

EUROPEAN COAL AND STEEL COMMUNITY

COMMISSION

# **Investment in the Community Coalmining and Iron and Steel Industries**

REPORT ON THE 1975 SURVEY

Position as at 1 January 1975<sup>1</sup>

in the nine countries of the enlarged Community

SEPTEMBER 1975

<sup>1</sup> *The majority of replies to this year's survey were not received by the Commission until the month of June. They have tended to reflect decisions taken three months after the formal date of the survey.*

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## I—INTRODUCTION

### 1. Scope

This report contains the results of the European Commission's 1975 survey of past and future investment by coal and steel enterprises in the European Coal and Steel Community (ECSC) and of the impact of such investment on production potential. The survey is based on figures supplied by ECSC enterprises which in 1974 accounted for 99% of total coal production, 99% of crude steel production and 98% of finished products designated by the Treaty establishing the ECSC.

A full breakdown of the results of the survey by product and plant categories and by region is given in the statistical annex.

The standard ECSC definitions of capital expenditure and production potential which have been used in the survey are set out below.

In their replies to the survey, the enterprises are asked to distinguish the effects on capital expenditure and production potential of the following three categories of investment project:

- (a) Projects completed or in progress before 1 January 1975;
- (b) Projects approved but not yet in progress on 1 January 1975;
- (c) Other projects planned to be started between 1 January 1975 and 31 December 1977.

However since investment projects drawn up by the enterprises are often revoked, production potentials and capital expenditure resulting from projects which are merely planned (Category C) are not included in any of the figures of this report. Estimates in the report are therefore based solely on projects already completed, still in progress or decided by the enterprises at 1 January 1975.

### 2. Definitions

#### Capital expenditure

Capital expenditure means all expenditure shown or to be shown on the credit side of the balance sheet as fixed assets in the year under review at the prices ruling in that year, but excluding the financing of workers' housing schemes, outside shareholdings and all interests not directly connected with ECSC Treaty products.

Expenditure relates normally to calendar years. However, exceptionally for the United Kingdom, figures for the capital expenditure of coalmines, mine-owned coking plants and coal briquetting plants relate to years

beginning 1 April and ending 31 March and not to calendar years. The enterprises concerned have agreed to follow the standard ECSC calendar year definition from 1976 onwards.

### **Coal — Extraction potential**

The figures shown represent the net maximum output technically achievable, allowing for the potential of the different installations at the collieries (underground, surface, washeries), and assuming that it is not impeded by difficulties in distribution, by strikes or by manpower shortages.

A number of mines with a low output, including the German 'small mines', have not been included as regards either capital expenditure or production potential. They accounted for an extraction in 1974 of 355 000 tonnes.

The 'licensed' mines in the United Kingdom are also not included in the inquiry due principally to the difficulties in extending the survey to the large number of small enterprises concerned. Their production in 1974 was 620 000 tonnes.

### **Coke — Production potential**

The figures shown represent the maximum annual coke production achievable with the plant in operation at a given date, taking into account the minimum coking time technically allowable for the normal composition of the coking blend, with due regard to the state of the ovens and the potential of the ancillary and auxiliary installations. It is assumed that a ready market and unlimited raw material supplies are assured.

### **Iron ore — Extraction potential**

The figures shown represent the maximum continuous output which can be achieved by each mine, allowing for the potential of the different installations, for example (underground or surface ore-preparation plant where the ore is sold only after treatment), and for estimated manpower availabilities during the year under consideration.

### **Sinter, pig-iron, crude steel and finished steel products**

Sinter, pig-iron, crude steel and rolled products **production potential** means the **maximum production which can effectively be achieved by all the different sections of the plant together** allowing for possible bottlenecks in one section holding up all the others. This maximum possible production is defined as follows:

'Maximum possible production is the maximum production which it is possible to attain during the year under normal working conditions, with due regard for repairs, maintenance and normal holidays, employing the plant available at the beginning of the year but also taking into account both additional production from any new plant installed and any existing plant to be finally taken off production in the course of the year. Production estimates must be based on the probable composition ratios of the charge in each plant concerned, on the assumption that the raw materials will be available.'

In the case of steels produced mainly from pig-iron, the production potential is estimated in respect of the **blast-furnaces and steelworks** as a whole and not each steelworks individually.

The capital expenditure of a number of very small iron- and steelworks has not been included in this survey. It was assumed that the production potential of these enterprises would over the next few years remain slightly above the level of actual production for 1974. The production potentials mentioned in this report therefore exceed those actually declared by a certain percentage which varies from sector to sector but does generally not exceed 1% for crude steel and 2% for finished rolled products.

The production potential of the **rolling mills** is governed by the shape, quality and width of the material fed into the mill and the products to be obtained. Where enterprises have not been able to forecast future demand conditions, they have been asked to assume that the mix of inputs and outputs, on any one mill and across the different types of mill, will be broadly the same as that in 1974.

### 3. Conversion rates between the unit of account and national currencies

Until the end of 1970, the unit of account adopted in this report was successively the unit of account of the European Payments Union and that of the European Monetary Agreement. The unit of account adopted for 1971 was the EUR unit of account as defined by the Statistical Office of the European Communities. The rates of exchange between this unit and the national currencies were calculated according to the weighted average of official rates in force before and after 18 December 1971. Rates in force in 1970 were considered valid until the Washington agreement of 18 December 1971, and for the period from 19 December 1971 the newly agreed central rates were applied.

In 1972 and 1973 the rates of exchange between the EUR unit of account and the national currencies continued to be calculated at central rates. For 1974, expenditure in currencies which are not floating has been converted at the average market rates, express in terms of EUR, which are now used by the Statistical Office of the European Communities.

For 1975 and onwards, the central rates have again been adopted for the fixed currencies. Floating currencies have been converted at the average market rates which were experienced in the first four months of 1975.

The table below gives details of the rates of exchange which have been applied from 1972 onwards. Details for the years prior to 1972 are available in the Report on the 1974 Survey (Office for Official Publications of the European Communities Ref. No 8447).

Country	Currency	1972	1973	1974	1975 and onwards
Germany (Fed. Rep.)	DM	3.499	3.499	3.220	3.220
Belgium/Luxembourg	Bfrs/Lfrs	48.657	48.657	48.657	48.657
France	FF	5.554	5.554	5.554	5.900
Italy	Lit	631.342	631.342	727.640	880
Netherlands	Fl	3.523	3.523	3.523	3.523
United Kingdom	£	0.417	0.417	0.534	0.580
Denmark	Dkr	7.578	7.578	7.578	7.578
Ireland	£Ir	0.417	0.417	0.534	0.580

### 4. Capital goods prices indices

The enterprises declare their capital expenditure at the ruling prices for the year concerned, the figures being converted into units of account at the rates shown above. However, the rate of increase of capital goods prices is making it increasingly difficult to compare investment levels from year to year.

Clearly, capital goods for the iron and steel and coal industries are often highly specific and may originate in countries outside the Community. It is thus difficult to calculate price indices for these goods applicable to every country in the ECSC. Nevertheless, in order to gain some idea of how investments have changed from year to year on a constant price basis, two capital goods price indices have been prepared—one for the iron and

steel industry and the other for the coal industry. This has been done by taking the national indices concerning capital goods for all sectors of industry and by weighting these indices in accordance with the share of each country in total Community investment in each of the industries concerned.

The table below shows the indices calculated according to this method from 1965 to 1974. These indices have been applied to several expenditure series of expenditure figures in the report.

Community index 1970 = 100	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Iron and steel industry.....	81.8	83.9	85.3	87.4	91.8	100	107.4	113.0	122.8	135.1 (1)
Coal industry.....	82.6	85.0	85.7	87.8	92.0	100	108.1	115.9	129.3	147.4 (1)

(1) Estimated.

## 5. Interpretation of capital expenditure figures for 1973 and 1974

It should be born in mind that even at current prices the figures given in this report for capital expenditure in 1973 and 1974 may differ from those in the 1974 report. There are three main reasons for this:

- first, for 1973, enterprises may revise their figures in the light of the completion of their final annual accounts;
- secondly, for 1974, actual spending by the enterprises may often depart from the expenditure estimates submitted at 1 January of that year;
- thirdly, again for 1974, the actual rates of exchange between the national currencies and the unit of account may differ from those used in the estimates of capital expenditure for the year ahead.

## 6. Breakdown of production potential and capital expenditure by region

Northern Germany:	Länder Schleswig-Holstein, Lower Saxony, Hamburg, Bremen;
Southern Germany:	Länder Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria;
Eastern France:	Departments of Ardennes, Aube, Doubs, Haute-Marne, Marne, Meurthe-et-Moselle, Meuse, Vosges, Territoire de Belfort, Haute-Saône, Moselle, Bas-Rhin, Haut-Rhin;
Northern France:	Departments of Aisne, Nord, Oise, Pas-de-Calais, Seine, Région parisienne, Seine-et-Marne, Somme;
Northern England (steel-producing regions only):	North, North-West, Yorks and Humberside;
England other regions (steel-producing regions only):	West Midlands, East Midlands, East Anglia, South-West, South-East.

The National Coal Board Districts included in the coal-producing regions of the United Kingdom are shown in the table below:

Coal-producing regions	Scotland	North umberland	Yorkshire	Western	Midlands	Wales
NCB Districts	Scottish North	North-umberland North Durham	North Yorkshire South Yorkshire	North-Western	North-Nottingham	East Wales
	Scottish South	South Durham	Barnsley  Doncaster	Staffordshire	North Derbyshire  South Midlands	West Wales

Opencast mining has been considered as a separate category irrespective of regional locations.

For statistical purposes only, the production potentials and capital expenditure of steel-producing enterprises in Berlin have been included in the totals for the region of North-Rhine Westphalia.

## 7. Past statistics

The following organizations helped to provide statistics on British, Danish and Irish industries for past years:

- (i) UK Iron and Steel Statistics Bureau, Croydon;
- (ii) National Coal Board, London;
- (iii) Organization for Economic Cooperation and Development, Paris;
- (iv) Department of Trade and Industry, London;
- (v) The Danish and Irish enterprises covered by this survey.

Annexe II of the report of the 1974 Survey (Office for Official Publications of the European Communities Ref. No 8447) lists the exact sources of past statistics on production and investment in the industries of the three new Member States.

Previous surveys covering the industries in the six countries of the original Community for the years 1954-1965 and 1966-1973 are summarized in two reports issued respectively in 1966 and 1974 and entitled 'Investment in the Community coalmining and iron and steel industries—recapitulative report on the 1956-1966 survey' and 'Recapitulative report on the 1966-1973 surveys in the six countries of the original Community'.

## II—CONCLUSIONS

The returns from **coal enterprises** indicate that the changed energy situation and the new objectives for coal output have had a considerable effect on investment intentions. **Capital expenditure** in 1975 is expected to be 60% higher than in 1974 and represents an investment of about 2.2 u.a. per tonne of coal produced. The achievement of the objective of a maintenance of coal extraction potential at its present levels is clearly dependent not only on the level of capital investment, but also on other factors—not least the ability of the industry to recruit and keep manpower. The enterprises are nevertheless now beginning to invest at a rate which could slow down the reduction of capacities.

TABLE 1

Capital expenditure in the coalmining industry 1972-1976

million u.a.

	Actual			Estimated (cat. A + B)	
	1972	1973	1974	1975	1976
Capital expenditure at current prices.....	267.8	267.3	324.1	514.3	405.2

After a considerable decrease in **extraction potential** between 1974 and 1975, Community extraction potential will be maintained at the level of 264 million tonnes (247 tce) between 1975 and 1978. However the maintenance of this level is only made possible by an increase in planned output potential at opencast mines which offsets the expected 4 million tonne decrease in deep-mining potential over the period. In addition the reductions in and postponement of planned closures on coalfields with less favourable long term development prospects will contribute as much to the maintenance of output as the new increases in potential announced on more favourably placed coalfields such as the Ruhr, the British Midlands and Yorkshire.

Thus, although the objective of maintenance of extraction potential may be achieved over the next few years, two questions remain over the development of potential in the longer term:

first, whether the future rate of introduction of new sites will be sufficient to maintain the substantial contribution of open-cast mining to total Community coal output; and secondly, whether sufficient new capacities will be brought into operation on the relatively productive deep-mine coalfields to compensate for



TABLE 2

## Actual production and production potential in the Community coal industry

Product	Actual Production		Production Potential						
	1960 (mil- lion tonnes)	Average cumula- tive annual move- ment %	1974 (mil- lion tonnes)	1970 (mil- lion tonnes)	Average cumula- tive annual move- ment %	1974 (mil- lion tonnes)	Average cumula- tive annual move- ment %	1978 (mil- lion tonnes)	
Coal (1) .....	Eur 6	232.9	- 4.3	126.6	183.0	- 6.9	137.3	- 2.1	126.3
	Eur 9	429.8	- 4.2	235.2	*	*	267.3	- 0.4	263.4

(1) Excluding the small mines in the Federal Republic of Germany and the licensed mines in the United Kingdom.  
Figures not available.

those mines elsewhere whose closure will soon become inevitable either for geological or economic reasons. Despite the changed energy situation, many enterprises, with relatively good prospects for the productive exploitation of their reserves, are not yet in a position to embark on the costly investments necessary to exploit them.

Clearly the necessary delays needed in planning major projects, together with financial constraints, may offer some explanation of the current hesitations. But they are no doubt also influenced by the uncertainty which surrounds the competitiveness of Community coal-using power stations, as installations, as well as by the anxieties about the relative costs of Community coal with respect to supplies from third countries. The fact remains however that considerably more investment must be undertaken if 1974 output levels are to be continued beyond the next three years.

TABLE 3

## Actual production and production potential for coke in the Community

Product	Actual Production		Production Potential						
	1960 (mil- lion tonnes)	Average annual move- ment (in %)	1974 (mil- lion tonnes)	1970 (mil- lion tonnes)	Average annual move- ment (in %)	1974 (mil- lion tonnes)	Average annual move- ment (in %)	1978 (mil- lion tonnes)	
Coke .....	Eur 6	73.9	- 0.7	66.6	70.7	- 0.1	70.4	+ 1.5	74.8
	Eur 9	95.2	- 1.2	80.2	*	*	86.3	+ 2.0	93.5

\* Figures not available.

**Production potential for furnace coke** in the Community is expected to increase from 86.3 million tonnes in 1974 to 93.5 million tonnes in 1978. This increase corresponds to an average annual rate of growth of 2% which, as in recent surveys, would appear relatively low in comparison with the expected 4.1% p.a. growth of pig-iron production potential over the period, particularly as such a large part of the expected increase will be achieved in the United Kingdom alone. However, there is still scope for further improvements in blast furnace coking rates in a number of countries. This, together with the possibility of diverting coke to the steel industry from other outlets, could prevent any serious constraint on pig-iron production—if this were ever taken to the level of the maximum production potential.

The survey of capital expenditure on coking plant is at present dominated by the programme of modernization and extension of capacities in the United Kingdom. The level of investment on coking plant there is now comparable to the high rate of spending in the Community in its original form in the early seventies. **Iron ore** extraction potential in the Community is expected to decline still further to a level of 74.5 million tonnes by 1978. Even in orefields where output is still competitive with foreign ores, a number of enterprises are not anxious to increase extraction potential because they are aiming to preserve their reserves as a guaranteed supply for the future.

TABLE 4

## Actual production and production potential for iron ore in the Community

Product	Actual Production		Production Potential					
	1960 (million tonnes)	Average annual move- ment (in %)	1974 (mil- lion tonnes)	1970 (mil- lion tonnes)	Average annual move- ment (in %)	1974 (mil- lion tonnes)	Average annual move- ment (in %)	1978 (mil- lion tonnes)
Iron ore ..... Eur 6	95.9	- 2.9	64.0	80.3	- 3.1	70.7	- 1.7	66.0
Eur 9	113.3	- 3.6	67.7	*	*	77.2	- 0.9	74.5

\* Figures not available.

In 1974, **capital expenditure** in the iron and steel industry of the Community was 2.799 million u.a. at current prices. As in the three previous years, spending in the industry continued to be on a high level. Capital expenditure per tonne of steel produced in the Community was 18 u.a. as against levels of between 8 u.a. and 12 u.a. from 1964 to 1969.

However, the actual level of expenditure in the year was 7% lower than in 1973, even though in last year's survey it was forecast to be 4% higher. In view of the near completion of the large major projects at new coastal steelworks in France and Italy, it was generally expected that there would be some fall in expenditure at constant prices. The decline in expenditure at current prices is nevertheless more unusual, particularly in view of the positive effects on the cash flow available for investment of the relatively favourable trading conditions which the enterprises enjoyed during most of 1973 and 1974. Figures for enterprises in the six countries of the Community in its original form indicate that in the previous boom years—for example 1960 and 1970—actual expenditure generally exceeded forecasts (see Figure 5).



from 178.9 million tonnes in 1974 to 212.8 million tonnes in 1978. Continuous casting should represent over 24% of crude steel production in 1978 as against 13% in 1974.

The pattern of expected growth of crude steel capacities is nevertheless quite different from that in recent surveys which have been strongly influenced by the construction and expansion of coastal works on the continent. The major projects at these works certainly have their greatest impact on production potential within the period, but it occurs mostly in 1975 and would have been much smaller had not delays in commissioning prevented the realization of the full production potential of some plants in 1974. Beyond 1975, even in the absence of other major projects in the Community the rate of growth of crude steel production potential should be maintained at nearly 4% p.a. because of the combination of three fairly distinct developments.

In the first place, this year's survey shows clearly that production potential for LD steels at coastal works in the United Kingdom will increase considerably by 1978 and will be only partially offset by closures of open hearth steelworks elsewhere. Secondly, proportionately large extensions to capacity are expected at inland works on the Rhine, and in the Saar and Lorraine regions, as a result of modernization schemes. Thirdly, as was shown in last year's survey, the production potential of steelworks based on electric furnaces is expected to continue to increase rapidly, rising from 29 million tonnes in 1974 to 42 million tonnes in 1978. 3 million tonnes of the expected total increase in electric steel production potential is accounted for by replacements of existing open hearth shops. A further 4 million tonnes will result from extensions to works producing special steels and the remaining 6 million tonnes from the construction of new or the extension of existing mini-mills producing ordinary steels.

Despite the uncertainties which have surrounded the development of markets for several finished steel products since the beginning of 1974, the production potential for finished products (including coils—finished products) is still expected to increase almost as fast as crude steel production potential at an average 3.7% p.a. rising from 147.9 million tonnes in 1974 to 171.4 million tonnes in 1978. As far as flat products potential is concerned, the expected rate of growth of 4.1% is due principally to the realization of major investments which were decided on two to three years ago.

On the other hand, the likely 3.3% p.a. increase in production potential for sections is strongly influenced by a continuing and rapid expansion of rod mill capacities.

In the Community's general objectives for steel for 1980, the impact of the demand forecast for the next five years on these expected trends in crude steel and finished product capacities will be examined closely. Attention will also be given to the expected supplies of raw materials, including scrap, and their possible implications for the development of steelmaking capacities.



## (c) Capital expenditure per tonne of coal produced in 1974

For the Community as a whole, the rate of capital expenditure per tonne of coal produced in 1974 was 1.38 u.a. compared with 1.02 u.a. in 1973. There were significant increases in the ratio for the Federal Republic of Germany (1.12 u.a. as against 0.83 u.a. in 1973) and for the United Kingdom (1.81 u.a. as against 1.26 u.a. in 1973). The table below illustrates that in recent years, even at current prices, the level of capital expenditure per tonne in the continental coalfields is still well below the levels of the late 1950's.

TABLE 7

## Capital expenditure per tonne of coal produced 1955 - 1974

u.a./tonne at current prices

Basins	1955	1956	1957	1958	1959	.....	1970	1971	1972	1973	1974
Ruhr.....	0.86	0.79	0.99	1.00	0.88	.....	0.52	0.59	0.63	0.80	1.09
Aachen.....	1.21	1.06	0.97	1.57	1.36	.....	0.70	0.86	0.89	1.10	0.91
Lower Saxony.....	1.00	1.36	2.35	2.43	2.62	.....	1.14	1.49	1.64	1.91	4.08
Saar.....	0.70	0.95	1.21	1.15	0.96	.....	0.52	0.61	0.98	0.65	0.85
Germany (FR).....	0.85	0.82	1.03	1.07	1.05	.....	0.54	0.63	0.71	0.83	1.12
Campine.....	1.30	1.64	1.78	1.70	1.08	.....	0.52	0.49	0.74	0.56	0.52
Southern.....	1.16	1.32	1.46	1.25	0.99	.....	0.88	0.97	0.96	0.96	0.54
Belgium.....	1.20	1.43	1.57	1.42	1.02	.....	0.65	0.65	0.81	0.68	0.53
Netherlands.....	1.42	1.10	1.10	1.06	1.55	.....	0.23	0.07	0.08	0.13	0.26
Nord/Pas-de-Calais.....	1.27	1.07	1.03	0.86	0.86	.....	0.29	0.38	0.60	0.55	0.48
Lorraine.....	2.11	2.04	1.87	1.43	1.09	.....	0.52	0.48	0.63	0.90	1.02
Centre-Midi.....	0.81	0.79	0.84	0.82	0.75	.....	0.25	0.26	0.23	0.22	0.55
France.....	1.36	1.24	1.20	1.00	0.89	.....	0.36	0.39	0.53	0.63	0.71
Italy.....	2.18	0.17	1.60	1.86	0.79	.....	7.00	10.05	0.00	0.00	—
<b>Total Eur 6</b>	<b>1.04</b>	<b>1.00</b>	<b>1.14</b>	<b>1.09</b>	<b>0.97</b>	.....	<b>0.51</b>	<b>0.58</b>	<b>0.67</b>	<b>0.77</b>	<b>1.00</b>
United Kingdom.....						.....				1.26	1.81
<b>Total Eur 9</b>						.....				<b>1.02</b>	<b>1.38</b>

## 2. Plans for 1975 and 1976

The radical transformation of the energy supply situation, and the revised objectives for coal output which have been adopted at both Community and national levels, appear to have had a considerable effect on the declared investment intentions of the enterprises. The survey shows that the total planned capital expenditure on coalmining amounts to 514 million u.a. on 1975—nearly 60% higher than spending in 1974.

