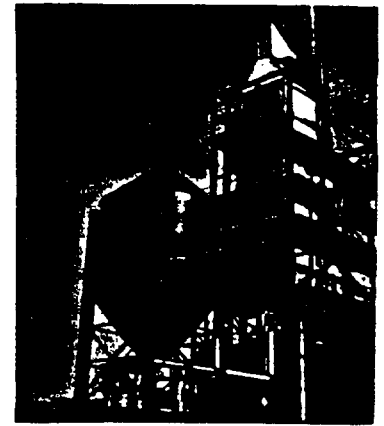
Riley Stoker Corporation, Worcester, Mass.

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Riley Customers in the Petroleum Industry

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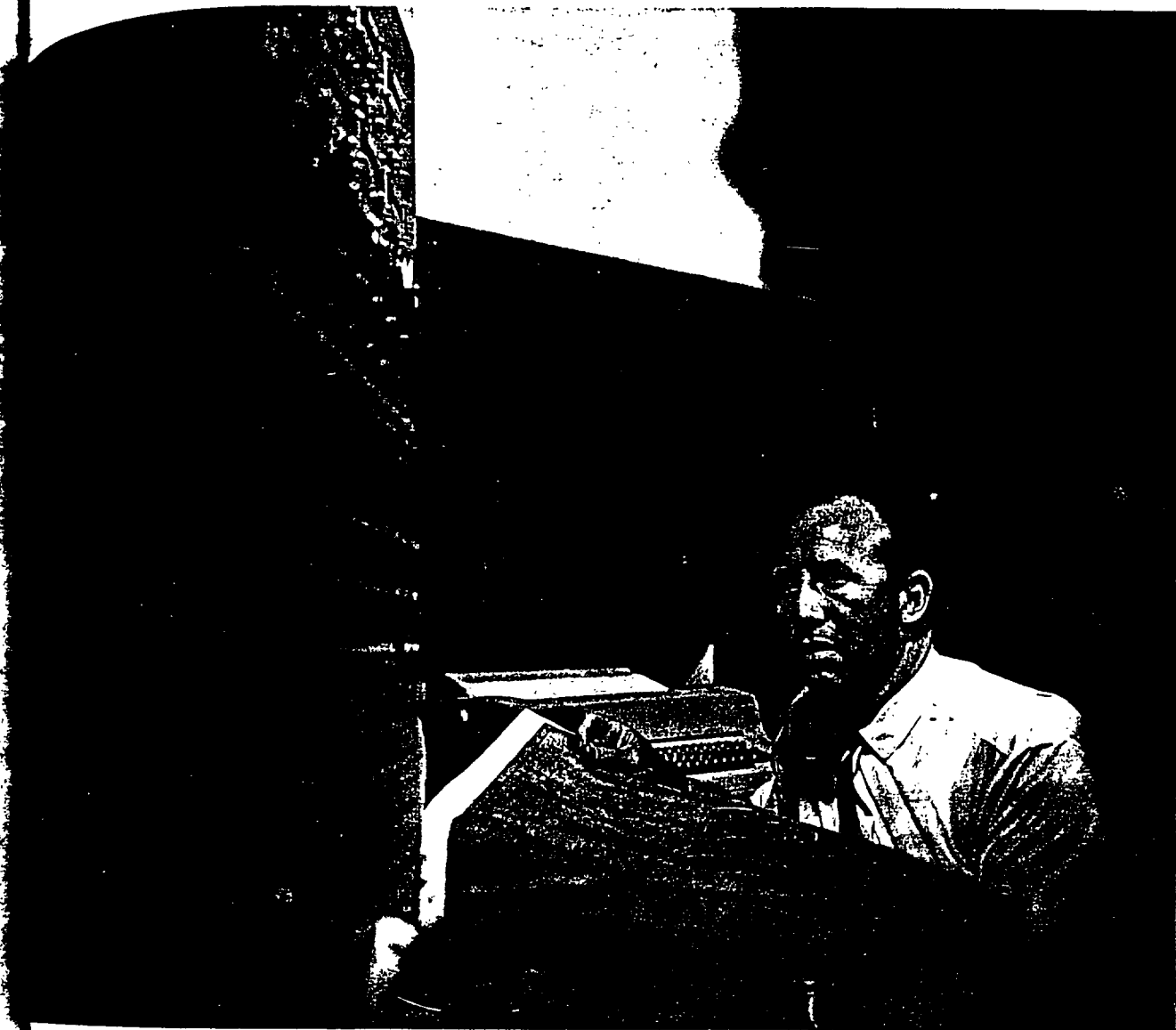
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AIR CONDITIONING CONTROL

A STAFF REPORT...

ALSO IN THIS ISSUE Are gas turbines economical for mechanical drives?
How to compare integral and separate motor-pumps

82
84

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