

# New British Petroleum Platformer

## THIRD UNIT SUPPLIES AROMATICS EXTRACTION PLANT

In September last year a third catalytic reforming unit went on stream at the British Petroleum Company's refinery on the Isle of Grain, and some three months later, on the same site, the British Petroleum-California Limited aromatics extraction plant started full-scale production of para- and ortho-xylene. The operation of these two new units is closely related—the reformer produces the starting material for the petrochemicals plant—and the commissioning of both reflects the continued increase in demand in Europe for both high-grade motor fuel and aromatic hydrocarbons.

The £3 million reforming unit, in which the Platforming process of Universal Oil Products Company is used, took two years to complete and is believed to be the largest of its kind outside the United States. Its three reactors are charged with about 66 tons of platinum-on-alumina catalyst, supplied by Universal-Matthey Products Limited. With a capacity for processing about 800,000 gallons of oil feedstock per day, the Platformer normally produces 95-octane (unleaded) motor fuel blending stock, but its design also allows for the production of a 100-octane blending component.

Part of the reformat produced is supplied to the nearby extraction unit, where a mixture of xylenes is separated by the Calchem process from ethylbenzene, paraffins and naphthenes. Paraxylene is then isolated in a high degree of purity by fractional crystallisation, while ortho-xylene is separated by super-fractionation.

Construction of this new petrochemicals plant close to the oil refinery illustrates the changing pattern of development of the organic chemical industry in Europe. Since coal tar is no longer an adequate source for aromatic hydrocarbons, increasing demands for these chemicals are being met by processing petroleum products. Because of its high aromatics content the reformat from catalytic petroleum reforming serves as an excellent starting material, and it has now become expedient to site the reforming and extraction plants together.

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*The new Platforming unit now operating at the British Petroleum Company's Kent Refinery*