Within the surveys, the estimates made by a number of enterprises of expenditure for two years ahead are usually well below actual expenditure, because a substantial proportion of their capital spending is formally approved only one year ahead. Under the definitions of the survey, expenditure which is planned but not yet decided on is not included in the figures of this report. However, according to this year's survey, over 405 million u.a. of expenditure is already planned and approved for 1976. This would suggest that actual expenditure in 1976 may be maintained above the level of 500 million u.a.

Certainly the largest increases in expenditure are planned in coalfields where the prospects for maintaining or increasing production are known to be relatively favourable, such as the Ruhr, Lorraine and the British



Midlands and Yorkshire regions<sup>1</sup> (See Table 1 of the Statistical Annex). But the survey also shows that, with the exception of Southern Belgium, enterprises in all regions of the Community are planning an average annual level of expenditure for 1975 and 1976 which is at least 50% higher than that carried out over the last three years.

### 3. Breakdown of actual and planned capital expenditure by type of installation

The table below gives a breakdown of actual and planned expenditure on coalmining by category of installation.

In 1974 the proportion of expenditure devoted to the various categories of plant was broadly similar to that in 1973. Coal preparation and other surface installations accounted for 47% of total spending as opposed to 46% in 1973.

TABLE 8

Breakdown of actual and planned capital expenditure on coalmines in Community by type of installation 1972-1976

million u.a.

Type of installation	For comparison 1954-1959	Actual expenditure			Estimated expenditure (on projects decided or in progress)		
		1972	1973	1974	1975	1976	
Shafts and underground.....	Eur 6	56.3	12.4	12.1	11.5	22.0	16.9
	Eur 9	*	33.1	17.4	25.2	68.3	62.1
Underground mechanical .....	Eur 6	56.8	36.8	37.1	49.6	91.4	37.1
	Eur 9	*	127.6	120.3	133.9	186.2	131.9
Haulage and winding equipment.....	Eur 6	21.4	3.7	6.6	8.8	28.7	31.1
	Eur 9	*	18.0	7.3	12.0	44.3	43.5
Screening and washing .....	Eur 6	56.7	15.0	21.2	27.4	53.0	42.1
	ur 9	*	27.3	29.7	35.9	99.8	96.3
Other surface installations including building .....	Eur 6	62.7	30.0	26.6	30.2	73.0	42.7
	Eur 9	*	61.8	92.6	117.1	115.7	71.4
<b>Total</b>	Eur 6	<b>253.9</b>	<b>97.9</b>	<b>103.6</b>	<b>127.5</b>	<b>268.1</b>	<b>169.9</b>
	Eur 9	*	<b>267.8</b>	<b>267.3</b>	<b>324.1</b>	<b>514.3</b>	<b>405.2</b>

In 1975, total planned Community expenditure on shafts and underground workings, and screening and washing is nearly three times 1974 levels. In addition, spending on haulage and winding equipment will be nearly four times its level in 1974.

However, despite these increases, it would not appear that the enterprises have yet decided on the really substantial increases in expenditure on underground workings which are likely to be necessary if capacities are to be preserved and extended in the medium to long term. This hesitation on the part of the enterprises to undertake long term projects, together with the necessary planning delays needed for them, is also reflected in

<sup>1</sup> It was not possible in this year's survey for the National Coal Board to give a breakdown of their planned capital expenditure by individual regions in the United Kingdom. The indications given above are based upon notifications of investment made to the Commission.



the fact that none of the projects for new mines in the Community is announced in the survey as 'in progress' or 'definitely decided'.

Unfortunately, no long series of figures of expenditure by type of installation is available for the Community as a whole which would enable comparisons to be made between current spending and that in a period when extraction potential was being broadly maintained, such as the late fifties. Figures for the Six member countries of the Community in its original form nevertheless do indicate that planned expenditure on the first three categories in the table is only 6% higher at current prices than it was in the period 1954-1959.

## 2. EXTRACTION AND EXTRACTION POTENTIAL

The survey of coal extraction and extraction potential is carried out in terms of 'tonne for tonne' coal output except in the German coalfields, other than the Saar, where the figures given follow the national definition.

### 1. Extraction in 1974

Coal output in the Community fell to 235.2 million tonnes in 1974 as against 263.1 million tonnes in 1973. Of the 27.9 million tonnes drop in output, nearly 20 million tonnes was lost due to strikes in the United Kingdom. The remaining net 7.9 million tonnes decrease was due to planned closures of pits in Germany, the United Kingdom, Belgium, the Netherlands and France which were only partially offset by increases in output from more profitable pits.

TABLE 9

#### Movement of coalmining extraction potential

*in million tonnes*

	Extraction		Extraction potential					
			Actual		Estimated			
	1960	1974	1970	1974	1975	1976	1977	1978
Eur 6 <sup>(1)</sup> (tonnes-survey definition) .....	232.9	126.6	183.0	137.3	130.3	130.1	128.2	126.3
Eur 9 <sup>(2)</sup> (tonnes-survey definition) .....	429.8	235.2	*	267.3	263.9	264.7	263.8	263.4
(estimated tonnes coal equivalent) .....	*	224.3	*	250.9	247.4	248.2	247.2	246.8

<sup>(1)</sup> As in previous years, mines producing only small tonnages are excluded. Their combined production in 1974 amounted to 355,000 tonnes.

<sup>(2)</sup> Excluding the 'licensed mines' in the United Kingdom. Their production in 1974 amounted to 620 000 tonnes.

\* Figures not available.

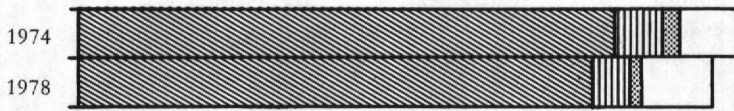
### 2. Extraction potential declared for the period 1975-1978

According to the latest returns of the enterprises, total Community coal extraction potential which was 267.3 million tonnes in 1974, should decrease by a net 3.9 million tonnes to reach a level of 263.4 million tonnes in 1978. By far the largest part of the decrease in potential—4.4 million tonnes—will occur between 1974 and 1975. Extraction potential will thus be maintained between 1975 and 1978 at about 264 million tonnes or 247 million tce.

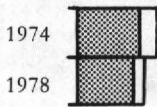
FIGURE 2

Comparison of actual coal extraction potential in 1974  
with forecast extraction potential for 1978

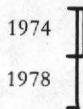
GERMANY (Fr.)



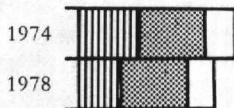
BELGIUM



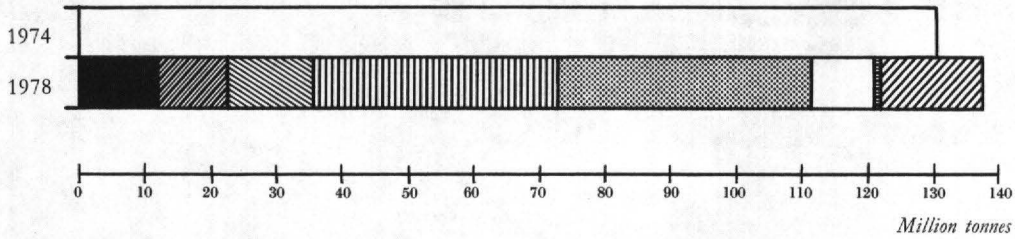
NETHERLANDS (Limburg)



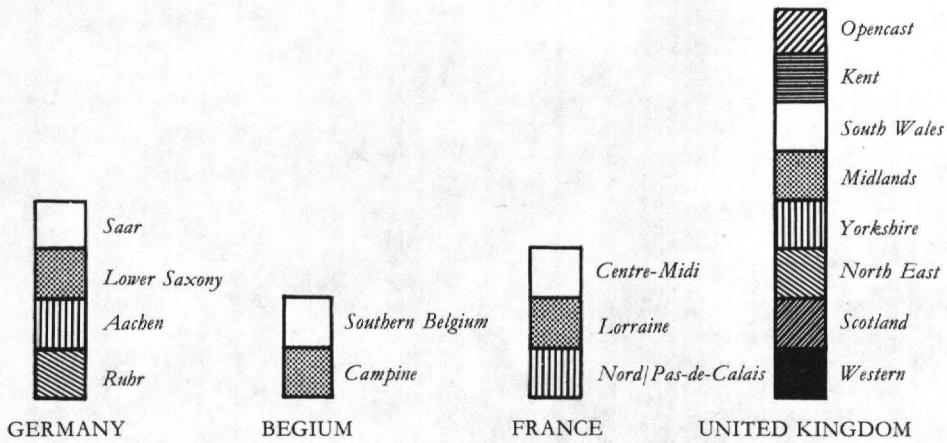
FRANCE



UNITED KINGDOM



0 10 20 30 40 50 60 70 80 90 100 110 120 130 140  
Million tonnes



As can be seen in the graph opposite, the expected pattern of development of extraction potential between 1975 and 1978 is quite different from coalfield to coalfield, and between deep and open-cast mining. (See also Statistical Annex Table 2). Only three deep-mine coalfields are expected to see a net increase in their output potential—the Saar (+ 0.3 million tonnes) and the British Midlands and Yorkshire regions (+ 1.1 million and + 1.2 million tonnes respectively). In the remaining deep-mine coalfields, about 11.5 million tonnes of extraction potential will disappear as a result of closures and rationalization of pits, in particular those already announced in the Ruhr (Germany), Nord/Pas-de-Calais (France), South Wales and the North-East (UK). These decreases will partially be offset by planned increases in potential at other pits in the coalfields concerned, totalling 4.9 million tonnes.

In contrast to deep-mining, extraction potential in the open-cast mines in the United Kingdom is planned to increase by 3.5 million tonnes to 15.2 million tonnes between 1975 and 1978—arise of 30%. The NCB's plan for coal,<sup>1</sup> which was approved by the UK government and trade unions, also envisages that a further 1 to 2 million tonnes could be added to open-cast extraction potential by 1985.

Because of the relatively short exploitation period of open-cast mines, the achievement of these objectives is linked chiefly to the rate of opening of new sites. This in turn is clearly dependent on the extent to which plans for sites are compatible with protection of the environment.

### 3. Comparison of extraction potential declared in the 1974 and 1975 surveys: Effect of changed energy situation

The 1974 investment survey was completed at a time when the majority of coal enterprises in the Community were not in a position to undertake a full revision of their investment programmes in the light of the changed energy supply situation which became apparent at the beginning of 1974.

TABLE 10

Comparison of coal extraction potential planned for 1977 as declared in the 1974 and the 1975 inquiry

	For reference: production potential 1974			Increases, decreases	
		Last year's inquiry (1974) 1977	This year's inquiry (1975) 1977		
Germany - Ruhr.....	81.4	76.2	78.5	+ 2.3	
France - Centre-Midi.....	4.4	2.8	4.8	+ 2.0	
Germany - Saar.....	9.8	9.2	10.4	+ 1.2	
France - Lorraine.....	10.0	9.5	10.0	+ 0.5	
France - Nord/pas-de-Calais.....	9.2	6.4	6.8	+ 0.4	
Southern Belgium.....	2.7	1.8	1.9	+ 0.1	
Belgium - Campine.....	9.1	9.1	8.0		- 1.1
Germany - Lower Saxony.....	2.7	2.7	9		- 0.8
Germany - Aachen.....	7.0	6.4	5.9		- 0.5
				+ 6.5	- 2.4
			Net increase:	4.1	

<sup>1</sup> Coal industry examination: Interim Report 1974 and Final Report 1974.

It is therefore interesting to compare the 1974 returns to those of this year's inquiry in order to gauge the effect of the changed conditions on the plans of the enterprises. The table below contains a comparison of the coal extraction potential planned for 1977, as declared in the National Coal Board revised its returns to the 1974 survey in June of that year).

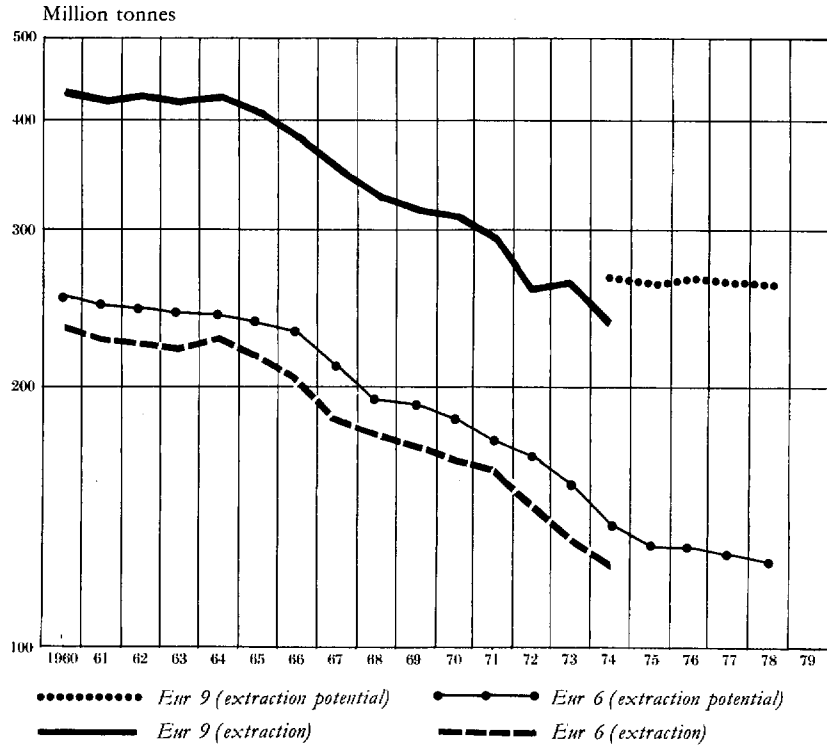
Despite the fact that 1977 is a relatively short time ahead in the investment programmes of the enterprises, the estimate of extraction potential for this year is, as a result of the more favourable conditions for coal sales, 4 million tonnes higher than that given in the 1974 inquiry.

However, the increases in expected 1977 potential are by no means confined to those coalfields which at first sight could be regarded as having more favourable prospects for maintaining or increasing production. Some relatively productive coalfields have lowered their forecast potentials for 1977. These results may be in part explained by the relative degree to which individual coal enterprises can increase their output potential over the short term. Although some mines are situated on or near to good reserves, which could eventually be worked very productively, it may nevertheless be necessary to undertake more investment over a period of years in order to prepare the reserves for efficient exploitation. On the other hand, other mines may be able to get at coal relatively quickly in existing workings, even though the reserves are difficult to work and though face productivity may be low.

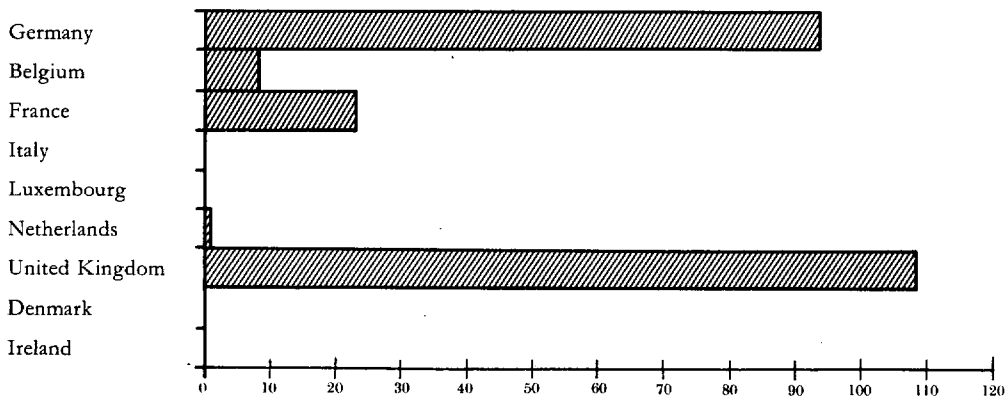
In the United Kingdom—where some preliminary revisions of investment plans had already been made in June of last year—the extraction potential announced in the 1974 Survey for 1977 was 140 million tonnes. The 1975 Survey now announces an extraction potential for 1977 at the lower level of 135 million tonnes. This decrease in expected potential reflects a somewhat slower build-up to the overall output objectives for 1980 and 1985, than was originally foreseen before the National Coal Board had undertaken the necessary detailed analysis and revision of its investment plans.

FIGURE 3

Extraction and extraction potential  
Coalmining Industry



Extraction by country for 1974



## IV—COKING AND BRIQUETTING PLANTS

### 1. Coking plants

**Capital expenditure** on coking plants in the Community reached a total of 207 million u.a. in 1974 against 188.9 million u.a. in 1973. The investment realized during the course of the year was only 83% of that forecast as at 1 January. This was due principally to delays in the commitment of expenditure on projects in progress, on new steelworks-owned coking plant in Northern England and on the replacement of mine-owned plants in the Ruhr. Spending on mine-owned and independent plants fell from 39 million u.a. in 1973 to 37 million u.a. in 1974. On the other hand, expenditure on steelworks-owned plants at 170 million u.a. was 20 million u.a. higher than its 1973 level.

Investment in steelworks-owned coking plant continued to account for the largest part of total expenditure. The regional breakdown of expenditure is clearly influenced by the realization of investment programmes for coking plant at coastal steelworks. Over two thirds of total expenditure was made in three regions where coastal steelworks have been expanding their capacities—Northern England, Southern France and coastal Italy.

Total spending on coking plant in 1975 may be over 250 million u.a. The extensive programme of modernization and expansion of steelwork-owned coking capacities in the United Kingdom is largely responsible for the continuance of such a high level of expenditure. Spending on steelworks-owned coking plants in the United Kingdom alone will be 111.3 million u.a.—over 40% of the total for all steelworks on the French and Italian Mediterranean coasts is expected to decline somewhat in 1975 as major investment programmes near completion. At the same time, in the Ruhr region of Germany, projects for the replacement of existing batteries at mine-owned coking plants could result in an increased expenditure for this category of plant there—42.6 million u.a. in 1975 against 17.3 million u.a. in 1974 and 25.7 million u.a. in 1973. At current prices, spending will thus return to around its 1972 level of 41.4 million u.a. Clearly, some part of the envisaged expenditure of 42.6 million u.a. in 1975 is linked to projects which were not carried out as planned in 1974 when realized expenditure was some 10 million u.a. lower than forecast at the beginning of the year.

The planned increase is nevertheless considerable and, combined with expected spending on modernization projects announced in Lorraine and in Italy, should result in a total capital expenditure on Community mine-owned and independent coking plants of 71.7 million u.a. in 1975 against 37.4 million u.a. in 1974. The tables below give a detailed breakdown of actual and forecast expenditure by category of coking plant and by type of installation.

TABLE 11

**Breakdown of actual capital spending at mine-owned, independent and steelworks  
coking plants 1972-1976**

million u.a.

Sector		Actual expenditure			Estimated expenditure (cat. A + B)	
		1972	1973	1974	1975	1976
Mine-owned .....	Eur 6	48.8	32.1	30.3	58.7	39.0
	Eur 9	57.2	35.2	33.1	60.1	39.0
Independent .....	Eur 6	3.9	2.4	2.1	11.2	21.0
	Eur 9	6.9	3.6	4.3	11.6	21.0
Steelworks .....	Eur 6	132.5	109.2	90.9	70.7	50.7
	Eur 9	*	150.1	170.1	182.0	158.0
<b>Total</b>	Eur 6	<b>185.2</b>	<b>143.7</b>	<b>123.3</b>	<b>140.6</b>	<b>110.7</b>
	Eur 9	*	<b>188.9</b>	<b>207.5</b>	<b>253.7</b>	<b>218.0</b>

\* Figures not available.

TABLE 12

**Breakdown of actual spending at mine-owned, independent and steelworks  
coking plants 1972-1976**

million u.a.

Sector		Estimated expenditure			Estimated expenditure (cat. A + B)	
		1972	1973	1974	1975	1976
Coking ovens of which .....	Eur 6	134.9	102.2	72.5	79.8	63.8
	Eur 9	*	129.0	131.8	158.3	135.4
New plant.....	Eur 6	(120.4)	(88.8)	(47.6)	(38.7)	(34.8)
	Eur 9	*	(109.9)	(104.3)	(112.4)	(98.9)
Repairs and replacement .....	Eur 6	(14.5)	(13.4)	(24.9)	(41.1)	(29.0)
	Eur 9	*	(19.1)	(27.5)	(45.9)	(36.5)
Gas and by-product plant .....	Eur 6	22.0	12.4	14.3	30.7	25.5
	Eur 9	*	21.8	24.9	45.9	41.9
Gasworks and miscellaneous.....	Eur 6	28.3	29.1	36.5	30.1	21.4
	Eur 9	*	38.1	50.8	49.5	40.7
<b>Total</b>	Eur 6	<b>185.2</b>	<b>143.7</b>	<b>123.3</b>	<b>140.6</b>	<b>110.7</b>
	Eur 9	*	<b>188.9</b>	<b>207.5</b>	<b>253.7</b>	<b>218.0</b>

\* Figures not available.

Community annual **production potential**<sup>1</sup> for furnace coke is expected to rise from 86.3 million tonnes in 1974 to 93.5 million tonnes in 1978, an annual average growth rate of just over 2% over the four years. According to the 1974 survey, production potential of **mine-owned coking plants** was expected to fall from 40.0 million tonnes in 1974 to 38.2 million tonnes in 1977. However, the results of the 1975 survey show that throughout the period between now and 1978, production potential will remain above the level of 39 million tonnes. This change appears to be due principally to an extension of the predicted life of capacities in the Nord/Pas-de-Calais region of France and in the United Kingdom. Given the extremely low level of actual and forecast investment in these areas, it is nevertheless doubtful whether the new figures indicate any real intention to carry out a full replacement of existing capacities when they become unworkable. This is not the case in both the Ruhr and the Lorraine regions where returns showing an expected maintenance of capacities are accompanied by forecasts of substantially higher expenditure on replacement in 1975 and 1976. The production potential of **independent coking plants** for furnace coke is not expected to exceed 4.5 million tonnes between now and 1977, although there will be a small addition to capacities in Italy from 1978 onwards.

