

and toluene. In 1953, Continental also began construction of a gas-processing plant at nearby Gillis, Louisiana, which will increase the volume of field condensables to be processed in the refinery.

The plant now contains two atmospheric crude topping units. The original unit was modified slightly to increase its capacity from 12,000 to 16,000 barrels daily.

Two new thermal catalytic-cracking units are contained in a joint structure and feed into a common fractionation system. They are of the modern Socony design employing gas-lift-catalyst circulating systems. The two cat crackers have separate feed preparation facilities; the one feed preparation system being designed to feed only distillate stocks, consists of a charge drum, a vaporizer furnace, and a flash drum. Elliott single-stage centrifugal compressors, illustrated at right, serve the TCC units. Elliott steam turbines also drive other pumps and units around the refinery.

The four water-tube boilers, each with a capacity of 85,000 lb per hr generate steam at 350 psig and 600 F. Considerable steam is generated at 350 psig in the kiln waste-heat boilers at the two cat-cracking units. Steam is available for processing at 350, 150, and 20 psig. Pump-driving turbines were carefully selected to insure maximum power realization from the steam before use in processing. To permit satisfactory balancing of three steam systems under all plant loads, several process turbines were designed to use 350-psi steam and operate condensing; others to use 350-psi steam and exhaust to the 150-psi system; while some units use 350-psi steam and exhaust to the 20-psi system.

The prime contractors of the new process units, except the platformer, and for the alki revamp was the Badger Process Division of Stone and Webster Corporation. The platformer was built by UOP's affiliate, Procon.



*One of the Elliott centrifugal compressors serving a cat cracker. The compressor is rated 52,000 inlet cfm, inlet pressure 14.54 psia, discharge pressure, 5.50 psig, speed 4200 rpm. The 1100-hp turbine takes steam at 350 psig, 436 F and discharges to a condenser at 10 in. Hg abs.*

*This is the other Elliott turbine-driven centrifugal compressor serving a cat cracker. Compressor is rated 36,050 inlet cfm, inlet pressure 14.6 psia, discharge pressure 4.10 psig, speed 3600 rpm. Turbine is rated 800 hp, using 350-psig steam.*

