

refinery

process the recovered gaseous constituents, a new 2000-bbl-per-day catalytic polymerization unit was included as a part of the refinery expansion. Alkylation unit capacity for the production of the chief constituent of aviation gasoline from recovered gases was increased by 50 percent.

In addition to these changes in basic processing and the new units involved, another major change involved re-vamping the combination units to increase their crude charging capacity by a total of 20,000 bbl per day.

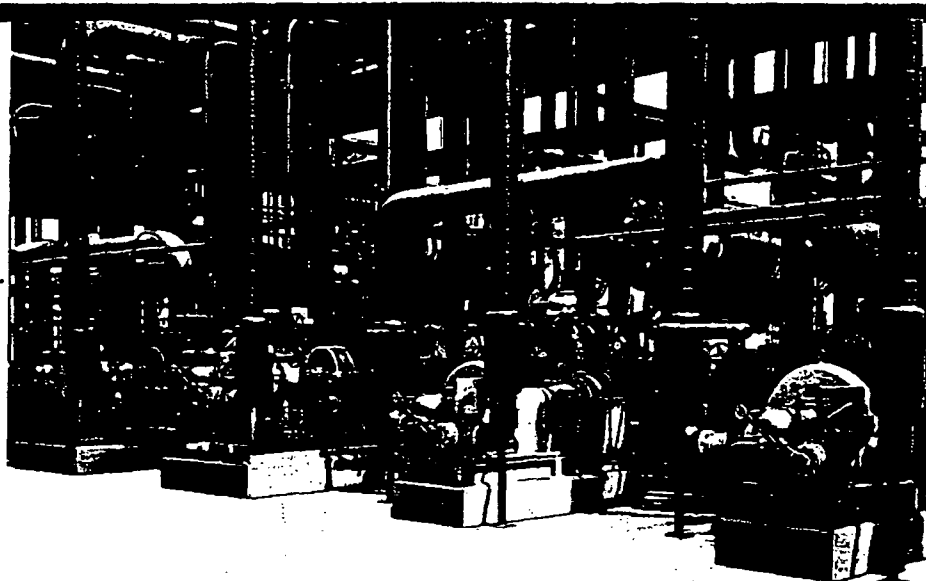
With the construction of any new processing units or redesign and modernization of existing units, a great deal of new and expanded auxiliary services are required. Richfield's recent refinery expansion program required large expenditures for these added auxiliary services. In addition to utilities, field piping, storage and related items, new shops, and a warehouse were provided to service and maintain the facilities.

Elliott steam turbines in sizes from 2 hp to 600 hp drive all sorts of pumps, fans, and compressors around the Watson refinery. A typical line of these turbines is illustrated. Turbines in the plant operate at three steam pressures. Some take steam at 600 psig from the newest boilers, exhausting at 150 psig. Many use 150-psig steam, exhausting at 25 psig. Some operate on this 25-psig steam.

Fans for the new cooling towers are driven by 36 Elliott C-W 60-hp, four-pole, explosion-proof motors.

EDITOR'S NOTE: Above is practically identical from Petroleum World and Oil.

POWERFAX, SPRING 1955



More than 100 Elliott steam turbines ranging in size from 2 hp to 600 hp are on the job at Richfield Oil Corporation's new Watson refinery driving process and water pumps, also fans and compressors.

Steel mill compressors

THE installation below shows two Elliott 800-hp, 180-rpm synchronous motors driving Ingersoll-Rand duplex air compressors in the Indiana Harbor Works of The Youngstown Sheet & Tube Company at East Chicago, Indiana. The two air compressors supply the general air requirements for a new cold-reduced sheet mill which cold-rolls sheet steel at the rate of 40,000 tons per month. The compressors also may supply emergency air supply to a nearby tin mill. With both compressors operating, the complete requirements of both tin mill and sheet mill may be supplied, the tonnage capacity of both plants being 120,000 tons per month. Air requirements include air cylinders, air hoists, air lifts, also emergency cooling and cleaning of equipment.