Between 1974 and 1978, production potential of **steelworks-owned coking plant** will increase from 41.8 million tonnes in 1974 to 49.4 million tonnes in 1978.

This rate of expansion is more or less the same as that given in the results to the 1974 survey. The largest expected annual increase in potential—3 million tonnes will occur between 1974 and 1975. Another 2.4 million tonnes of potential will be added by 1976.

The pattern of expansion of production potential across the countries is also broadly similar: expected increases in potential of nearly 3 million tonnes in the United Kingdom, over 2 million tonnes in Italy and 1.5 million tonnes in the Federal Republic of Germany. Table 13 below summarizes the actual and expected levels of production potential up to 1978 by category of coking plant. Table 5 in the Statistical Annex gives a regional breakdown of furnace coke production potential.

TABLE 13  
Movement of production potential in coking plants

Coking plants		Production		Production potential					
				Actual		Forecast			
		1960	1974	1970	1974	1975	1976	1977	1978
Mine-owned coking plants .....	Eur 6	50.2	33.9	40.6	35.5	34.5	35.0	34.7	35.0
	Eur 9	56.9	38.4	*	40.0	39.2	39.6	39.2	39.5
Independent coking plants .....	Eur 6	3.9	3.5	3.5	3.5	3.5	3.5	3.5	3.6
	Eur 9	6.0	4.4	*	4.5	4.5	4.5	4.5	4.6
Steelworks coking plants .....	Eur 6	19.8	29.2	26.0	31.4	34.5	36.1	36.5	36.2
	Eur 9	32.3	37.4	*	41.8	44.8	47.2	48.7	49.4
Total	Eur 6	73.9	66.6	70.7	70.4	72.5	74.6	74.7	74.8
	Eur 9	95.2	80.2	*	86.3	88.5	91.3	92.4	93.5

\* Figures not available.

<sup>1</sup> This report on the survey of coking plant production potential is limited to plants producing furnace coke and does not include potential for low temperature coke or semi-coke. Some plants in the United Kingdom which were included in the 1974 survey have now been excluded.



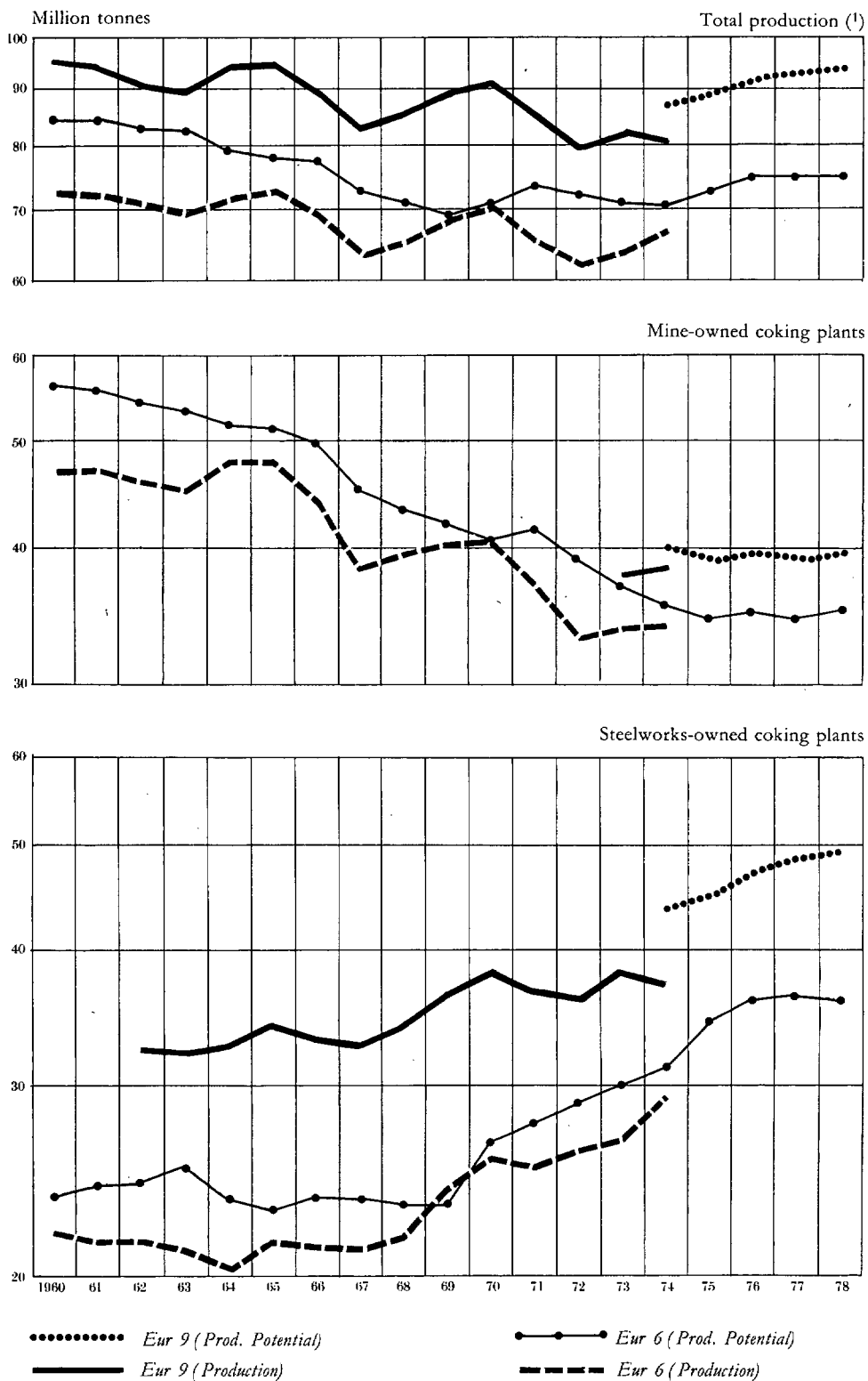
## 2. Briquetting plants

Capital expenditure on hard coal briquetting plants in the Community barely reached 1 million u.a. in 1974 and is not expected to exceed this level in 1975. At the same time, Community production potential for hard coal briquetting is expected to fall by 0.7 million tonnes to 8.9 million tonnes in 1975, due principally to closures in the Ruhr and Aachen regions. Further closures in Belgium will mean that by 1978 Community production potential will have fallen 8.7 million tonnes—nearly 20% off its 1973 level. On the basis of the returns of the enterprises on investment and capacity, it would not therefore appear that the changed energy situation has had any favourable effect on the competitiveness of hard coal briquettes either in domestic or industrial uses. Announcements of further closures can thus be expected.

Despite the new and favourable prospects for the exploitation of brown coal reserves in the Community, the situation of enterprises making **brown coal briquettes** seems to be similar to those making hard coal briquettes. While the level of capital expenditure is more considerable—just under 3 million u.a. in 1974 with nearly 8 million u.a. expected for 1975—the expected fall in production potential from 6.2 million tonnes in 1974 to 4.8 million in 1978 is clearly more drastic.

FIGURE 4

Production and Production Potential of Coking Plants



(1) Mine-owned, steelworks-owned and independent coking plants.

## V—IRON ORE MINING

Capital expenditure on iron ore mining rose from 25.5 million u.a. in 1973 to 26.7 million u.a. in 1974. Forecast expenditure slightly exceeded the forecast made by the enterprises at the beginning of the year.

In 1975, investments of approximately 28.3 million u.a. are expected, of which nearly 19 million u.a. is to be spent on mines in Eastern France. Table 14 gives a breakdown of actual and estimated capital expenditure by country. Table 15 shows the ratio of capital expenditure per tonne extracted from 1958 to 1974.

TABLE 14  
Capital expenditure in the iron-ore industry by country 1973-1976

Country	Actual expenditure		Estimated expenditure	
	1973	1974	1975	1976
Germany (FR).....	4.44	4.65	4.60	1.02
Belgium.....	0.04	0.02	—	—
France.....	18.12	19.74	21.76	7.30
Italy.....	0.64	1.31	0.45	0.04
Luxembourg.....	1.91	2.13	1.00	0.18
United Kingdom.....	1.22	0.52	0.45	0.06
<b>Community.....</b>	<b>26.37</b>	<b>28.37</b>	<b>28.26</b>	<b>9.60</b>

millions u.a.

Capital expenditure at current prices per tonne of crude ore extracted was 0.39 u.a. in 1974 for the Community as a whole and 0.43 u.a. for the six countries of the Community in its original form.

TABLE 15

## Capital expenditure in the Iron-ore Industry 1972-1976

million u.a.

Sectors	Actual expenditure			Estimated expenditure (cat. A Ø B)		
	1972	1973	1974	1975	1976	
Extraction of ore.....	Eur 6 Eur 9	16.3 *	19.5 19.6	20.6 21.0	20.4 20.8	7.4 7.4
Mine based preparations of ore .....	Eur 6 Eur 9	0.9 *	0.8 1.5	0.4 0.5	1.2 1.2	0.0 0.0
Miscellaneous surface.....*	Eur 6 Eur 9	3.7 *	4.8 5.3	6.8 6.9	6.2 6.3	1.1 1.2
<b>Total</b>	Eur 6 Eur 9	<b>20.9</b> *	<b>25.1</b> <b>26.4</b>	<b>27.8</b> <b>28.4</b>	<b>27.8</b> <b>28.3</b>	<b>8.5</b> <b>8.6</b>

\* Figures not available.

TABLE 16

## Capital expenditure at current prices per tonne of crude ore extracted in the six countries of the Community in its original form 1958-1974

	Capital expenditure (million u.a.)	Crude ore extracted (million tonnes)	Capital expenditure per tonne of crude ore extracted (u.a.)
1958 .....	41.2	87.1	0.47
1959 .....	40.3	88.4	0.46
1960 .....	43.2	95.9	0.45
1961 .....	52.4	95.9	0.55
1962 .....	46.5	92.3	0.50
1963 .....	28.3	80.2	0.35
1964 .....	23.9	81.4	0.29
1965 .....	25.6	78.7	0.33
1966 .....	17.3	73.0	0.24
1967 .....	16.0	66.0	0.24
1968 .....	20.7	71.2	0.29
1969 .....	20.3	71.0	0.29
1970 .....	21.2	71.1	0.30
1971 .....	26.4	68.4	0.39
1972 .....	20.8	66.0	0.31
1973 .....	25.1	65.8	0.38
1974 .....	27.8	64.0	0.43

It can be seen from the Table that expenditure per tonne extracted in the industry fell sharply from its level of about 0.50 u.a. in the late fifties and early sixties to 0.24 u.a. in 1966 and 1967. However, since 1967 capital expenditure at current prices has not declined as rapidly as production, and expenditure per tonne at current prices has increased substantially. Rises in capital goods prices and in capitalized labour costs would clearly account for most of this apparent increase. In addition, some mining companies have made considerable investments in equipment to increase productivity. However, figures for the Community as a whole hide the sharp differences evident in the returns of the different enterprises. While some are clearly continuing to invest at a level comparable with that in periods when their capacities were broadly maintained, other enterprises still continue to forecast maintenance of extraction potential even though their capital expenditure is negligible.

According to the survey, total Community annual **extraction potential** is expected to fall from 77.2 million tonnes in 1974 to 74.5 million tonnes in 1978.

TABLE 17

## Extraction and extraction potential by country

million tonnes

Country	Extraction		Extraction potential				
	1973	1974	1974	1975	1976	1977	1978
Germany .....	6.4	5.7	6.6	6.6	6.4	5.8	5.3
Belgium .....	0.1	0.1	0.2	0.2	0.2	0.2	0.2
France .....	54.7	54.7	59.8	58.2	57.6	57.3	56.8
Italy .....	0.7	0.8	0.9	0.8	0.8	0.8	0.8
Luxembourg.....	3.8	2.7	3.2	3.0	2.9	2.9	2.9
EUR 6 .....	65.7	64.0	70.7	68.6	68.1	67.0	66.0
United Kingdom.....	7.1	3.6	6.5	7.8	8.5	8.5	8.5
EUR 9 .....	72.8	67.7	77.2	76.4	76.6	75.5	74.5

The level of potential for 1975 is expected to be 76.4 million tonnes for the Community as a whole and 68.6 million tonnes in the six countries of the Community in its original form. The figure for the six countries indicates that the decline in extraction potential is somewhat faster than that foreseen in the Community's general objectives for steel for 1975, which were prepared in 1971. At that time it was estimated that, even in average market conditions, the six countries should be capable of an actual rate of extraction of 68.0 million tonnes per year.

In Eastern France, despite renewed improvements in productivity and the ability to dispose of the bulk of production to iron works in the vicinity of the mines, annual extraction potential will fall by 3.2 million tonnes from 56.6 million tonnes in 1974 to 53.4 million tonnes in 1978. A number of enterprises operating in the region now appear to be trying to extend the life of existing reserves for possible use as a guaranteed supply, rather than extracting the maximum saleable output in the short term.

Elsewhere in the Community, further closures and reductions in potential may be even higher than those announced in the survey, especially in view of the extremely low level of investment in some areas.

TABLE 18

## Movement in crude ore extraction potential declared

million tonnes

Survey dates	Production potential estimated						
	1972	1973	1974	1975	1976	1977	1978
1970..... Eur 6	80.7	79.5					
1971..... Eur 6	80.2	79.7	78.4				
1972..... Eur 6	73.2	74.5	75.6	75.5			
1973..... Eur 6	72.5 <sup>(1)</sup>	70.3	71.5	70.8	70.6		
1974..... Eur 6 Eur 9		73.2	67.7	68.6	68.4	67.1	
		82.2	76.1	76.9	76.6	75.3	
1975..... Eur 6 Eur 9			70.7	68.6	68.1	67.0	66.0
			77.2	76.4	76.6	75.5	74.5

<sup>(1)</sup> Revised figure.

## VI—IRON AND STEEL INDUSTRY

Between 1973 and 1974 capital expenditure in the iron and steel industry of the Community fell by 7%—from 3 028 million u.a. to 2 799 million u.a. As Table 20 shows, the enterprises had previously forecast a total annual expenditure of 3 140 million u.a. There was thus an 11% shortfall of actual from planned spending.

Of this 11% shortfall, 4.5% was due to adjustments made to the conversion rate of national currencies in terms of units of account which were necessary because of the decline during 1974 in the value of the value of the lira, the pound and the French franc. However, the remaining 6.4% fall was due to delays in the realization of investment programmes. The figures given in Table 19 indicate that the decrease in expected spending affected projects at all stages of production. There was a particularly low realization of expenditure on general services.

*TABLE 19*  
Capital expenditure in the iron and steel industry 1972-1976

Type of installation		Actual expenditure			Estimated expenditure (cat. A + B)	
		1972	1973	1974	1975	1976
Plant for production of:						
Pig iron.....	Eur 6	622.1	632.2	483.2	439.2	426.9
	Eur 9	*	794.9	714.1	694.6	696.0
Steel.....	Eur 6	344.0	361.3	388.6	386.2	294.3
	Eur 9	*	441.5	462.2	499.9	383.5
Rolled products.....	Eur 6	1 167.0	1 014.4	1 010.0	1 064.3	724.4
	Eur 9	*	1 166.2	1 174.2	1 340.1	965.4
General services .....	Eur 6	506.1	576.4	400.0	428.8	287.1
	Eur 9	*	625.8	448.2	515.7	368.6
<b>Total</b>						
Eur 6		2 639.2	2 584.3	2 281.8	2 318.5	1 732.7
Eur 9		3 229.2	3 028.4	2 798.7	3 050.3	2 413.5
<b>Total</b>						
Eur 6		*	2 104.4	1 688.9	1 716.1	1 282.5
— at constant 1970 prices .....		Eur 9	2 857.5	2 466.1	2 071.6	1 786.4

\* Figures not available.

*million u.a.*

TABLE 20

**Estimated capital expenditure in 1974 and actual amount spent in  
the six countries of the original Community**

million u.a.

Stage in production	Estimates (1)	Actual amounts spent (2)		Agreement with estimates % (3) = (2) : (1)	
Pig iron.....	744.0	714.1	(748.5)	96.0	(100.6)
Crude steel.....	497.2	462.2	(485.1)	93.0	(97.6)
Rolling mills.....	1 296.5	1 174.2	(1 230.7)	90.6	(94.9)
General services .....	602.7	448.2	(474.0)	74.4	(78.6)
<b>Total iron and steel industry</b>	<b>3 140.4</b>	<b>2 798.7</b>	<b>(2 936.3)</b>	<b>89.1</b>	<b>(93.6)</b>

The figures in brackets represent the actual expenditure and rates of realization calculated on the basis of the conversion rates between national currencies and the unit of account which were used in the forecasts made at the beginning of 1974.

As Table 21 shows, the rate of realization of investments in terms of national currencies was lowest in France—84.0% and the United Kingdom—89.4%. On the other hand, capital expenditure by enterprises in Belgium was 20% higher than forecast by them at the beginning of the year. Apart from the effects of rises in capital goods prices, this increase appears to have arisen principally because progress on three investment programmes was faster than expected.

Taking into account the rises in capital goods prices during 1974, rates of realization of expenditure throughout the Community are significantly lower than those indicated above. At constant prices of 1970, total capital expenditure in 1974 declined by about 16% relative to its 1973 level. Even in terms of national currencies the shortfall against forecast expenditure at constant prices is likely to have been over 12%.

The following sections of this chapter analyse the actual and expected capital expenditure on each plant category together with the development of production potential for the plant involved.

### 1. Pig-iron and sponge-iron production facilities

In 1974 **capital expenditure** under the heading of pig- and sponge-iron production facilities—which includes spending on steelworks-owned coking plants, burden preparation, blast furnaces and direct reduction plant—was 714 million u.a., and is expected to reach a total of about 695 million u.a. in both 1975 and 1976. Table 22 analyses this expenditure into the major categories of plant involved.

Between 1973 and 1974, expenditure on blast furnaces fell by 68 million u.a. to 279 million u.a. in 1974, with decreases in North-Rhine/Westphalia, Northern France and in the coastal regions of Italy, only partially offset by increases elsewhere. Spending on blast furnaces in Belgium was at its highest ever level at current prices of 38 million u.a. against the previous highest of 31 million u.a. in 1972.





TABLE 21

Estimated capital expenditure in 1974 and actual amount spent —  
Iron and steel industry in the countries of the original Community

million u.a.

Area	Estimated (1)	Actual amount spent (2)	Agreement with estimates % (3) = (2) : (1)
Northern Germany.....	160.4	202.6	126.3
North Rhine/Westphalia.....	370.4	318.3	85.9
Southern Germany.....	34.4	28.4	82.5
Saar.....	66.4	55.1	82.9
<i>Germany (FR)</i> .....	<i>631.6</i>	<i>604.4</i>	<i>95.6</i>
<i>Belgium</i> .....	<i>299.2</i>	<i>358.3</i>	<i>119.7</i>
Eastern France.....	117.4	115.0	97.9
Northern France.....	208.1	148.7	71.4
France: other areas.....	476.1	358.5	75.2
<i>France</i> .....	<i>801.6</i>	<i>622.2 (673.2)</i>	<i>77.6 (84.0)</i>
Italy: coastal areas.....	488.2	386.0	79.0
Italy: other areas.....	186.2	200.1	107.4
<i>Italy</i> .....	<i>674.4</i>	<i>586.1 (654.7)</i>	<i>86.8 (97.4)</i>
<i>Luxembourg</i> .....	<i>48.4</i>	<i>46.7</i>	<i>96.5</i>
<i>Netherlands</i> .....	<i>67.7</i>	<i>64.1</i>	<i>94.6</i>
<i>United Kingdom</i> .....	<i>582.7</i>	<i>501.0 (521.0)</i>	<i>85.9 (89.4)</i>
<i>Denmark</i> .....	<i>34.4</i>	<i>15.9</i>	<i>46.3</i>
<i>Ireland</i> .....	<i>0.4</i>	—	—
<b>Total</b>	<b>3 140.4</b>	<b>2 798.6 (2 938.3)</b>	<b>89.1 (93.6)</b>

The figures in brackets represent the actual expenditure and rates of realization calculated on the basis of the conversion rates between national currencies and the unit of account which were used in the forecasts made at the beginning of 1974.

TABLE 22  
Capital expenditure on pig-iron production plant 1972-1976

million u.a.

Sectors		Actual expenditure			Estimated expenditure (cat. A + B)	
		1972	1973	1974	1975	1976
Steelworks coking plants .....	Eur 6	132.5	109.2	90.8	70.7	50.7
	Eur 9	*	150.0	170.1	182.0	158.0
Burden preparation and direct reduction.....	Eur 6	183.6	216.1	146.3	128.9	115.4
	Eur 9	*	297.8	265.3	234.9	211.2
Blast furnace.....	Eur 6	306.0	306.9	246.1	239.7	260.7
	Eur 9	*	347.1	278.7	277.7	326.7
<b>Total</b>	Eur 6	<b>622.1</b>	<b>632.2</b>	<b>483.2</b>	<b>439.3</b>	<b>426.8</b>
	Eur 9	*	<b>794.9</b>	<b>714.1</b>	<b>694.6</b>	<b>695.9</b>

\* Figures not available.

In 1975, although total expenditure on blast furnaces is not expected to change, its breakdown by region will differ considerably from that seen since 1971. While the major projects at new works on the Mediterranean coast are nearing completion, expenditure on expansion schemes in North-Rhine/Westphalia will return to its high level of the beginning of the seventies. In Lorraine there will be a resurgence of investment, principally for modernization schemes. There is also a substantial level of expenditure committed by enterprises in these two regions for 1976. Expenditure at coastal works in Northern England will be as much as 59 million u.a. in 1976. Spending associated with schemes on the north-west coast of Italy is also expected to be of the same order of magnitude.

