



*An early stage in the process in the Johnson Matthey smelting plant. Nickel matte, carrying with it the platinum metals, is cast into pigs*

and a further extension of the reduction works. The total cost involved will exceed £5 million, but it is considered that this level of new capital expenditure is essential to Rustenburg's endeavours to ensure that some surplus capacity is always available, and that stocks of refined platinum are adequate to meet the needs of users as and when these needs arise.

possible to avoid any further increase in the price of platinum for some considerable time to come.

Smelting and refining capacity in the Johnson Matthey plants in the United Kingdom, as a result of steady modernisation and improvement, will be adequate to deal with the increased output from Rustenburg.

It is also expected that the large scale of production upon which Rustenburg is now engaged, and which will continue for so long as it is warranted, will assist materially towards mitigating the effects of inflation upon the cost of production, and by so arresting the otherwise steady increase in production costs it is hoped that it will be

## **Aromatics Production by Platinum Reforming**

### **LARGE SCALE PLANT DESIGNED FOR BILLINGHAM**

The largest aromatics plant of its kind in Europe, having a projected capacity of some 400,000 tons a year, is now in course of construction at the Billingham works of Imperial Chemical Industries Limited and will begin production in the latter part of this year.

Six process units licensed by Universal Oil Products Company comprise the new complex, two of them employing platinum catalysts. Light straight-run naphtha feed will be charged to a Unifining plant for desul-

phurisation and then to a Platforming unit for aromatics reforming. An alternative source of aromatics, cracked naphtha, will be hydrogen treated in a Platfining process unit, and the products from both streams will be fed to a Sulfolane unit for the extraction of high purity aromatics.

The use of these two routes will give flexibility in the production of aromatics – mainly benzene, toluene, xylenes and cyclohexane – on this large scale.