

of the United Kingdom's new mill by 1952-53 should enable this prospective dollar drain to be considerably reduced.

104. On the heavy side of the industry, the main feature of the plan is the proposed installation of mills for rolling constructional sections. In the case of plates and light sections, the plan is concerned with the modernisation rather than the expansion of capacity. There will be a substantial increase in the output of wire rod, from about 750,000 tons in 1948 to over 1 m. tons in 1952. At present the United Kingdom is obliged to include a substantial quantity of wire rod in her import programme and indeed has considerable difficulty in obtaining the imports needed; the development plan is designed to eliminate this need for imports.

105. A further expansion of steel-making and finishing capacity in the United Kingdom is under consideration in the light of the present forward estimates of demand, but the existing development plan will be well on its way to completion before any new plans can be put into operation.

106. The following table briefly summarises the principal statistics:—

	1935-38	1947	actual weight '000 metric tons	
	Average	Actual	1948-49 Programme	1952-53 Programme
Production of crude steel ...	11,437	12,684	14,987	17,020
Imports—crude and semi-finished steel ...	487	293	373	383
finished steel ...	486	105	544	317
Exports—crude and semi-finished ...	22	4	6	—
finished steel ...	1,411	996	1,185	1,580
Consumption of finished steel ...	7,444	9,630	11,032	11,860

(5) ENGINEERING

107. The engineering industries are directly involved in nearly every aspect of economic recovery: in the mechanisation of agriculture; in the re-equipment of home industries and public utilities; in the export of capital goods not only to pay for current imports but also to develop the resources of the participating countries, the sterling area and other parts of the world.

108. Between 1938 and 1948 the production of the mechanical and electrical engineering sections of this industrial group has increased by about one half and it is expected that by 1952 production will rise still further to about 70 per cent. above the 1938 level.

109. Exports of all engineering products are at present over twice the level of 1938 and account for about 40 per cent. of the United Kingdom's total visible exports. By the end of 1948 the engineering industries as a whole should be exporting 230 per cent. by volume of their 1938 exports. The aim is to maintain at least this high level throughout the period under review.

110. The supply of machinery for home investment (including a small but important amount of imported equipment) was in 1947 about 20 per cent. above the pre-war level. By 1952 it is expected to increase the rate of supply to 40 per cent. above the 1938 level. The expansion of output of industrial machinery and equipment will exceed that of vehicles and other metal goods. Much of this plant will be needed in the next few years to make good the arrears of replacement accumulated during the war; part will go to increase the capacity of other exporting industries; all of it will increase the efficiency of British industry.

111. The engineering industries are making a major contribution to the agricultural expansion programme. In addition to a wide range of other agricultural machinery they are now producing agricultural tractors at a rate of 100,000 per annum compared with a pre-war output of some 12,000 a year and an output in 1947 of 56,000. This rate will be increased as steel supplies expand. Some 50,000 tractors a year are currently being exported and as the demand from the United Kingdom agricultural industry is approaching the point at which it will be stabilised at the replacement level, the major part of the increased production will be available for export. It is expected that about 27,000 agricultural and industrial tractors will be exported to the participating countries in 1948-49. Steps are being taken to encourage the manufacture of larger wheeled tractors, crawler tractors and specialised types of agricultural machinery for which the United Kingdom and the sterling area generally have hitherto been dependent on imported supplies from the Western Hemisphere.

112. The engineering industries are also making a direct contribution to the reduction of dollar expenditure by developing or manufacturing under licence types of equipment hitherto imported including agricultural machinery, specialised machine tools, contractors' plant, automatic textile and hosiery machinery, office appliances and a diverse range of other equipment used throughout industry. Continued encouragement will be given to this process.

113. It is not possible to give in precise quantitative terms a programme for the engineering industries as they are not a homogeneous entity. They consist of at least as many different sections as there are industries using their products. The broad objectives, for which it is believed material supplies will be adequate, are:—

- To achieve by 1952 an aggregate output in mechanical and electrical engineering 170 per cent. of the 1938 level; vehicles 135 per cent., and tools and implements 160 per cent.;
- to maintain the export of engineering products as a whole at not less than 230 per cent. of the 1938 level;
- to organise the productive capacity of the industries so as to produce the equipment needed for the home investment programme in the required quantity, type of product and time;
- to develop those categories of engineering exports likely to make the best and quickest contribution to the restoration of economic stability, namely, those which will increase the hard currency earnings, or reduce hard currency expenditure of the United Kingdom and other sterling area members of the Commonwealth, develop the production of food-stuffs and raw materials in the sterling area and other overseas territories, and contribute to the re-equipment of the agricultural and manufacturing industries of the participating countries;
- to maintain and improve the efficiency of the industry by research, the application of new techniques, good management and improved skills.

The various controls over resources exercised by the Government will be used to these ends.

(6) CHEMICALS

114. The production of chemicals has a major contribution to make both towards righting the balance of payments and increasing industrial production generally. For some years large amounts of organic chemicals and plastic materials have been imported from North America, including molasses, alcohols, solvents, and a wide range of oil derivatives, together with materials, for the rapidly growing plastics industry. Expenditure has been in the region of \$60-70 million a year. Increased production will also help the sterling area and participating countries to reduce purchases for dollars. Exports have increased rapidly and in the second quarter of 1948 were 56 per cent. above the 1938 level. By 1952 it is hoped that they will be 90 per cent. above 1938.

115. The main object is to increase production in nearly all branches of the industry: organic chemicals and plastic materials, dyestuffs and basic chemicals (particularly alkalis). The current dollar expenditure of over \$60 million a year for the import of organic chemicals will be almost eliminated. A surplus for export will become available. The increases in production will also put the organic chemicals industry into a more balanced state. At present it is largely self-supporting in coal tar products, and to a lesser extent in derivatives of ethyl alcohol obtained from the fermentation of molasses, but production is deficient in the large number of chemicals obtained from cracking oil.

116. Progress is also being made in making up the leeway lost during the war in keeping pace with developments in the manufacture of plastics. Production of the main plastic materials in use at present is being expanded and within three years United Kingdom production will be sufficient to make most imports unnecessary and provide for expanded exports. By 1952 United Kingdom output of plastics should be three times as great as in 1938.

117. About 95 per cent. of the dye-stuffs required by industry are already made in the United Kingdom; the remaining 5 per cent. must be imported mainly from Europe. Increased capacity, at a cost of about \$40-50 million, is being installed to meet increasing demands, and by 1952 British production will be about 30 per cent. greater than in 1947. It should then cover the majority of the