As in the 1974 survey, actual and expected expenditure on steelworks-owned coking plant and on installations for burden preparation continues to be dominated by the programme for modernization and extension of these facilities in the United Kingdom. While it is true that most steelworks in the United Kingdom meet their own coking needs, the magnitude of the expenditures being undertaken in the same country is nevertheless worthy of note—a total of 311 million u.a. in the United Kingdom in 1974, 1975 and 1976, compared with 213 million u.a. for the six countries of the Community in its original form, where considerable spending on coking plant at coastal steelworks was made at the beginning of the 1970's.

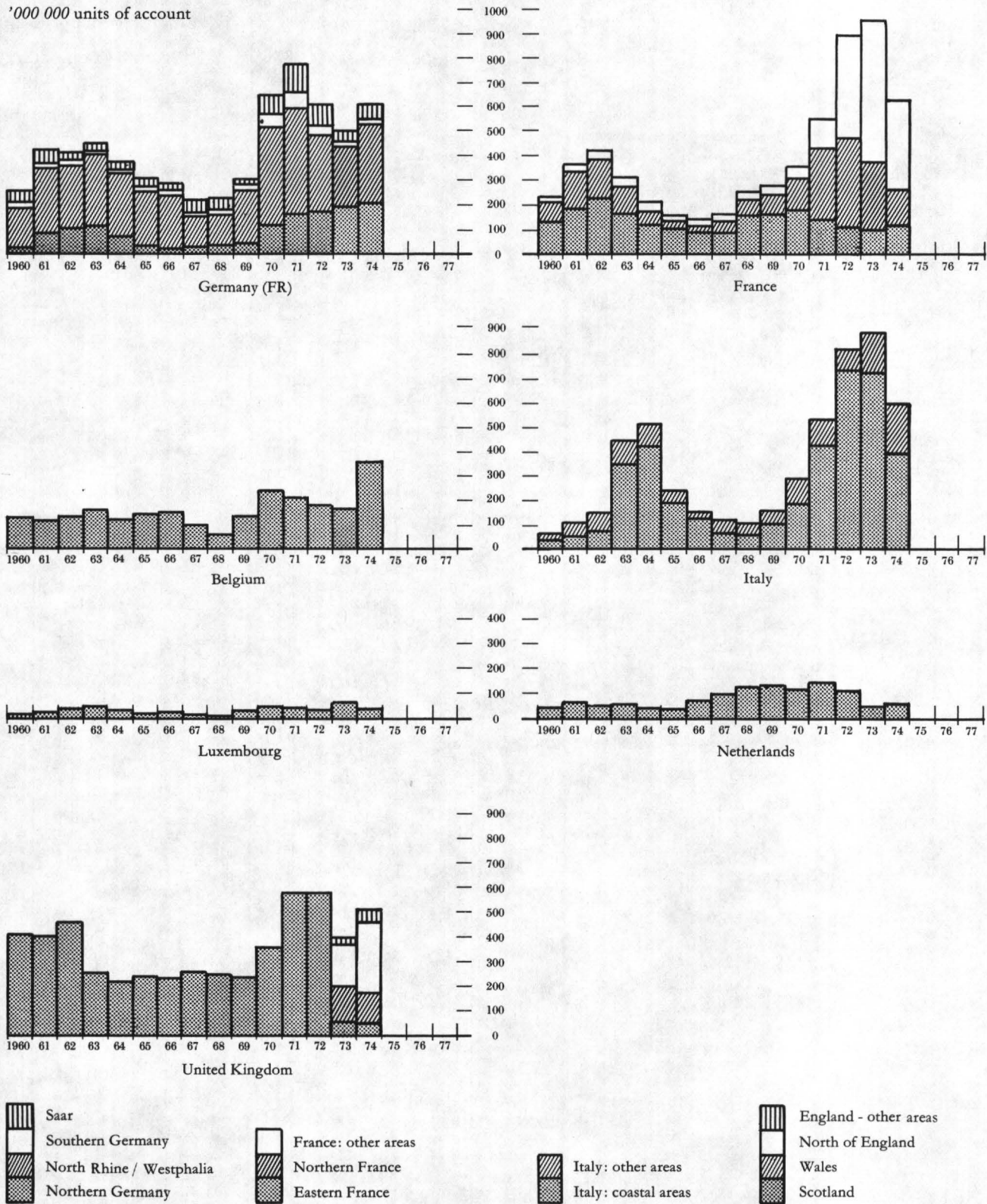
In addition to the installations already in existence in Germany which are to be expanded, there are two further projects for **direct reduction** plants which are announced as definitely decided or in progress in the survey—one in the United Kingdom and the other in Italy. Total expenditure on the three plants is expected to be 18 million u.a. in 1975 and 49 million u.a. in 1976.

The expected development of Community **production potential** for pig-iron, sinter and coking plant is given in Table 23. In 1974, total pig-iron potential was 127.7 million tonnes as against 133.3 million tonnes announced by the 1974 survey. (The actual rates of utilization of production potential experienced in 1974 are discussed in the section on steel production.) Of the 5.6 million tonnes shortfall of production potential from forecast, 1.3 million tonnes is accounted for by enterprises in the United Kingdom where there were delays in the commissioning of new plant and major furnace relines which were not foreseen in the original estimates. The remaining 4.3 million tonnes decrease from the expected figure was almost entirely due

FIGURE 6

Capital Expenditure in the Iron and Steel Industry

'000 000 units of account



to delays in commissioning elsewhere in the Community, notably in plants on the Italian coast where 2 million tonnes of additional blast furnace capacity was only commissioned at the end of the year, principally due to industrial disputes in the construction industry. The majority of these plants which were not fully commissioned at the announced level of production potential are now expected to realise their full potential during 1975.

TABLE 23

## Movement of production potential for coke, sinter and pig iron

*million tonnes*

	Actual production		Production potential						
	1960	1974	1970	1974	1975	1976	1977	1978	
Coke (steelworks-, mine-owned and independent plants).....	Eur 6	73.9	66.6	70.7	70.4	72.5	74.6	74.7	74.8
	Eur 9	95.2	80.2	*	86.3	88.5	91.3	92.4	93.5
Sinter .....	Eur 6	34.4	130.2	103.1	143.1	149.3	152.1	158.7	160.5
	Eur 9	49.1	144.8	*	163.2	170.7	177.6	190.5	193.1
Pig-iron .....	Eur 6	54.0	97.8	94.1	110.1	118.4	122.8	125.3	127.2
	Eur 9	70.1	111.8	*	127.7	137.2	142.5	146.7	149.9

\* Figures not available.

The expected annual average rate of growth of pig iron production potential announced for the period 1974-1978 is 4.1% p.a., very close to that announced by the previous survey (4.2% p.a.) for the period 1973-1977. However, nearly half of the announced new potential will come into service in 1975. By the end of 1975, major additions to Community pig-iron production potential will be made on final completion of the investment programmes at coastal steelworks in France, Italy and Belgium. From 1975 to 1978 the rates of growth of potential are thus only 2.9% p.a. for the Community as a whole, and 2.4% p.a. for the six Member States of the Community in its original form. These rates are markedly less than those of actual production which were respectively 3.7% and 4.6% p.a. for the period 1960 to 1974.

The regional pattern of growth of production potential beyond 1975 differs noticeably from that of the last three years. Although some expansion continues at plants on the northern and southern continental coastlines, the most substantial increases in potential will occur elsewhere. Production potential will expand rapidly at integrated coastal works in the United Kingdom, notably as a result of the installation of a large new blast furnace at Redcar on the north-east coast. Capacities will also be increased at plants on inland sites on the Continent, in particular in North-Rhine/Westphalia, where a further large new blast furnace is under construction on the Rhine and in Belgium and in Lorraine where it has been decided to modernize some existing capacities.

According to the survey, the production potential for **directly reduced iron ore** for use in electric furnaces should rise from 0.3 million tonnes in 1974 to 0.9 million tonnes in 1978. Based on the projects decided, and providing there are no further delays in the actual commitment of expenditure, maximum production potential could reach 2 million tonnes p.a. by 1980.

## 2. Steel production

### (a) Capital expenditure

At current prices capital expenditure on steelworks in the Community rose from 442 million u.a. in 1973 to 462 million u.a. in 1974. Total spending in this category could reach 500 million u.a. in 1975. In 1975, investment in steelworks based on **bottom- and top-blown oxygen processes** is expected to account for nearly half total spending. However, as Table 24 below shows, **electric furnaces** are for the first time expected to take up slightly more expenditure than on oxygen furnaces. Spending on them will reach the unprecedented level of 222 million u.a. against 186 million u.a. in 1974 and 170 million u.a. in 1973. This expenditure forecast is almost certainly an underestimate owing to the difficulties of obtaining accurate forecasts from the many small enterprises using electric furnaces who often decide on a project and install the necessary equipment over a very short period.

Capital expenditure on **OBM and LWS and similar steelworks** continues to increase, due not only to the conversion of existing Basic Bessemer furnaces, but also to the construction of new OBM steelworks in the Saar and Southern region of Germany, in Belgium and in Italy.

Spending on **open-hearth steelworks** was only 7 million u.a. in 1974—exactly half the level forecast at the beginning of the year. This was due in part to the cancellation of 3 million u.a. of expenditure on a plant in Italy which is to be replaced, and in part to delays in installation of pollution control equipment in Germany.

Capital expenditure on **Basic Bessemer steelworks** reached a total of just under 3 million u.a. in 1974 and is expected to amount to under 2 million u.a. in 1975. With the prospect of a continuing low level of expenditure for this type of steelworks, the statistical table giving spending on Basic Bessemer steelworks by region has been dropped from this report.

TABLE 24  
Capital expenditure on steelmaking plant 1972-1976 according to production process

Sectors		Actual expenditure			Estimated expenditure (cat. A + B)	
		1972	1973	1974	1975	1976
Basic Bessemer.....	Eur 6	4.8	2.6	2.8	1.6	0.8
	Eur 9	*	2.6	2.8	1.6	0.8
OBM, etc.....	Eur 6	6.6	22.2	38.7	46.6	53.0
	Eur 9	*	22.2	38.7	46.6	53.0
Open-hearth.....	Eur 6	3.3	3.5	6.4	12.4	9.4
	Eur 9	*	5.0	7.3	13.6	9.4
Electric furnace.....	Eur 6	81.8	123.6	137.1	146.6	88.9
	Eur 9	*	169.5	186.4	222.4	144.0
LD, Kaldo etc.....	Eur 6	247.6	209.4	203.6	179.0	142.2
	Eur 9	*	242.4	227.1	215.7	176.2
Total	Eur 6	344.1	361.3	388.6	386.2	294.3
	Eur 9	*	441.5	462.3	499.9	383.4

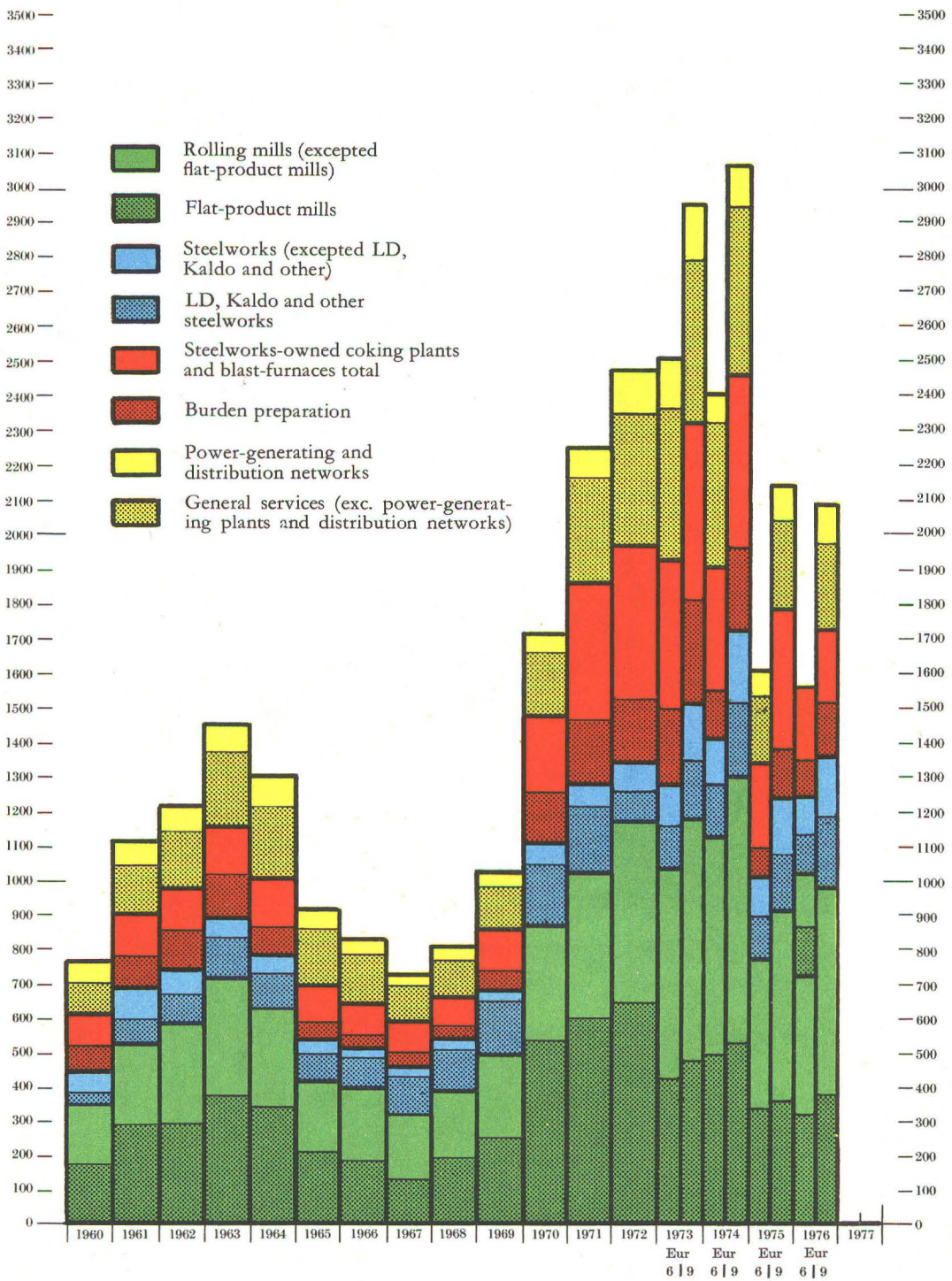
\* Figures not available.



FIGURE 7

Breakdown of capital expenditure in the Iron and steel industry

'000 000 units of account



**(b) Actual production and production potential in 1974**

Actual crude steel production in the Community reached a total of 155.5 million tonnes in 1974, compared with a production potential available in 1974 of 178.9 million tonnes (see Table 25). The rate of utilization of production was an average 86.9% for the Community as a whole, slightly higher than its 1973 level of 86.0%.

TABLE 25

**Movement of crude steel production potential 1974-1978***million tonnes*

	Production 1974	Production potential				
		1974	1975	1976	1977	1978
Community.....	155.5	178.9	191.3	200.6	207.5	212.8

Table 26 shows how the rates of utilization of potential varied by country and by production process. Most countries had a higher rate of utilization in 1974 than in 1973. The lowest rate of utilization of crude steel capacity was experienced in the United Kingdom—80.3%. This was due for the most part to the effects on steel production of the energy crisis and miners' strike at the beginning of the year.

After a similar exercise in 1973 for the other countries of the Community, the Commission, in cooperation with British Steel enterprises, undertook a special enquiry at the beginning of 1975 on the causes of the differences between actual crude steel production and production potential in the United Kingdom. The preliminary results of this inquiry indicate that nearly 50% of the shortfall in actual production from the maximum possible production was caused by shortages of coking coal, scrap and energy supplies, while a further 14% was directly attributable to disputes in the industry itself.

In the absence of these factors, the rate of utilization of steel capacities in the United Kingdom could have been as much as 93%.

Industrial stoppages were also largely responsible for low rates of utilization of capacity in Italy, where the average utilization for the year was 82.4% despite the fact that, during the last three months, Italy generally had a higher level of activity in its steelworks than in these in other countries.

As well as the inquiry on production shortfalls in the United Kingdom, the Commission in cooperation with the trade associations, has paid particular attention in analysing the replies to this year's inquiry to the trend towards lower rates of utilization from one period of high activity to the next. The main reasons for this trend were outlined in last year's report on investments: in particular, the greater effect of stoppages in more integrated plants, the difficulty of achieving the maximum possible production because of shortages of manpower and raw materials in the boom, and the general increase throughout the Community in production losses due to industrial disputes. A further though less important factor is that a number of enterprises in the Community who were nearing completion of major expansion programmes, had not fully revised their estimates of production potential in the light of delays in commissioning. This had the effect of lowering their declared rates of utilization because actual production was compared with a production potential which was not yet fully commissioned. In this year's survey, some attempt has been made to correct this distortion for major works, although some error probably remains in the total figures. As in the case of pig-iron, the crude



TABLE 26

## Rate of utilization of production potential for pig-iron, crude steel, coils and finished products

in %

	Pig iron	Basic Bessemer	OBM, LWS	Open hearth	Electric	LD, Kaldo and others	Crude steel total	Continuous casting	Coils	Heavy sections	Light sections	Wire rod	Hoop and skip	Plate $\geq$ 3 mm	Cold-reduced sheet < 3 mm	Finished rolled products Total (excl. coils finished products)
Germany (FR).....	87.3	83.2	85.8	89.8	88.2	88.0	88.1	87.9	82.8	76.5	74.4	84.1	78.4	78.7	68.8	75.5
Belgium.....	90.5	89.8	88.4	83.2	85.7	92.3	91.2	54.7	90.2	89.2	69.5	86.8	72.3	87.0	81.2	79.3
France.....	89.5	92.0	92.4	87.3	88.0	86.4	88.5	74.4	82.8	89.1	91.0	83.6	78.2	82.4	85.7	85.6
Italy.....	85.5	—	—	79.2	82.8	83.4	82.4	85.3	80.3	56.5	84.3	77.0	78.5	74.9	74.4	75.9
Luxembourg.....	95.4	98.7	99.8	—	89.2	94.0	96.0	—	85.5	77.5	92.0	95.0	89.5	97.2	85.8	87.1
Netherlands.....	96.1	—	—	75.5	97.2	96.0	95.7	—	84.3	—	78.8	90.7	70.7	69.3	82.7	80.1
<b>Total Eur 6</b>	<b>87.2</b>	<b>91.4</b>	<b>90.4</b>	<b>86.6</b>	<b>85.8</b>	<b>88.4</b>	<b>88.2</b>	<b>84.2</b>	<b>83.5</b>	<b>77.9</b>	<b>80.0</b>	<b>83.9</b>	<b>79.3</b>	<b>79.3</b>	<b>76.6</b>	<b>78.9</b>
United Kingdom.....	79.6	—	—	83.5	87.6	75.5	80.3	64.7	76.9	75.1	81.9	82.9	63.3	84.1	74.6	77.6
Denmark.....	—	—	—	96.1	70.0	—	94.7	—	—	90.0	93.8	—	—	82.6	—	87.9
Ireland.....	—	—	—	80.6	83.6	—	82.1	—	—	83.3	87.7	—	—	—	—	87.4
<b>Total Eur 9</b>	<b>87.5</b>	<b>91.4</b>	<b>90.4</b>	<b>85.9</b>	<b>85.8</b>	<b>86.7</b>	<b>87.2</b>	<b>82.6</b>	<b>82.6</b>	<b>77.4</b>	<b>80.4</b>	<b>83.7</b>	<b>76.8</b>	<b>80.0</b>	<b>76.3</b>	<b>78.7</b>



steel production potential for 1974 was somewhat below that estimated by the enterprises in the 1974 survey—178.9 million tonnes (see Table 27). This appears to have been due mainly to delays in the realization of new production potential in LD steelworks in coastal Italy, Northern England and Southern France.

TABLE 27

Comparison of the forecasts of crude steel production potential given in recent surveys

million tonnes

Survey dates	Production potential estimated							
	1971	1972	1973	1974	1975	1976	1977	1978
1970 ..... Eur 6	137.4	144.3	146.8					
1971 ..... Eur 6	137.3	145.3	151.9	160.5				
1972 ..... Eur 6	135.8	142.3	148.8	157.5	164.0			
1973 ..... Eur 6		139.7	146.1	155.7	164.1	167.9		
1974 ..... Eur 6			144.9	153.3	163.0	170.3	173.3	
			174.5	183.2	197.4	204.5	206.1	
1975 ..... Eur 6				150.4	162.3	169.8	179.9	177.8
				178.9	191.3	200.6	207.5	212.8

### (c) Expected production potential 1974-1978

The production potential for crude steel in the Community is expected to reach a total of 212.8 million tonnes in 1978 as Table 28 shows. This increase represents an expected annual average rate of growth for the Community as a whole of 4.4% and for the six Member States of the Community in its original form of 4.3%.

In 1975, production potential in the six Member States of the Community in its original form is expected to reach 162.3 million tonnes—very close to the level of 163.0 million tonnes estimated in 1971 in the general objectives for steel for 1975. The pattern of production potential across countries and processes is also similar to that expected. However, the development of production potential in Italy has been much faster, and that in Belgium much slower, than originally foreseen. The OBM process has been adopted much more extensively than was thought likely in 1971.

TABLE 28

Average annual rates of growth for pig-iron and steelmaking potential

in %

Date of survey	1960	1967	1968	1969	1970	1971	1972	1973	1974	1975
Period covered	1959-1963	1966-1970	1967-1971	1968-1972	1969-1973	1970-1974	1971-1975	1972-1976	1973-1977	1974-1978
Pig-iron ..... Eur 6	5.2	2.6	2.5	3.0	5.3	7.0	5.7	5.1	4.5	3.7
	*	*	*	*	*	*	*	*	4.2	4.1
Steel ..... Eur 6	3.8	3.1	2.6	3.6	5.0	6.1	4.8	4.7	4.6	4.3
	*	*	*	*	*	*	*	*	4.3	4.4

\* Figures not available.

In common with the figures for pig-iron production potential, the rates of growth estimated for the period 1974-78 are higher than might have been expected for two main reasons: first, production potential in the base year of 1974 was much lower than expected; secondly, as Table 29 below shows, about 37% of the absolute increase in potential between 1974 and 1978 will be realized between 1974 and 1975. Thus the expected annual rate of growth of potential between 1975 and 1978 is only 3.6%.

TABLE 29  
Expected increases in Community crude steel production potential by  
year 1974-1978

	For reference 1974 Production potential	1974-75	1975-76	1976-77	1977-78
Community .....	178.9	+ 12.2	+ 9.5	+ 6.8	+ 5.4

million tonnes

From 1975 to 1978 the only major programmes of expansion of capacity of coastal steelworks to be implemented will be those of the new steelmaking complex at Teesside in the North of England, and of the IJmuiden plant in the Netherlands. Elsewhere, the expansion of capacity will occur mainly at inland sites in Italy, North-Rhine/Westphalia and Eastern France. Table 30 below shows the net effect of these movements on the comparative rates of growth of crude steel production potential for coastal as opposed to other works. It can be seen that the achievement of new potential at coastal works in 1975 is primarily responsible for the decline in the rate of growth of capacity between 1975 and 1978.

TABLE 30

Total Community	% of total crude steel production potential		Expected annual average growth p.a. of production potential	
	Actual	Expected	1974-1978	1975-1978
	1974	1978		
Major coastal steelworks <sup>(1)</sup> .....	25.8	32.3	9.0	6.2
Other steelworks .....	74.2	67.7	2.7	2.6
<b>Total all steelworks</b>	<b>100.0</b>	<b>100.0</b>	<b>4.4</b>	<b>3.6</b>

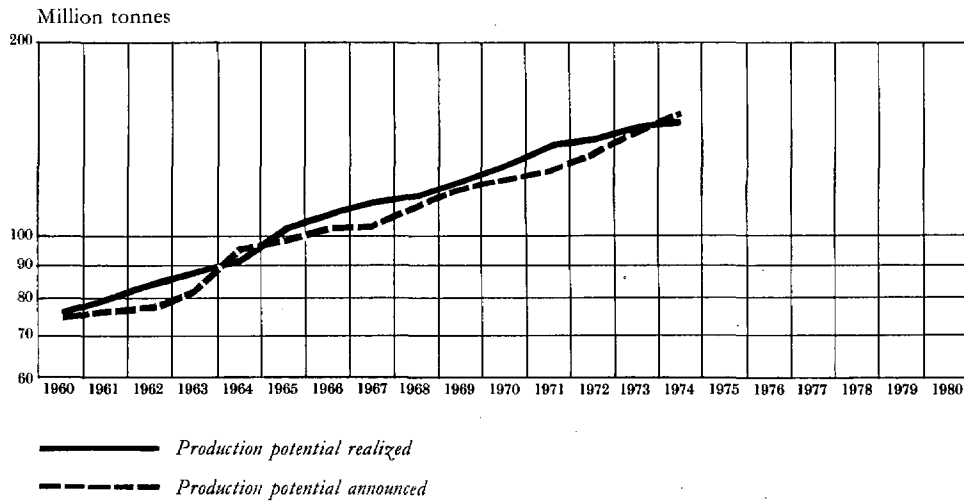
million tonnes

<sup>(1)</sup> Hamburg, Bremen, IJmuiden, Sidmar, Dunkirk, Mondeville, Fos, Cornigliano, Piombino, Bagnoli, Taranto, Hunterston, Ravenscraig, Port Talbot, Llanwern, Scunthorpe, Redcar/Teesside.  
This list includes works which, although not located on the coast, nevertheless may share some of the transport costs and other locational advantages of strictly coastal works.

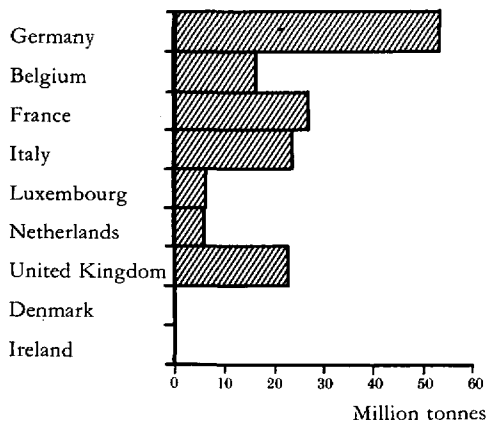
The overall figures for the Community nevertheless hide the important differences in the pattern of development between plants in the United Kingdom and those in the six Member States of the Community in its original form. These differences are shown clearly in Table 31.

FIGURE 9

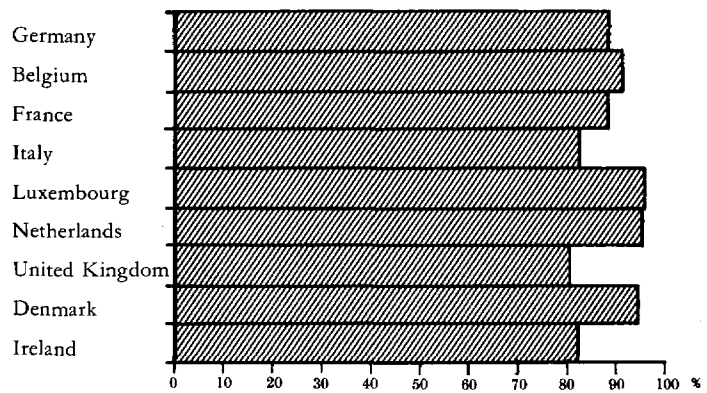
Community crude steel production potential announced<sup>(1)</sup>  
and realized in the six original member states of the Community



Production by country  
1974



Utilization rate of production  
potential by country 1974



<sup>(1)</sup> i.e. production potential announced by the enterprises four years in advance

TABLE 31

Comparison of expected average annual rates of growth of production potential in integrated coastal and other steelworks in the United Kingdom and in the Six 1974-1978

in %

Countries	For reference: actual growth % p.a.		
	1970-1974	1974-1978	1975-1978
<i>Major coastal steelworks in:</i>			
Six Member States of the Community in its original form...	+ 16.9	+ 8.7	+ 4.2
United Kingdom .....	*	+ 12.0	+ 11.8
<i>Other steelworks in:</i>			
Six Member States of the Community in its original form...	+ 1.9	+ 2.9	+ 2.8
United Kingdom .....	*	- 1.4	+ 0.4
<b>Total all steelworks:</b>			
Six Member States of the Community in its original form...	+ 4.4	+ 4.3	+ 3.1
United Kingdom.....	*	+ 5.0	+ 6.4

\* Figures not available.

**Production potential** at coastal works in the United Kingdom is expected to expand almost as fast as that of similar works on the Continent did between 1970 and 1974. On the other hand, over the period 1974

TABLE 32

Movement of actual crude steel production potential according to steelmaking process

million tonnes

Production processes	Production		Production potential						
	1960	1974	1970	1974	1975	1976	1977	1978	
Basic Bessemer .....	Eur 6	35.9	11.2	25.1	12.3	10.5	7.7	6.3	4.7
	Eur 9	37.6	11.2	*	12.3	10.5	7.7	6.3	4.7
OBM and similar processes .....	Eur 6	—	7.6	2.0	8.4	10.0	13.2	16.3	19.0
	Eur 9	—	7.6	*	8.4	10.0	13.2	16.3	19.0
Open-hearth .....	Eur 6	27.5	16.0	26.0	18.5	17.6	16.4	13.1	12.0
	Eur 9	48.7	22.8	*	26.5	23.9	22.6	18.3	16.1
Electric furnace .....	Eur 6	7.6	19.9	16.8	23.3	25.8	28.4	30.2	32.2
	Eur 9	9.3	25.2	*	29.4	33.0	36.5	39.6	41.9
LD, Kaldo etc.....	Eur 6	1.8	77.8	56.9	87.9	98.5	104.0	108.0	110.0
	Eur 9	2.2	88.7	*	102.3	113.9	120.6	127.0	131.1
<b>Total</b>	Eur 6	<b>72.8</b>	<b>132.6</b>	<b>126.8</b>	<b>150.4</b>	<b>162.4</b>	<b>169.7</b>	<b>173.9</b>	<b>177.6</b>
	Eur 9	<b>97.8</b>	<b>155.5</b>	<b>*</b>	<b>178.9</b>	<b>191.3</b>	<b>200.6</b>	<b>207.5</b>	<b>212.8</b>

\* Figures not available.

to 1978 as a whole, potential at non-coastal works in the United Kingdom will actually decline. This sharp divergence between coastal and non-coastal works will become more accentuated if further closures of open-hearth steel capacities are definitely decided on.

The expected development of Community crude steel production potential by production process is given in Table 32 above. The production potential of **LD and similar steelworks** is expected to rise from 102.3 million tonnes in 1974 to 131.1 million tonnes in 1978, when it will represent 62% of total crude steel production potential as against 57% in 1974 (see Table 33).

Over the whole period, LD steel production potential in plants on the Mediterranean coast will increase by over 7 million tonnes, of which more than 5 million tonnes should be commissioned by the end of 1975.

TABLE 33  
Shares of the different steelmaking processes in 1960, 1970, 1974, 1978

Production processes		Actual production		Production potential		
		1960	1974	1970	1974	1978 estimated share
Basic Bessemer .....	Eur 6	48.8	8.5	19.8	8.2	2.7
	Eur 9	38.5	7.3	*	6.9	2.3
OBM and similar processes.....	Eur 6	—	5.7	1.6	5.6	10.6
	Eur 9	—	4.9	*	4.7	8.8
Open-hearth.....	Eur 6	37.6	12.1	20.5	12.3	6.8
	Eur 9	49.7	14.6	*	14.8	7.6
Electric furnace .....	Eur 6	11.0	15.0	13.2	15.5	18.1
	Eur 9	9.5	16.2	*	16.4	19.7
LD, Kaldo, etc. ....	Eur 6	2.6	58.7	44.9	58.4	61.8
	Eur 9	2.3	57.0	*	57.2	61.6
<b>Total</b>	Eur 6	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
	Eur 9	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* Figures not available.

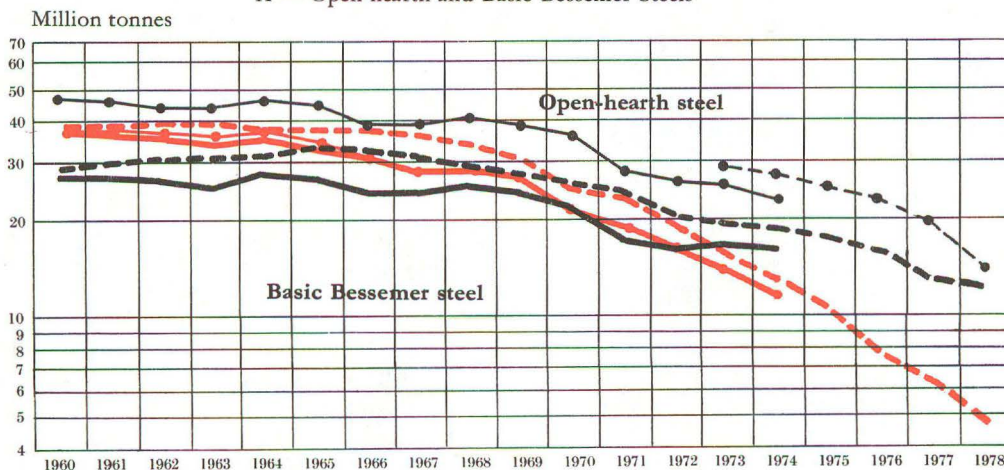
There will also be considerable increases in production potential at plants on the Northern continental coast in Belgium, France and Holland, and on the North-East coast of England. Potential for LD steel in North-Rhine/Westphalia will increase by over 4 million tonnes over the period.

The production potential of steelworks based on **electric furnaces** is expected to grow at a rate of 9.3% p.a. to reach 41.9 million tonnes in 1978 against 29.4 million tonnes in 1974. Electric steel will thus account for nearly 20% of total crude steel production potential in 1978. The largest absolute increases in potential are still expected to occur in Italy (5.7 million tonnes) and in the United Kingdom (3.1 million tonnes). Denmark will also double its steelmaking potential with the addition of 0.5 million tonnes of new electric furnace capacity over the period. As is shown in Table 35 it is notable in this and previous surveys that the enterprises' estimates of expected electric furnace potential for three or four years ahead have usually been an underestimate of the potential eventually realized.

FIGURE 10

Actual Production and Production Potential of Crude Steel by Production Process

A — Open-hearth and Basic Bessemer Steels



B — Electric, LD, Kaldo and other Steels

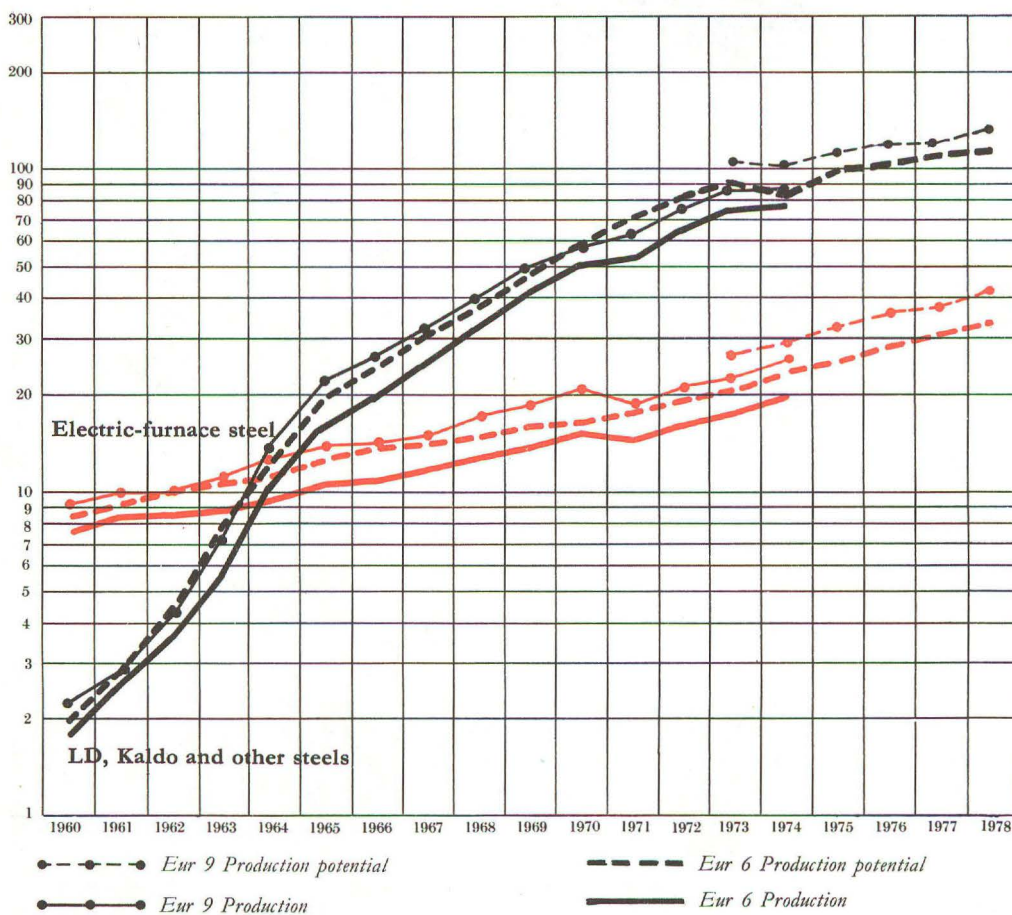




TABLE 34

## Average annual movement of the different steelmaking processes

in %

Production processes		Average annual movement in actual production	Estimated average annual movement in completed or approved	
		1960-1974	1970-1974	1974-1978
Pig-iron (for comparison).....	Eur 6	4.6	+ 4.0	+ 3.6
	Eur 9	3.7	*	+ 4.0
Basic Bessemer .....	Eur 6	- 7.1	- 16.3	- 20.9
	Eur 9	- 7.5	*	- 20.9
OBM, etc. ....	Eur 6	*	+ 43.1	+ 22.5
	Eur 9	*	*	+ 22.5
Open-hearth.....	Eur 6	- 3.9	- 8.2	- 1.0
	Eur 9	- 4.8	*	- 11.7
Electric furnace .....	Eur 6	+ 7.4	+ 8.5	+ 8.4
	Eur 9	+ 4.4	*	+ 9.3
LD, Kaldo, etc. ....	Eur 6	+ 30.9	+ 11.5	+ 5.5
	Eur 9	+ 30.2	*	+ 6.4
<b>Total crude steel</b>	Eur 6	+ 4.7	+ 4.4	<b>4.3</b>
	Eur 9	+ 3.7	*	<b>4.4</b>

\* Figures not available.

TABLE 35

## Comparison of estimates of electric furnace production potential from survey to survey 1971-1975

million tonnes

Survey dates		1973	1974	1975	1976	1977	1978
1971 .....	Eur 6	19.4	20.7				
1972 .....	Eur 6	19.8	21.5	23.0			
1973 .....	Eur 6	20.4	22.3	24.2	25.3		
1974 .....	Eur 6	20.7	23.2	25.5	28.4	29.2	
	Eur 9	26.4	29.5	32.8	36.6	38.4	
1975 .....	Eur 6	—	23.3	25.8	28.4	30.2	32.2
	Eur 9	—	29.4	33.0	36.5	39.6	41.9

Of the total increase expected in this year's survey for the period 1974 to 1978 3 million tonnes will arise from replacement of existing open-hearth furnaces. A further increase of about 4 million tonnes is attributable mainly to increases in the capacity of special steelmakers. The largest increase in capacities however—over 6 million tonnes—is expected to be installed at new or existing mini-mills producing ordinary steels.

The production potential for **open-hearth steel** in the six Member States of the Community in its original form is expected to decline far more rapidly than announced a year ago. Production potential for the Six will fall from 18.5 million tonnes in 1974 to 12 million tonnes in 1978, of which 7 million tonnes would be in service in North-Rhine/Westphalia where pollution control equipment is to be installed on some of the existing furnaces. In contrast to the returns for 1974, several closures of open-hearth steelworks in the United Kingdom have now been deferred beyond 1978.

The net effect of these developments on the Continent and in the United Kingdom is that total Community production potential for open-hearth steel is expected to be 16.1 million tonnes in 1978 as against 26.5 million tonnes in 1974—a total decrease of over 39%.

The decline of **Basic Bessemer steel** production potential is now likely to be more rapid than announced in the report on the 1974 survey. Production of Basic Bessemer steel in Belgium and the Saar is expected to be discontinued completely within the four years covered by the new survey. Production potential in 1978 will be restricted to Eastern France (2.9 million tonnes), and Luxembourg (1.9 million tonnes). Partly in connection with the more rapid conversion of Basic Bessemer steelworks, production potential for OBM and LWS steels is expected to grow from 8.4 million tonnes in 1974 to 18.9 million tonnes in 1978. For the first time in the Community, a major new steelworks is to be installed to use the Q-BOP process, figures for which are included under the heading of OBM. It will be brought into service at a coastal works in Italy, within the old structure of an open-hearth steelworks.

### 3. Continuous casting and semi-finished products

The actual and expected levels of **capital expenditure** on blooming and slabbing mills and continuous casting plant are shown in Table 36. Capital expenditure on **blooming and slabbing mills** declined from 130 million u.a. in 1973 to 95 million u.a. in 1974, although it is expected to increase to 120 million u.a. in 1975.

TABLE 36

Capital expenditure on production capacity for semis and rolled products 1972-1976

million u.a.

Type of mill	Actual expenditure			Estimated expenditure (cat. A + B)		
	1972	1973	1974	1975	1976	
Blooming and slabbing mills.....	Eur 6 Eur 9	121.5 *	104.9 130.0	86.0 95.1	79.3 120.1	53.5 93.2
Continuous casting plants .....	Eur 6 Eur 9	67.0 *	117.4 145.9	184.3 214.2	178.2 224.2	115.1 159.8
Total Section mills .....	Eur 6 Eur 9	192.7 *	207.7 255.3	195.5 273.5	242.9 328.3	182.2 218.1
Total flat-product mills .....	Eur 6 Eur 9	647.8 *	431.9 477.1	420.8 451.4	447.7 503.8	319.1 372.3
Miscellaneous (including coating lines).....	Eur 6 Eur 9	138.0 *	152.5 157.9	123.4 140.0	116.2 163.7	54.5 122.0
<b>Total</b>	Eur 6 Eur 9	<b>1 167.0</b> *	<b>1 014.4</b> <b>1 166.2</b>	<b>1 010.0</b> <b>1 174.2</b>	<b>1 064.3</b> <b>1 340.1</b>	<b>724.4</b> <b>965.4</b>

\* Figures not available.

Expenditure on this category of plant continues to be mainly on modernization and replacement projects. In 1974, spending was distributed across the regions approximately in proportion to existing capacities. In 1975, however, over 30% of expected expenditure is accounted for by projects in the North of England which are designed to improve facilities at two steelworks which are to concentrate on production of billets.

Investment on **continuous casting** plant reached a total of 214.2 million u.a. in 1974 against only 146 million u.a. in 1973. The level of expected spending is moreover substantial in most regions and countries.

As Table 37 below indicates the **production potential** for continuous casting in the Community, which was 22.9 million tonnes in 1974 is expected to reach a total of 52.0 million tonnes in 1978 when it will represent 24.4% of crude steel production potential against 12.8% in 1974. Table 38 below shows actual and expected continuous casting production potential as a proportion of the Community in 1974 and in 1978.

TABLE 37

## Movement of continuous casting potential

million tonnes

	Production 1974	Production potential				
		1974	1975	1976	1977	1978
Community.....	19.0	22.9	32.2	40.9	47.0	52.0

TABLE 38

Ratio of continuous casting production potential  
to crude steel production potential in 1974 and 1978

Country	1974 %	1978 %
Germany (RF).....	19.5	30.1
Belgium.....	2.1	16.5
France.....	12.1	20.6
Italy.....	18.6	37.5
Luxembourg.....	—	—
Netherlands.....	—	—
United Kingdom.....	6.3	18.0
Denmark.....	—	46.9
Ireland.....	—	—
<b>Community</b>	<b>12.8</b>	<b>24.4</b>

With the prospect of significant improvements in yield through the installation of continuous casting facilities, it is surprising that the returns of the enterprises continue to show that expected crude steel production potential will increase at a faster rate than production potential for finished products. As is shown in Table 39 below, the ratios of Community crude steel to finished product production potential (including coils—finished products) for each year from 1964 to 1978 indicates that, while the ratio in 1974 was exceptionally low, there is no sign of the downward movement which could be expected if more finished products could be made with the same steel capacities.

TABLE 39

**Index of crude steel to finished product production  
potential in the Community 1974-1978**

Year	Eur 6	Eur 9
1964.....	117.0	
1965.....	127.3	
1966.....	123.7	
1967.....	122.0	
1968.....	119.2	
1969.....	123.8	
1970.....	124.6	
1971.....	125.0	
1972.....	121.3	
1973.....	122.2	
1974.....	119.4	121.0
1975 (1).....	123.3	124.5
1976.....	124.1	124.1
1977.....	124.5	124.5
1978.....	123.1	124.2

(1) From 1975 onwards, expected figures.

In fact, expected figures of production potential in all countries of the Community, except Ireland, give a higher ratio of crude steel to finished products in 1978 than in 1974.

TABLE 40

	Ratio	
	1974	1978
Germany (FR).....	117.4	121.2
Belgium.....	117.5	124.3
France.....	125.3	126.4
Italy.....	116.4	120.2
Luxembourg.....	129.6	130.3
Netherlands.....	122.9	130.2
United Kingdom.....	130.0	130.2
Denmark.....	108.7	126.6
Ireland.....	154.0	136.7
<b>Community</b>	<b>121.0</b>	<b>124.2</b>

#### 4. Finished products

**Capital expenditure on rolling mills** producing coils and finished products totalled 865 million u.a. in 1974 and is expected to amount to 996 million u.a. in 1975. As in the last three years, expenditure in 1975 on

FIGURE 11

Flat products (red)  
Sections (black)

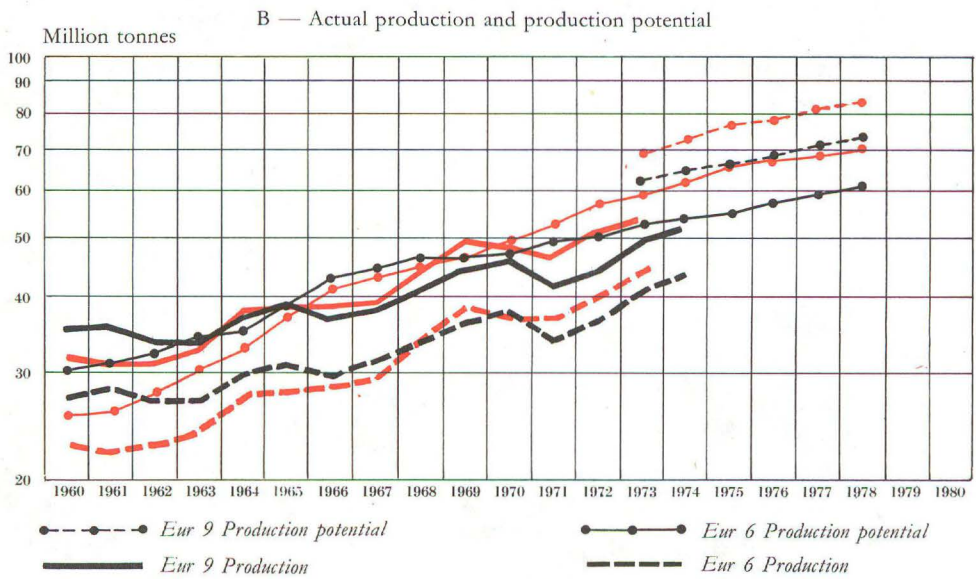
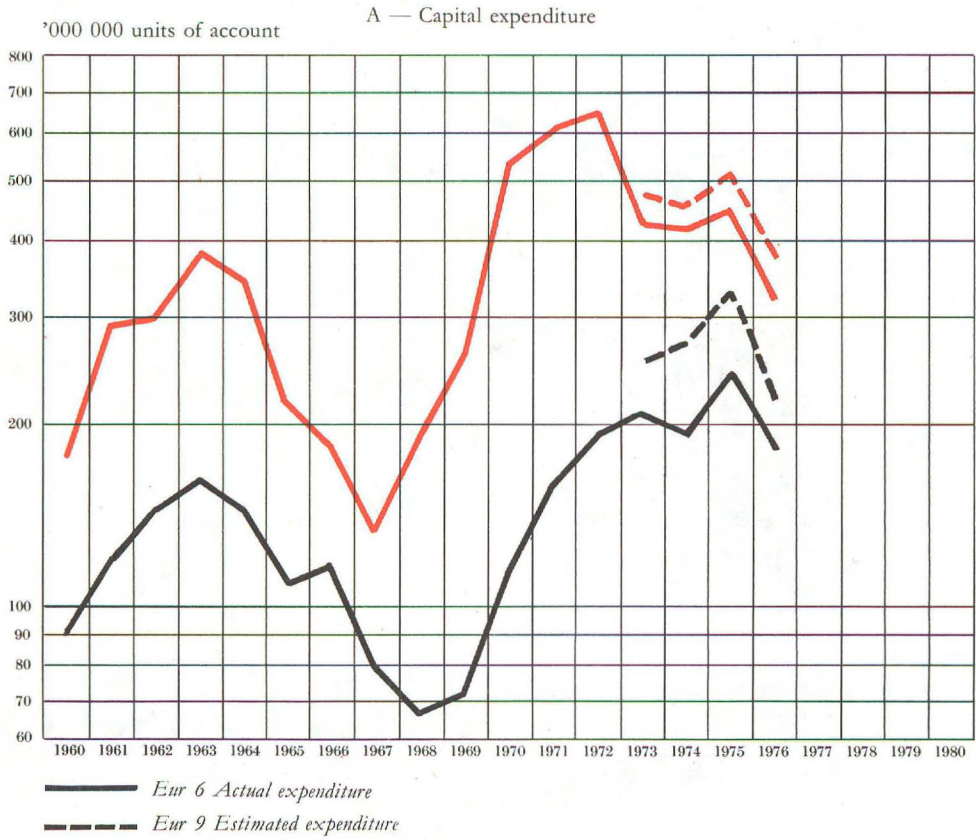




TABLE 42  
Capital expenditure on flat product mills 1972-1976

million u.a.

Sectors	Actual expenditure			Estimated expenditure (cat. A + B)		
	1972	1973	1974	1975	1976	
Hoop and strip mills.....	Eur 6 Eur 9	5.8 *	4.7 14.4	4.9 15.2	4.6 16.3	7.5 11.2
Plate and universal mills.....	Eur 6 Eur 9	120.0 *	49.1 58.2	45.6 53.2	73.0 93.7	133.2 150.3
Hot-sheet mills.....	Eur 6 Eur 9	0.6 *	— —	0.1 0.2	0.6 0.8	0.2 0.3
Cold-sheet mills.....	Eur 6 Eur 9	— *	— 10.4	— 1.0	— 0.5	— —
Hot wide-strip mills .....	Eur 6 Eur 9	314.3 *	207.1 210.7	176.2 176.9	183.4 183.8	82.5 82.5
Cold wide-strip mills .....	Eur 6 Eur 9	207.1 *	171.0 183.4	194.0 204.9	186.1 208.7	95.7 128.0
<b>Total flat-product mills</b>	Eur 6 Eur 9	<b>647.8</b> *	<b>431.9</b> <b>477.1</b>	<b>420.8</b> <b>451.4</b>	<b>447.7</b> <b>503.8</b>	<b>319.1</b> <b>372.3</b>

\* Figures not available.

investment programmes in progress since 1970 on the French and Italian seaboard is fully realized, this situation ought to be reversed. Already for cold-rolled sheets, the growth rate expected in the Community in its original form for the period 1974-1978 of 3.3% p.a. is well below the 8.4% p.a. recorded between 1970 and 1974.

TABLE 43  
Capital expenditure on section mills 1972-1976

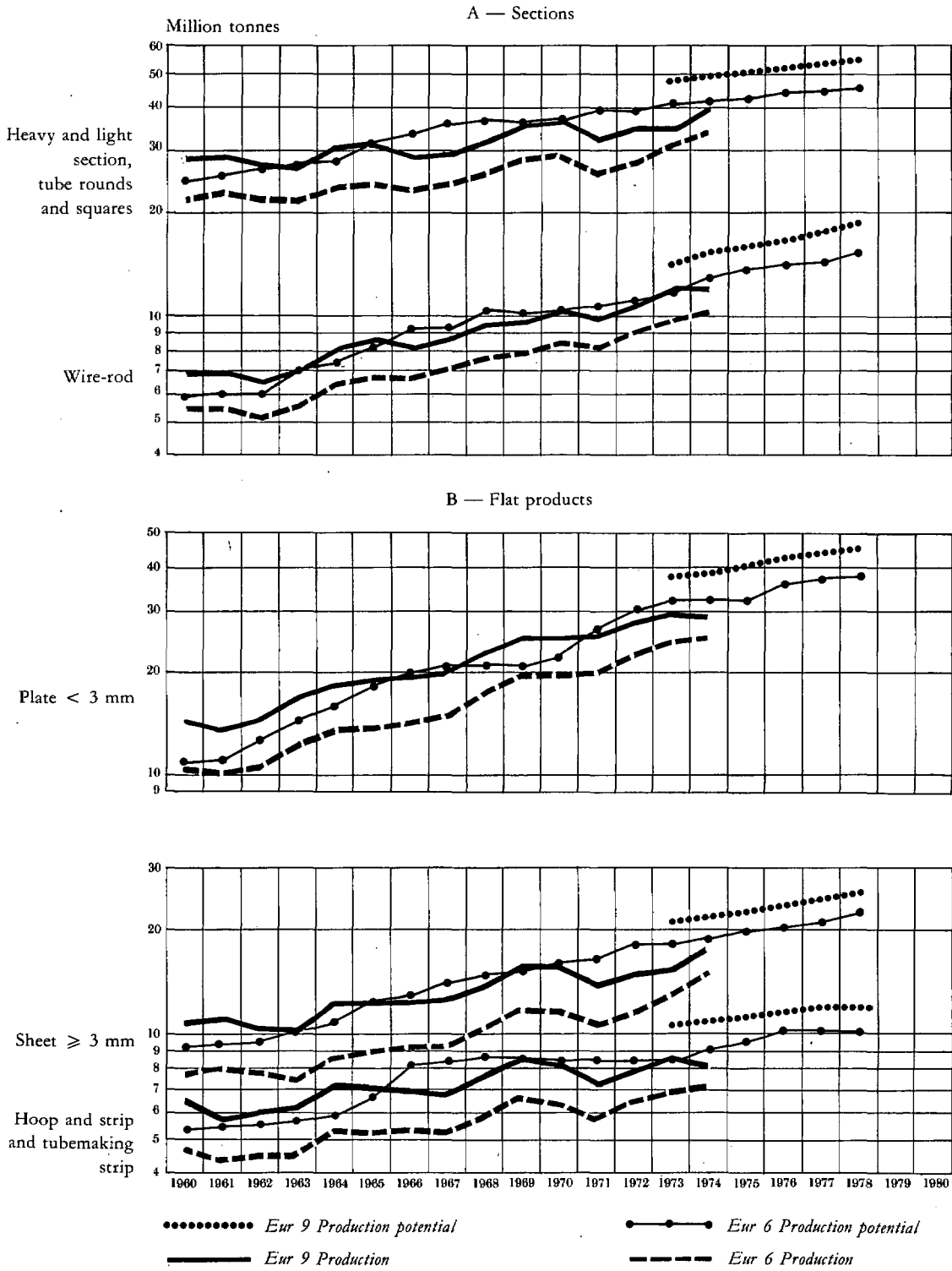
million u.a.

Sectors	Actual expenditure			Estimated expenditure (cat. A + B)		
	1972	1973	1974	1975	1976	
Heavy and medium section mills .....	Eur 6 Eur 9	54.2 *	68.3 80.6	75.0 81.8	129.5 143.3	85.6 92.0
Small bar mills.....	Eur 6 Eur 9	74.0 *	78.9 75.6	63.4 65.8	53.5 63.6	47.8 56.8
Wire mills.....	Eur 6 Eur 9	64.5 *	60.5 99.1	57.1 125.9	59.9 121.4	48.8 69.3
<b>Total section mills</b>	Eur 6 Eur 9	<b>192.7</b> *	<b>207.7</b> <b>255.3</b>	<b>195.5</b> <b>273.5</b>	<b>242.9</b> <b>328.3</b>	<b>182.2</b> <b>218.1</b>

\* Figures not available.

FIGURE 12

Actual production and production potential for the various categories of finished rolled products





## (b) Section mills

Capital expenditure on **section mills** is expected to increase in 1975 to 328 million u.a. against 274 million u.a. in 1974. There is a particularly large increase forecast for expenditure on **heavy and medium section mills** associated in particular with projects in the coastal region of Italy, Northern Germany and North-Rhine/Westphalia. Spending on **light section mills and wire rod mills** is expected to be 185 million u.a.—about the same at current prices as it was in 1974, when, as a result of the start of major projects in the public and private sectors of the UK industry, there was a sharp increase in expenditure on wire rod mills from its 1973 level. In 1975 again, schemes in the United Kingdom will account for over half of the expenditure for this category of plant.

TABLE 44

Actual and expected rates of growth of production potential for finished products

Products	Actual production			Production potential					
	1960 (million tonnes)	Average cumulative annual movement %	1974 (million tonnes)	1970 (million tonnes)	Average cumulative annual movement %	Average 1974 (million tonnes)	Average cumulative annual movement %	1978 (million tonnes)	
Heavy and light sections, incl. tube rounds and squares.....	Eur 6	21.9	3.0	33.7	36.6	3.6	41.4	2.4	45.6
	Eur 9	28.4	2.5	40.0	*	*	49.4	2.5	54.5
Wire rod .....	Eur 6	5.4	5.1	10.1	10.4	5.7	13.0	4.2	15.3
	Eur 9	6.9	4.6	12.1	*	*	15.3	5.5	19.0
<b>Total sections</b>	Eur 6	<b>27.3</b>	<b>3.4</b>	<b>43.7</b>	<b>47.0</b>	<b>3.6</b>	<b>54.3</b>	<b>2.9</b>	<b>10.2</b>
	Eur 9	<b>35.3</b>	<b>2.9</b>	<b>52.0</b>	*	*	<b>64.7</b>	<b>3.3</b>	<b>73.5</b>
Hoop and strip and tube strip.....	Eur 6	4.7	3.6	7.1	8.4	1.9	9.1	2.9	10.2
	Eur 9	6.5	2.5	8.2	*	*	10.9	2.6	12.1
Plate of 3 mm and over (1) .....	Eur 6	7.8	4.8	15.1	16.3	3.8	18.9	4.3	22.4
	Eur 9	10.9	3.6	17.6	*	*	21.8	4.2	25.7
Hot-rolled sheet under 3 mm (1).....	Eur 6	3.0	—	0.4	1.0	—	1.0	8.8	1.4
	Eur 9	*	13.4	0.5	*	*	1.1	8.0	1.5
Cold-reduced sheet under 3 mm .....	Eur 6	7.4	10.2	24.5	23.2	8.4	32.1	3.3	36.7
	Eur 9	*	*	28.7	*	*	37.7	3.8	43.8
<b>Total flats (1)</b>	Eur 6	<b>22.9</b>	<b>5.9</b>	<b>47.3</b>	<b>48.9</b>	<b>5.7</b>	<b>61.1</b>	<b>3.7</b>	<b>70.6</b>
	Eur 9	<b>31.9</b>	<b>4.7</b>	<b>55.1</b>	*	*	<b>71.5</b>	<b>3.8</b>	<b>83.1</b>
<b>Total finished rolled products (1)</b>	Eur 6	<b>50.2</b>	<b>4.7</b>	<b>90.9</b>	<b>95.9</b>	<b>4.7</b>	<b>115.5</b>	<b>3.3</b>	<b>131.2</b>
	Eur 9	<b>67.2</b>	<b>3.8</b>	<b>107.1</b>	*	*	<b>136.2</b>	<b>3.5</b>	<b>156.6</b>

(1) Exclusive of coils rating as end products in respect of which the production potential would increase from 11.7 to 14.7 million tonnes from 1974 to 1978. Figures not available.

As far as **production potential for sections** is concerned, it is becoming increasingly difficult to distinguish not only between potential for heavy and for light sections, but also between that for light sections and for wire rod. Many of the new continuous mills which are being installed in the Community can equally produce bars in coils for reinforcement or rod in coils for wire.

Subject to these reservations, it would appear that **production potential for heavy and light sections** in the Community will increase from 49.5 million tonnes in 1974 to 54.6 million tonnes in 1978 giving an average annual rate of increase of 2.5%. On the other hand, there is expected to be a 5.7% p.a. growth rate of **production potential for wire rod**, taking the total for the Community from 15.2 million tonnes in 1974 to 19.0 million tonnes in 1978. The additions to production potential will be most rapid in the United Kingdom where it will increase by 1.4 million tonnes from 2.3 million tonnes in 1974. Other substantial increases in potential are expected in Belgium, Germany, France and Italy.

Overall, total finished products (including coils—finished products) production potential in the Community is expected to grow by an average 3.7% p.a. from 147.9 million tonnes in 1974 to 171.4 million tonnes in 1978.

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<b>HARD COAL COLLIERIES</b>
-----------------------------

**Investments**

*TABLE 1*  
**Capital expenditure by coalfields**

*million u.s.*

Coalfield	Actual expenditure			Estimated expenditure <sup>(3)</sup>		
				on Jan. 1, 1974 for 1974	on Jan. 1, 1975 for	
	1972	1973	1974		1974	1975
Ruhr <sup>1</sup> .....	53.14	64.33	85.93	107.39	193.27	109.59
Aachen <sup>2</sup> .....	5.63	6.62	5.31	5.92	6.90	7.02
Lower Saxony .....	4.10	4.41	7.77	8.48	16.85	9.73
Saar .....	10.21	5.96	7.59	16.81	16.51	8.37
<i>Germany (F.R.)</i> .....	<i>73.08</i>	<i>81.22</i>	<i>106.60</i>	<i>138.60</i>	<i>233.53</i>	<i>134.71</i>
Campine .....	5.44	3.54	3.22	2.45	11.86	1.44
Southern Belgium .....	3.10	2.42	1.09	1.34	1.66	0.52
<i>Belgium</i> .....	<i>8.54</i>	<i>5.96</i>	<i>4.31</i>	<i>3.79</i>	<i>13.52</i>	<i>1.96</i>
<i>Netherlands (Limburg)</i> .....	<i>0.25</i>	<i>0.23</i>	<i>0.21</i>	<i>0.19</i>	<i>0.05</i>	—
Nord/Pas-de-Calais .....	7.67	5.82	4.39	4.00	5.37	6.89
Lorraine .....	6.87	9.18	9.30	9.56	13.78	21.77
Centre-Midi .....	1.46	1.19	2.66	1.41	1.83	4.52
<i>France</i> .....	<i>16.00</i>	<i>16.19</i>	<i>16.35</i>	<i>14.97</i>	<i>20.98</i>	<i>33.18</i>
<i>Italy</i> .....	—	—	—	—	—	—
<b>Total EUR 6</b>	<b>97.87</b>	<b>103.60</b>	<b>127.47</b>	<b>157.55</b>	<b>268.13</b>	<b>169.85</b>
Scotland .....	*	10.00	12.13	*	*	*
North East .....	*	20.04	26.44	*	*	*
Yorkshire .....	*	44.74	48.31	*	*	*
Midlands .....	*	38.72	48.16	*	*	*
Western .....	*	31.12	36.51	*	*	*
South Wales .....	*	13.98	17.34	*	*	*
Kent .....	*	1.19	1.12	*	*	*
Opencast .....	*	3.95	6.59	*	*	*
<i>United Kingdom</i> .....	<i>169.90</i>	<i>163.74</i>	<i>196.90</i>	<i>182.94</i>	<i>246.20</i>	<i>235.37</i>
<b>Total EUR 9</b>	<b>267.77</b>	<b>267.34</b>	<b>324.07</b>	<b>340.49</b>	<b>514.33</b>	<b>405.22</b>

<sup>1</sup> Without the expenses of the Ruhr part of EBV.

<sup>2</sup> Includes the expenses of the Ruhr part of EBV.

<sup>3</sup> The estimates relate only to expenditure on projects already in progress (cat. A) and approved (cat. B).

\* Figures not available.

<b>HARD COAL</b>
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<b>Extraction</b>
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TABLE 2  
Extraction and extraction potential by coalfields

million tonnes

Actual extraction 1974	Coalfield	Extraction potential			Expected extraction potential			
		1972	1973	1974	1975	1976	1977	1978
78.2	Ruhr .....	94.4	90.1	81.4	79.0	79.6	78.5	78.0
5.8	Aachen .....	7.3	7.2	7.0	6.0	5.9	5.9	5.9
1.9	Lower Saxony .....	2.7	2.7	2.7	1.9	1.9	1.9	1.7
8.9	Saar .....	12.6	12.4	9.8	10.1	10.1	10.4	10.4
94.8	<i>Germany (FR)</i> .....	117.0	112.4	100.9	97.0	97.5	96.7	96.0
6.1	Campine .....	9.1	9.1	9.1	8.0	8.0	8.0	8.0
2.0	Southern Belgium .....	4.1	3.1	2.7	2.3	2.2	1.9	1.8
8.1	<i>Belgium</i> .....	13.2	12.4	11.8	10.3	10.2	9.9	9.8
0.8	<i>Netherlands (Limburg)</i> ...	3.5	2.2	1.0	—	—	—	—
9.0	Nord/Pas-de-Calais .....	13.5	11.5	9.2	8.3	7.5	6.8	6.1
9.1	Lorraine .....	12.0	11.1	10.0	10.0	10.0	10.0	10.0
4.8	Centre-Midi .....	6.7	5.3	4.4	4.7	4.9	4.8	4.4
22.9	<i>France</i> .....	32.3	27.9	23.6	23.0	22.4	21.6	20.5
—	<i>Italy</i> .....	0.1	—	—	—	—	—	—
126.6	<b>Total EUR 6</b>	166.9	154.9	137.3	130.3	130.1	128.2	126.3
8.7	Scotland .....	*	*	*	11.0	10.7	10.4	10.3
12.9	Northern .....	*	*	*	14.7	14.4	13.8	13.3
28.0	Yorkshire .....	*	*	*	35.8	36.3	36.9	37.0
30.9	Midlands .....	*	*	*	37.6	37.9	38.1	38.7
10.9	Western .....	*	*	*	12.3	12.2	12.2	12.2
7.4	South Wales .....	*	*	*	9.6	9.5	9.5	9.4
0.6	Kent .....	*	*	*	0.9	0.9	1.0	1.0
9.2 <sup>1</sup>	Opencast .....	*	*	*	11.7	12.7	13.7	15.2
108.6	<i>United Kingdom</i> .....	*	*	130.0	133.6	134.6	135.6	137.1
235.2	<b>Total EUR 9</b>	*	*	267.3	263.9	264.7	263.8	263.4

<sup>1</sup> Approximate.  
\* Figures not available.

<b>MINE-OWNED AND INDEPENDENT COKING PLANTS</b>
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**Investment**

**TABLE 3**  
**Capital expenditure by coalfields**

*million u.s.*

Area	Actual expenditure			Estimated expenditure <sup>3</sup>		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
<b>Mine-owned coking plants</b>						
Ruhr ..... <sup>1</sup>	44.97	27.50	17.30	27.00	42.63	21.82
Aachen ..... <sup>2</sup>	1.49	2.16	6.33	4.96	4.04	2.06
Saar .....	0.10	1.09	2.60	2.72	0.73	—
<i>Germany (FR)</i> .....	<i>46.56</i>	<i>28.95</i>	<i>26.23</i>	<i>34.68</i>	<i>47.40</i>	<i>23.88</i>
Nord/Pas-de-Calais .....	1.20	1.00	0.77	0.83	1.43	—
Lorraine .....	0.82	1.85	2.94	4.39	9.65	15.14
Centre-Midi .....	0.21	0.30	0.35	0.38	0.22	—
<i>France</i> .....	<i>2.23</i>	<i>3.15</i>	<i>4.06</i>	<i>5.60</i>	<i>11.30</i>	<i>15.14</i>
<b>Total EUR 6</b>	<b>48.79</b>	<b>32.10</b>	<b>30.29</b>	<b>40.28</b>	<b>58.70</b>	<b>39.02</b>
<i>United Kingdom</i> .....	<i>8.42</i>	<i>3.09</i>	<i>2.80</i>	<i>1.66</i>	<i>1.40</i>	—
<b>Total EUR 9</b>	<b>57.21</b>	<b>35.19</b>	<b>33.09</b>	<b>41.94</b>	<b>60.10</b>	<b>39.02</b>
<b>Independent coking plants</b>						
<i>Belgium and the Netherlands</i> .....	<i>2.31</i>	<i>1.42</i>	<i>0.87</i>	<i>0.61</i>	<i>0.19</i>	<i>0.72</i>
<i>Italy</i> .....	<i>1.57</i>	<i>0.96</i>	<i>1.26</i>	<i>7.05</i>	<i>11.02</i>	<i>20.29</i>
<b>Total EUR 6</b>	<b>3.88</b>	<b>2.38</b>	<b>2.13</b>	<b>7.66</b>	<b>11.21</b>	<b>21.01</b>
<i>United Kingdom</i> .....	<i>3.00</i>	<i>1.23</i>	<i>2.14</i>	<i>3.00</i>	<i>0.41</i>	—
<b>Total EUR 9</b>	<b>6.88</b>	<b>3.61</b>	<b>4.27</b>	<b>10.66</b>	<b>11.61</b>	<b>21.01</b>
<b>Grand total EUR 6</b>	<b>52.67</b>	<b>34.48</b>	<b>32.42</b>	<b>47.94</b>	<b>69.91</b>	<b>60.03</b>
<b>Grand total EUR 9</b>	<b>64.09</b>	<b>38.80</b>	<b>37.36</b>	<b>52.60</b>	<b>71.71</b>	<b>60.03</b>

<sup>1</sup> Without the expenses of the Ruhr part of EBV.

<sup>2</sup> Include the expenses of the Ruhr part of EBV.

<sup>3</sup> The estimates relate only to expenditure on projects already in progress (cat. A) and approved (cat. B).

\* Figures not available.

<b>STEELWORKS-OWNED COKING PLANTS</b>
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## Investment

TABLE 4  
Capital expenditure by regions

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for		
	1972	1973	1974	1974	1975	1976
Northern Germany .....	2.27	1.70	4.84	4.78	3.81	1.89
North Rhine/Westphalia .....	3.58	5.51	9.80	8.70	2.44	1.05
Southern Germany .....	—	—	—	—	—	—
Saar .....	0.23	0.26	0.86	0.76	0.24	—
<i>Germany (FR)</i> .....	<i>6.08</i>	<i>7.47</i>	<i>15.50</i>	<i>14.24</i>	<i>6.49</i>	<i>2.94</i>
<i>Belgium</i> .....	<i>18.85</i>	<i>5.22</i>	<i>9.94</i>	<i>14.54</i>	<i>13.15</i>	<i>6.56</i>
Eastern France .....	1.08	0.33	0.22	0.42	5.78	11.59
Northern France .....	15.84	—	—	4.86	—	—
France - other areas .....	15.45	32.56	26.45	23.86	13.05	4.92
<i>France</i> .....	<i>32.37</i>	<i>32.89</i>	<i>26.67</i>	<i>29.14</i>	<i>18.83</i>	<i>16.51</i>
Italy - coastal areas .....	44.07	58.24	36.59	37.96	28.71	20.52
Italy - other areas .....	—	—	—	—	—	—
<i>Italy</i> .....	<i>44.07</i>	<i>58.24</i>	<i>36.59</i>	<i>37.96</i>	<i>28.71</i>	<i>20.52</i>
<i>Luxembourg</i> .....	—	—	—	—	—	—
<i>Netherlands</i> .....	<i>31.44</i>	<i>5.39</i>	<i>2.14</i>	<i>3.37</i>	<i>3.49</i>	<i>4.21</i>
<b>Total EUR 6</b>	<b>132.51</b>	<b>109.21</b>	<b>90.84</b>	<b>99.25</b>	<b>70.67</b>	<b>50.74</b>
Scotland .....	*	1.19	0.06	0.42	0.06	0.04
Wales .....	*	11.20	5.93	9.20	1.52	0.34
Northern England .....	*	28.00	72.62	87.58	108.69	105.33
England - other areas .....	*	0.44	0.69	1.19	1.06	1.58
<i>United Kingdom</i> .....	<i>*</i>	<i>40.83</i>	<i>79.30</i>	<i>98.39</i>	<i>111.33</i>	<i>107.29</i>
<i>Denmark</i> .....	<i>*</i>	—	—	—	—	—
<i>Ireland</i> .....	<i>*</i>	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>150.04</b>	<b>170.14</b>	<b>197.64</b>	<b>182.00</b>	<b>158.03</b>

\* Figures not available.



<b>COKE</b>
<b>Production</b>

TABLE 5  
Production and production potential by regions

Actual production	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
	<b>Mine-owned coking plants</b>							
23.4	Ruhr .....	26.6	24.9	24.1	23.4	23.9	23.5	23.6
2.1	Aachen .....	2.1	2.1	2.1	2.0	2.0	2.1	2.1
1.5	Saar .....	1.6	1.5	1.5	1.5	1.5	1.5	1.5
27.0	<b>Germany (FR) .....</b>	<b>30.3</b>	<b>28.5</b>	<b>27.7</b>	<b>26.9</b>	<b>27.4</b>	<b>27.1</b>	<b>27.2</b>
—	<i>Belgium and Netherlands .</i>	—	—	—	—	—	—	—
4.2	Nord/Pas-de-Calais .....	5.1	5.0	4.8	4.8	4.8	4.8	4.8
2.2	Lorraine .....	2.8	2.7	2.4	2.4	2.4	2.4	2.6
0.5	Centre-Midi .....	0.9	0.8	0.6	0.4	0.4	0.4	0.4
6.9	<b>France .....</b>	<b>8.8</b>	<b>8.5</b>	<b>7.8</b>	<b>7.6</b>	<b>7.6</b>	<b>7.6</b>	<b>7.8</b>
33.9	<b>Total EUR 6</b>	<b>39.1</b>	<b>37.0</b>	<b>35.5</b>	<b>34.5</b>	<b>35.0</b>	<b>34.7</b>	<b>35.0</b>
4.5	<i>United Kingdom .....</i>	*	*	4.5	4.7	4.6	4.6	4.5
38.4	<b>Total EUR 9</b>	*	*	<b>40.0</b>	<b>39.2</b>	<b>39.6</b>	<b>39.3</b>	<b>39.5</b>
	<b>Independent coking plants</b>							
1.2	<i>Belgium and Netherlands .</i>	1.2	1.2	1.0	1.0	1.0	1.0	1.0
2.3	<i>Italy .....</i>	2.5	2.5	2.5	2.5	2.5	2.5	2.6
3.5	<b>Total EUR 6</b>	<b>3.7</b>	<b>3.7</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.6</b>
0.9	<i>United Kingdom .....</i>	*	1.0	1.0	1.0	1.0	1.0	1.0
4.4	<b>Total EUR 9</b>	*	4.7	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>4.6</b>
	<b>Steelworks-owned coking plants</b>							
7.9	<i>Germany (FR) .....</i>	8.9	8.4	8.4	8.9	9.3	9.9	9.9
9.6	<i>Belgium and Netherlands .</i>	8.8	9.9	10.2	10.3	10.8	11.9	10.6
5.4	<i>France .....</i>	4.9	4.8	5.9	6.9	7.0	6.6	6.6
6.3	<i>Italy .....</i>	6.2	6.9	6.9	8.4	9.0	9.1	9.1
29.2	<b>Total EUR 6</b>	<b>28.8</b>	<b>30.0</b>	<b>31.4</b>	<b>34.5</b>	<b>36.1</b>	<b>36.5</b>	<b>36.2</b>
0.9	<i>Scotland .....</i>	*	*	1.1 <sup>1</sup>	1.1	1.5	1.5	1.5
2.7	<i>Wales .....</i>	*	*	3.3 <sup>1</sup>	3.5	4.0	4.0	4.1
4.0	<i>Northern England .....</i>	*	*	4.9 <sup>1</sup>	4.7	4.6	4.6	6.6
0.8	<i>England - Other regions ...</i>	*	*	1.1 <sup>1</sup>	1.0	1.0	1.0	1.0
8.4	<b>Total United Kingdom .....</b>	*	*	<b>10.4<sup>1</sup></b>	<b>10.3</b>	<b>11.1</b>	<b>12.2</b>	<b>13.2</b>
37.6	<b>Total EUR 9</b>	*	*	<b>41.8<sup>1</sup></b>	<b>44.8</b>	<b>47.2</b>	<b>48.7</b>	<b>49.4</b>
66.6	<b>Grand total EUR 6</b>	<b>71.6</b>	<b>70.7</b>	<b>70.4</b>	<b>72.5</b>	<b>74.6</b>	<b>74.7</b>	<b>74.8</b>
80.4	<b>Grand total EUR 9</b>	*	*	<b>86.3</b>	<b>88.5</b>	<b>91.3</b>	<b>92.5</b>	<b>93.5</b>

\* Figures not available.  
<sup>1</sup> Revised figures.

**HARD COAL BRIQUETTES****Production**

TABLE 6a

**Production and production potential by regions**

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
1.00	Ruhr .....	2.5	1.2	1.0	0.8	0.8	0.8	0.8
0.95	Aachen .....	1.2	1.1	1.2	1.0	1.0	1.0	1.0
0.26	Lower Saxony .....	0.7	0.7	0.7	0.7	0.7	0.7	0.7
2.21	Germany (FR) .....	4.4	3.0	2.9	2.5	2.5	2.5	2.5
0.35	Belgium .....	1.2	1.0	0.8	0.6	0.6	0.4	0.4
—	Netherlands (Limburg) ...	0.8	0.6	—	—	—	—	—
1.99	Nord/Pas-de-Calais .....	3.3	2.9	2.7	2.7	2.7	2.7	2.7
0.71	Centre-Midi .....	1.1	1.1	0.8	0.8	0.8	0.8	0.8
0.71	Independent plants .....	1.0	0.6	1.0	1.0	1.0	1.0	1.0
3.41	France .....	5.4	4.6	4.5	4.5	4.5	4.5	4.5
5.97	<b>Total EUR 6</b>	11.8	9.2	8.2	7.6	7.6	7.4	7.4
1.15	United Kingdom .....	*	1.5	1.4	1.3	1.3	1.3	1.3
7.12	<b>Total EUR 9</b>	*	10.7	9.6	8.9	8.9	8.7	8.7

\* Figures not available.

**BROWN COAL BRIQUETTES****Production**

TABLE 6b

**Production and production potential for BKB (brown coal briquettes)**

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
6.3	<b>Total EUR 6</b>	7.2	6.7	6.2	5.8	5.3	5.0	4.8

<b>IRON AND STEEL INDUSTRY</b>
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**Total Investment**

**TABLE 7**  
**Capital expenditure by regions**

*million u.s.*

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for 1974	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	161.90	185.79	202.64	160.37	128.73	137.02
North Rhine/Westphalia .....	316.51	249.38	318.28	370.47	447.95	389.04
Southern Germany .....	37.69	17.91	28.37	34.43	25.58	22.88
Saar .....	77.02	48.84	55.10	66.41	80.22	32.91
<b>Germany (FR) .....</b>	<b>593.42</b>	<b>501.92</b>	<b>604.39</b>	<b>631.68</b>	<b>682.48</b>	<b>581.85</b>
Belgium .....	175.89	169.91	358.31	299.20	320.20	183.65
Eastern France .....	112.27	103.27	114.96	117.36	168.13	153.36
Northern France .....	366.09	259.48	148.66	208.07	167.96	125.58
France - other areas .....	421.44	577.68	358.50	476.15	277.85	109.87
<b>France .....</b>	<b>899.80</b>	<b>940.43</b>	<b>622.12</b>	<b>801.58</b>	<b>613.94</b>	<b>388.81</b>
Italy - coastal areas .....	732.10	711.41	386.02	488.17	361.14	362.65
Italy - other areas .....	84.50	150.03	200.13	186.27	208.78	127.05
<b>Italy .....</b>	<b>816.60</b>	<b>861.44</b>	<b>586.15</b>	<b>674.44</b>	<b>569.92</b>	<b>489.70</b>
Luxembourg .....	41.66	61.40	46.72	48.39	52.35	19.67
Netherlands .....	111.84	49.17	64.08	67.70	79.64	69.04
<b>Total EUR 6</b>	<b>2 639.21</b>	<b>2 584.27</b>	<b>2 281.77</b>	<b>2 522.99</b>	<b>2 318.53</b>	<b>1 732.72</b>
Scotland .....	*	61.91	60.69	61.87	75.19	108.86
Wales .....	*	145.41	115.45	133.02	171.95	129.34
Northern England .....	*	200.47	284.90	338.46	416.37	416.28
England - other areas .....	*	24.82	40.01	49.30	42.47	18.33
<b>United Kingdom .....</b>	<b>*</b>	<b>432.61</b>	<b>501.05</b>	<b>582.65</b>	<b>705.98</b>	<b>672.81</b>
Denmark .....	*	11.54	15.90	34.40	25.76	7.92
Ireland .....	*	—	—	0.36	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>3 028.42</b>	<b>2 798.72</b>	<b>3 140.40</b>	<b>3 050.27</b>	<b>2 413.45</b>

\* Figures not available.

<b>BLAST FURNACES</b>
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## Investment

TABLE 8  
Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	10.08	14.14	8.10	8.13	9.27	32.93
North Rhine/Westphalia .....	89.75	81.17	51.16	52.11	82.02	100.74
Southern Germany .....	0.83	0.55	1.98	1.27	0.50	1.37
Saar .....	3.50	5.79	19.61	20.70	5.45	1.15
<i>Germany (FR)</i> .....	<i>104.16</i>	<i>101.65</i>	<i>80.85</i>	<i>82.21</i>	<i>97.24</i>	<i>136.19</i>
<i>Belgium</i> .....	<i>29.67</i>	<i>17.22</i>	<i>38.09</i>	<i>44.25</i>	<i>29.18</i>	<i>6.50</i>
Eastern France .....	7.58	11.05	28.51	29.95	43.86	37.50
Northern France .....	67.57	40.82	9.01	15.10	5.89	0.49
France - other areas .....	26.63	42.32	36.62	38.47	16.80	6.15
<i>France</i> .....	<i>101.78</i>	<i>94.19</i>	<i>74.14</i>	<i>83.52</i>	<i>66.55</i>	<i>44.14</i>
Italy - coastal areas .....	44.32	90.30	45.53	35.22	33.15	64.55
Italy - other areas .....	0.35	0.29	1.38	2.98	1.23	0.58
<i>Italy</i> .....	<i>44.67</i>	<i>90.59</i>	<i>46.91</i>	<i>38.20</i>	<i>34.38</i>	<i>65.13</i>
<i>Luxembourg</i> .....	<i>0.43</i>	<i>1.37</i>	<i>1.29</i>	<i>2.45</i>	<i>2.20</i>	—
<i>Netherlands</i> .....	<i>25.26</i>	<i>1.84</i>	<i>4.84</i>	<i>5.70</i>	<i>10.11</i>	<i>8.79</i>
<b>Total EUR 6</b>	<b>305.97</b>	<b>306.86</b>	<b>246.12</b>	<b>256.33</b>	<b>239.66</b>	<b>260.75</b>
Scotland .....	*	3.53	1.30	6.45	2.01	2.05
Wales .....	*	27.32	15.24	11.86	3.18	2.05
Northern England .....	*	4.58	9.62	19.16	31.41	59.20
England - other areas .....	*	4.77	6.44	4.14	1.43	2.65
<i>United Kingdom</i> .....	<i>*</i>	<i>40.20</i>	<i>32.60</i>	<i>41.61</i>	<i>38.03</i>	<i>65.95</i>
<i>Denmark</i> .....	<i>*</i>	—	—	—	—	—
<i>Ireland</i> .....	<i>*</i>	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>347.06</b>	<b>278.72</b>	<b>297.94</b>	<b>277.69</b>	<b>326.70</b>

\* Figures not available.

**STEELWORKS-OWNED  
COKING PLANTS, BURDEN  
PREPARATION,  
DIRECT REDUCTION  
AND BLAST FURNACES  
TOTAL**

Investment

TABLE 9  
Capital expenditure by regions

*million u.s.*

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	32.42	34.67	32.97	15.22	15.81	38.14
North Rhine/Westphalia .....	103.71	96.21	79.27	83.83	99.62	117.21
Southern Germany .....	0.95	0.88	2.28	2.03	1.14	1.80
Saar .....	3.78	6.21	20.68	21.55	7.43	1.77
<b>Germany (FR) .....</b>	<b>140.86</b>	<b>137.97</b>	<b>135.20</b>	<b>122.63</b>	<b>124.00</b>	<b>158.92</b>
<b>Belgium .....</b>	<b>62.24</b>	<b>30.76</b>	<b>78.84</b>	<b>67.43</b>	<b>79.95</b>	<b>48.05</b>
Eastern France .....	26.21	26.26	33.08	36.77	66.18	62.92
Northern France .....	103.45	51.13	12.21	22.79	9.63	3.61
France - other areas .....	67.14	123.96	91.85	91.30	46.81	17.20
<b>France .....</b>	<b>196.80</b>	<b>201.35</b>	<b>137.14</b>	<b>150.86</b>	<b>122.62</b>	<b>83.73</b>
Italy - coastal areas .....	149.42	229.17	113.03	125.57	90.22	118.02
Italy - other areas .....	0.40	0.29	1.38	3.02	1.23	0.58
<b>Italy .....</b>	<b>149.82</b>	<b>229.46</b>	<b>114.41</b>	<b>128.59</b>	<b>91.45</b>	<b>118.60</b>
<b>Luxembourg .....</b>	<b>12.60</b>	<b>23.26</b>	<b>9.36</b>	<b>11.34</b>	<b>4.08</b>	<b>0.62</b>
<b>Netherlands .....</b>	<b>59.75</b>	<b>9.41</b>	<b>8.29</b>	<b>12.71</b>	<b>17.12</b>	<b>17.02</b>
<b>Total EUR 6</b>	<b>622.07</b>	<b>632.21</b>	<b>483.24</b>	<b>493.56</b>	<b>439.22</b>	<b>426.94</b>
Scotland .....	*	5.51	18.40	9.22	33.63	73.43
Wales .....	*	75.69	54.50	68.96	45.01	11.08
Northern England .....	*	75.78	150.33	166.24	173.33	177.78
England - other areas .....	*	5.67	7.65	6.01	3.45	6.72
<b>United Kingdom .....</b>	<b>*</b>	<b>162.65</b>	<b>230.88</b>	<b>250.43</b>	<b>255.42</b>	<b>269.01</b>
Denmark .....	*	—	—	—	—	—
Ireland .....	*	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>794.86</b>	<b>714.12</b>	<b>743.99</b>	<b>694.64</b>	<b>695.95</b>

\* Figures not available.

<b>OPEN HEARTH STEELWORKS</b>
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## Investment

TABLE 10  
Capital expenditure by regions

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for 1974	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	0.49	0.15	0.61	0.57	0.12	—
North Rhine/Westphalia .....	0.67	1.63	3.57	6.43	8.61	8.46
Southern Germany .....	0.36	0.24	0.28	0.76	0.82	0.04
Saar .....	0.07	—	0.01	—	0.02	—
<i>Germany (FR)</i> .....	<i>1.59</i>	<i>2.02</i>	<i>4.47</i>	<i>7.76</i>	<i>9.57</i>	<i>8.50</i>
<i>Belgium</i> .....	<i>0.13</i>	<i>0.12</i>	<i>0.07</i>	—	—	—
Eastern France .....	0.26	0.61	0.39	1.09	0.43	0.32
Northern France .....	0.57	0.46	0.21	0.35	0.27	—
France - other areas .....	0.38	0.10	0.44	0.69	0.59	—
<i>France</i> .....	<i>1.21</i>	<i>1.17</i>	<i>1.04</i>	<i>2.13</i>	<i>1.29</i>	<i>0.32</i>
Italy - coastal areas .....	—	—	—	2.83	—	—
Italy - other areas .....	0.32	0.13	0.82	0.60	1.53	0.57
<i>Italy</i> .....	<i>0.32</i>	<i>0.13</i>	<i>0.82</i>	<i>3.43</i>	<i>1.53</i>	<i>0.57</i>
<i>Luxembourg</i> .....	—	—	—	—	—	—
<i>Netherlands</i> .....	<i>0.01</i>	<i>0.03</i>	—	—	—	—
<b>Total EUR 6</b>	<b>3.26</b>	<b>3.47</b>	<b>6.40</b>	<b>13.32</b>	<b>12.39</b>	<b>9.39</b>
Scotland .....	*	0.28	0.09	0.51	0.17	0.02
Wales .....	*	0.72	0.74	0.60	0.93	—
Northern England .....	*	0.29	0.02	0.02	0.03	—
England - other areas .....	*	0.24	0.04	0.04	0.02	—
<i>United Kingdom</i> .....	<i>*</i>	<i>1.53</i>	<i>0.89</i>	<i>1.17</i>	<i>1.15</i>	<i>0.04</i>
<i>Denmark</i> .....	*	—	—	—	—	—
<i>Ireland</i> .....	—	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>5.00</b>	<b>7.29</b>	<b>14.49</b>	<b>13.54</b>	<b>9.43</b>

\* Figures not available.

<b>ELECTRIC FURNACE STEELWORKS</b>
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**Investment**

**TABLE 11**  
**Capital expenditure by regions**

*million u.s.*

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	14.08	17.18	22.54	10.89	5.68	6.70
North Rhine/Westphalia .....	14.32	8.41	4.42	8.61	16.53	11.10
Southern Germany .....	0.58	0.51	0.72	3.71	1.25	1.24
Saar .....	—	—	0.30	5.03	0.49	—
<b>Germany (FR) .....</b>	<b>28.98</b>	<b>26.10</b>	<b>27.98</b>	<b>28.24</b>	<b>23.95</b>	<b>19.04</b>
Belgium .....	6.10	8.10	4.86	4.88	8.78	4.30
Eastern France .....	4.15	5.61	3.65	3.43	3.36	0.62
Northern France .....	5.42	3.31	8.43	11.37	10.62	0.84
France - other areas .....	9.95	26.63	24.55	29.29	17.96	7.57
<b>France .....</b>	<b>19.52</b>	<b>35.55</b>	<b>36.63</b>	<b>44.09</b>	<b>31.94</b>	<b>9.03</b>
Italy - coastal areas .....	5.55	4.56	6.27	4.83	17.49	19.12
Italy - other areas .....	21.48	49.19	60.87	51.61	63.72	37.29
<b>Italy .....</b>	<b>27.03</b>	<b>53.75</b>	<b>67.14</b>	<b>56.44</b>	<b>81.21</b>	<b>56.41</b>
Luxembourg .....	0.04	—	—	—	0.01	—
Netherlands .....	0.08	0.11	0.45	0.02	0.68	0.10
<b>Total EUR 6</b>	<b>81.75</b>	<b>123.61</b>	<b>137.06</b>	<b>133.67</b>	<b>146.57</b>	<b>88.88</b>
Scotland .....	*	10.65	14.63	14.97	6.58	0.27
Wales .....	*	1.25	1.49	1.00	21.46	25.74
Northern England .....	*	20.71	20.36	24.36	26.17	22.07
England - other areas .....	*	7.99	12.66	14.44	10.21	2.43
<b>United Kingdom .....</b>	<b>*</b>	<b>40.60</b>	<b>49.14</b>	<b>54.77</b>	<b>64.42</b>	<b>50.51</b>
Denmark .....	*	5.28	0.17	16.49	11.43	4.62
Ireland .....	*	—	—	0.11	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>169.49</b>	<b>186.37</b>	<b>205.04</b>	<b>222.42</b>	<b>144.01</b>

\* Figures not available.

**LD, KALDO AND  
OTHER STEELWORKS**

## Investment

TABLE 12

## Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
	1972	1973	1974	on Jan. 1, 1974 for	on Jan. 1, 1975 for	
				1974	1975	1976
Northern Germany .....	7.99	6.98	7.34	7.75	7.55	21.17
North Rhine/Westphalia .....	12.76	23.05	40.11	48.84	47.03	36.93
Southern Germany .....	—	—	—	—	—	—
Saar .....	10.08	2.33	8.25	4.62	3.00	0.37
<b>Germany (FR) .....</b>	<b>30.83</b>	<b>32.36</b>	<b>55.70</b>	<b>61.21</b>	<b>57.58</b>	<b>58.47</b>
<b>Belgium .....</b>	<b>16.15</b>	<b>14.15</b>	<b>32.76</b>	<b>33.15</b>	<b>18.59</b>	<b>17.07</b>
Eastern France .....	16.15	3.85	2.37	4.12	3.65	9.83
Northern France .....	33.55	18.59	5.58	7.33	5.70	0.50
France: other areas .....	28.02	43.07	44.47	33.31	25.28	15.26
<b>France .....</b>	<b>77.72</b>	<b>65.31</b>	<b>52.42</b>	<b>44.76</b>	<b>34.63</b>	<b>25.59</b>
Italy: coastal areas .....	102.16	72.25	35.32	47.34	18.15	10.79
Italy: other areas .....	0.17	0.13	0.25	2.43	0.15	—
<b>Italy .....</b>	<b>102.33</b>	<b>72.38</b>	<b>35.57</b>	<b>49.77</b>	<b>18.30</b>	<b>10.79</b>
<b>Luxembourg .....</b>	<b>12.32</b>	<b>9.85</b>	<b>3.72</b>	<b>8.45</b>	<b>18.92</b>	<b>10.62</b>
<b>Netherlands .....</b>	<b>8.25</b>	<b>15.37</b>	<b>23.43</b>	<b>26.29</b>	<b>30.96</b>	<b>19.68</b>
<b>Total EUR 6</b>	<b>247.60</b>	<b>209.42</b>	<b>203.60</b>	<b>223.63</b>	<b>178.98</b>	<b>142.22</b>
Scotland .....	*	5.64	6.35	6.96	11.55	13.79
Wales .....	*	18.37	14.48	14.76	9.21	2.50
Northern England .....	*	8.47	1.87	5.06	15.75	17.65
England - Other regions .....	*	0.34	0.77	0.92	0.22	0.03
<b>United Kingdom .....</b>	<b>*</b>	<b>32.82</b>	<b>23.47</b>	<b>27.65</b>	<b>36.73</b>	<b>33.97</b>
<b>Denmark .....</b>	<b>*</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Ireland .....</b>	<b>*</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Total EUR 9</b>	<b>*</b>	<b>242.24</b>	<b>227.07</b>	<b>251.28</b>	<b>215.71</b>	<b>176.19</b>

\* Figures not available.

**BOTTOM BLOWN STEELS  
(OBM, LWS, ETC.)**

## Investment

TABLE 13

## Capital expenditure

million u.a.

<b>Total EUR 6</b>	<b>6.59</b>	<b>22.16</b>	<b>38.72</b>	<b>23.73</b>	<b>46.61</b>	<b>53.04</b>
<b>Total EUR 9</b>	<b>*</b>	<b>22.16</b>	<b>38.72</b>	<b>23.73</b>	<b>46.61</b>	<b>53.04</b>

\* Figures not available.



<b>STEELWORKS TOTAL</b>
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## Investment

**TABLE 14**  
**Capital expenditure by regions**

million u.s.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	22.56	24.31	30.49	19.21	13.35	27.87
North Rhine/Westphalia .....	27.75	33.09	48.10	63.88	72.17	56.49
Southern Germany .....	1.39	0.90	6.13	4.74	7.20	6.93
Saar .....	13.46	5.86	12.37	13.30	22.92	14.20
<b>Germany (FR) .....</b>	<b>65.16</b>	<b>64.16</b>	<b>97.09</b>	<b>101.13</b>	<b>115.64</b>	<b>105.49</b>
Belgium .....	26.65	39.49	65.47	55.67	38.68	33.80
Eastern France .....	23.13	13.63	10.45	12.94	16.07	24.05
Northern France .....	39.68	22.30	14.35	19.05	16.87	1.46
France - other areas .....	38.62	70.00	69.52	63.33	44.39	22.91
<b>France .....</b>	<b>101.43</b>	<b>105.93</b>	<b>94.32</b>	<b>95.32</b>	<b>77.33</b>	<b>48.42</b>
Italy - coastal areas .....	107.71	76.81	41.59	55.00	37.91	37.86
Italy - other areas .....	21.97	49.45	61.94	54.64	65.40	37.86
<b>Italy .....</b>	<b>129.68</b>	<b>126.26</b>	<b>103.53</b>	<b>109.64</b>	<b>103.31</b>	<b>75.72</b>
Luxembourg .....	12.76	12.93	4.28	8.91	19.58	11.11
Netherlands .....	8.34	15.51	23.88	26.31	31.64	19.78
<b>Total EUR 6 .....</b>	<b>344.02</b>	<b>361.28</b>	<b>388.57</b>	<b>396.98</b>	<b>386.18</b>	<b>294.32</b>
Scotland .....	*	16.57	21.07	22.44	18.30	14.08
Wales .....	*	20.34	16.71	16.36	31.60	28.26
Northern England .....	*	29.47	22.25	29.39	41.95	39.72
England - other areas .....	*	8.57	13.47	15.40	10.45	2.46
<b>United Kingdom .....</b>	<b>*</b>	<b>74.95</b>	<b>73.50</b>	<b>83.59</b>	<b>102.30</b>	<b>84.52</b>
Denmark .....	*	5.28	0.17	16.49	11.43	4.62
Ireland .....	*	—	—	0.11	—	—
<b>Total EUR 9 .....</b>	<b>*</b>	<b>441.51</b>	<b>462.24</b>	<b>497.17</b>	<b>499.91</b>	<b>383.46</b>

\* Figures not available.

<b>CONTINUOUS CASTING PLANTS</b>
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<b>Investment</b>
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*TABLE 15*  
Capital expenditure by regions

million u.s.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	14.23	13.06	7.72	8.33	0.34	0.01
North Rhine/Westphalia .....	5.44	10.04	57.43	57.60	42.37	30.79
Southern Germany .....	2.10	1.33	0.21	0.32	0.20	0.09
Saar .....	0.07	0.08	4.27	6.23	19.02	—
<i>Germany (FR)</i> .....	<i>21.84</i>	<i>24.51</i>	<i>69.63</i>	<i>72.48</i>	<i>61.93</i>	<i>30.89</i>
<i>Belgium</i> .....	<i>4.72</i>	<i>11.04</i>	<i>24.18</i>	<i>25.56</i>	<i>30.63</i>	<i>26.21</i>
Eastern France .....	0.01	0.33	6.91	6.10	1.05	0.04
Northern France .....	27.50	16.02	10.76	18.01	20.65	17.15
France - other areas .....	0.10	1.21	18.44	29.89	27.22	10.00
<i>France</i> .....	<i>27.61</i>	<i>17.56</i>	<i>36.11</i>	<i>54.00</i>	<i>48.92</i>	<i>27.19</i>
Italy - coastal areas .....	8.96	51.57	35.55	31.19	16.67	21.89
Italy - other areas .....	3.85	12.68	18.79	15.23	20.05	8.90
<i>Italy</i> .....	<i>12.81</i>	<i>64.25</i>	<i>54.34</i>	<i>46.42</i>	<i>36.72</i>	<i>30.79</i>
<i>Luxembourg</i> .....	—	—	—	—	—	—
<i>Netherlands</i> .....	—	—	—	—	—	—
<b>Total EUR 6</b>	<b>66.98</b>	<b>117.36</b>	<b>184.26</b>	<b>198.46</b>	<b>178.20</b>	<b>115.08</b>
Scotland .....	*	17.01	3.24	2.53	4.09	2.48
Wales .....	*	0.05	1.35	0.60	10.91	9.55
Northern England .....	*	5.99	6.43	4.08	19.89	28.40
England - other areas .....	*	1.52	6.39	13.54	5.16	*1.00
<i>United Kingdom</i> .....	<i>*</i>	<i>24.57</i>	<i>17.41</i>	<i>20.75</i>	<i>40.05</i>	<i>41.43</i>
<i>Denmark</i> .....	<i>*</i>	<i>3.96</i>	<i>12.58</i>	<i>9.90</i>	<i>5.94</i>	<i>3.30</i>
<i>Ireland</i> .....	<i>*</i>	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>145.89</b>	<b>214.25</b>	<b>229.11</b>	<b>224.19</b>	<b>159.81</b>

\* Figures not available.

<b>BLOOMING AND SLABBING MILLS</b>
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<b>Investment</b>
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**TABLE 16**  
**Capital expenditure by regions**

*million u.s.*

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	2.53	5.36	6.35	9.47	2.79	0.25
North Rhine/Westphalia .....	8.39	8.51	13.27	15.89	12.93	6.52
Southern Germany .....	0.64	0.73	0.49	0.67	0.76	0.02
Saar .....	0.08	0.03	0.04	0.95	4.05	4.88
<b>Germany (FR) .....</b>	<b>11.64</b>	<b>14.63</b>	<b>20.15</b>	<b>26.98</b>	<b>20.53</b>	<b>11.67</b>
<i>Belgium</i> .....	3.09	6.62	7.48	6.21	12.89	8.08
Eastern France .....	10.35	8.36	9.80	10.86	10.44	16.31
Northern France .....	0.23	0.04	—	0.23	—	—
France - other areas .....	29.68	34.54	16.15	14.22	10.51	3.64
<b>France .....</b>	<b>40.26</b>	<b>42.94</b>	<b>25.95</b>	<b>25.31</b>	<b>20.95</b>	<b>19.95</b>
Italy - coastal areas .....	53.36	26.25	10.61	17.00	4.58	3.02
Italy - other areas .....	2.13	1.99	3.07	1.75	6.76	3.13
<b>Italy .....</b>	<b>55.49</b>	<b>28.24</b>	<b>13.68</b>	<b>18.75</b>	<b>11.34</b>	<b>6.15</b>
<i>Luxembourg</i> .....	6.98	7.36	11.00	4.35	7.74	0.63
<i>Netherlands</i> .....	4.03	5.08	7.71	5.29	5.89	7.02
<b>Total EUR 6</b>	<b>121.49</b>	<b>104.87</b>	<b>85.97</b>	<b>86.89</b>	<b>79.34</b>	<b>53.50</b>
Scotland .....	*	4.67	0.41	2.85	0.58	0.28
Wales .....	*	8.59	2.45	6.30	3.61	2.05
Northern England .....	*	11.72	6.03	6.78	35.68	36.79
England - other areas .....	*	0.14	0.21	0.12	0.92	0.59
<b>United Kingdom .....</b>	<b>*</b>	<b>25.12</b>	<b>9.10</b>	<b>16.05</b>	<b>40.79</b>	<b>39.71</b>
Denmark .....	*	—	—	—	—	—
Ireland .....	*	—	—	0.07	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>129.99</b>	<b>95.07</b>	<b>103.01</b>	<b>120.13</b>	<b>93.21</b>

\* Figures not available.

## SECTION MILLS

## Investment

TABLE 17  
Capital expenditure by regions

million n.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	12.75	20.38	31.79	30.75	30.53	9.13
North Rhine/Westphalia .....	16.71	11.05	9.54	12.86	33.93	29.35
Southern Germany .....	11.71	7.38	1.72	6.58	2.19	7.75
Saar .....	34.31	19.41	3.40	4.71	4.58	1.36
<i>Germany (FR)</i> .....	<i>75.48</i>	<i>58.22</i>	<i>46.45</i>	<i>54.90</i>	<i>71.23</i>	<i>47.59</i>
<i>Belgium</i> .....	<i>13.18</i>	<i>13.91</i>	<i>38.17</i>	<i>29.31</i>	<i>41.59</i>	<i>22.73</i>
Eastern France .....	16.70	18.11	12.28	9.17	24.55	20.72
Northern France .....	3.54	6.53	5.07	4.85	14.44	9.84
France - other areas .....	57.42	69.14	37.03	39.48	12.82	3.78
<i>France</i> .....	<i>77.66</i>	<i>93.78</i>	<i>54.38</i>	<i>53.50</i>	<i>51.81</i>	<i>34.34</i>
Italy - coastal areas .....	12.04	9.38	16.60	20.48	46.03	60.79
Italy - other areas .....	13.36	24.99	25.85	31.02	23.03	14.30
<i>Italy</i> .....	<i>25.40</i>	<i>34.37</i>	<i>42.45</i>	<i>51.50</i>	<i>69.06</i>	<i>75.09</i>
<i>Luxembourg</i> .....	<i>0.61</i>	<i>7.02</i>	<i>12.08</i>	<i>13.72</i>	<i>7.65</i>	<i>1.99</i>
<i>Netherlands</i> .....	<i>0.32</i>	<i>0.37</i>	<i>1.94</i>	<i>2.83</i>	<i>1.53</i>	<i>0.44</i>
<b>Total EUR 6</b>	<b>192.65</b>	<b>207.67</b>	<b>195.47</b>	<b>205.76</b>	<b>242.87</b>	<b>182.18</b>
Scotland .....	*	0.22	1.07	0.57	0.94	0.86
Wales .....	*	3.99	14.61	9.16	26.37	13.77
Northern England .....	*	39.85	54.43	68.30	42.32	16.29
England - other areas .....	*	3.59	6.79	4.16	14.81	5.01
<i>United Kingdom</i> .....	<i>*</i>	<i>47.65</i>	<i>76.90</i>	<i>82.19</i>	<i>85.44</i>	<i>35.93</i>
<i>Denmark</i> .....	<i>*</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
<i>Ireland</i> .....	<i>*</i>	<i>—</i>	<i>1.14</i>	<i>0.07</i>	<i>—</i>	<i>—</i>
<b>Total EUR 9</b>	<b>*</b>	<b>255.32</b>	<b>273.51</b>	<b>288.02</b>	<b>328.31</b>	<b>218.11</b>

\* Figures not available.

<b>FLAT PRODUCT MILLS</b>
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## Investment

TABLE 18  
Capital expenditure by regions

million u.s.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
	1972	1973	1974	on Jan. 1, 1974 for	on Jan. 1, 1975 for	
				1974	1975	1976
Northern Germany .....	37.19	50.91	47.81	53.35	51.84	52.00
North Rhine/Westphalia .....	93.35	39.61	60.57	67.87	72.95	57.02
Southern Germany .....	11.68	2.91	11.68	13.34	7.91	3.13
Saar .....	7.69	2.86	3.62	4.86	5.21	0.49
<b>Germany (FR) .....</b>	<b>149.91</b>	<b>96.29</b>	<b>123.68</b>	<b>139.42</b>	<b>137.91</b>	<b>112.64</b>
<i>Belgium</i> .....	38.20	36.40	86.30	76.43	88.17	30.38
Eastern France .....	6.80	7.08	13.64	14.06	15.34	6.23
Northern France .....	113.22	94.49	58.94	89.36	67.46	78.75
France - other areas .....	111.78	82.99	46.49	60.88	48.62	22.44
<b>France .....</b>	<b>231.80</b>	<b>184.56</b>	<b>119.07</b>	<b>164.30</b>	<b>131.42</b>	<b>107.42</b>
Italy - coastal areas .....	203.58	100.32	44.04	71.08	37.57	43.12
Italy - other areas .....	13.95	12.06	43.80	33.61	49.37	21.71
<b>Italy .....</b>	<b>217.53</b>	<b>112.38</b>	<b>87.84</b>	<b>104.69</b>	<b>86.94</b>	<b>64.83</b>
<i>Luxembourg</i> .....	0.60	0.72	0.75	1.09	0.71	0.31
<i>Netherlands</i> .....	9.74	1.59	3.14	4.03	2.58	3.57
<b>Total EUR 6</b>	<b>647.78</b>	<b>431.94</b>	<b>420.78</b>	<b>489.96</b>	<b>447.73</b>	<b>319.15</b>
Scotland .....	*	10.91	8.83	8.64	9.75	11.53
Wales .....	*	25.41	8.07	13.30	5.82	0.75
Northern England .....	*	5.70	12.60	10.46	34.44	40.63
England - other areas .....	*	1.83	0.89	1.46	0.77	0.28
<b>United Kingdom .....</b>	<b>*</b>	<b>43.85</b>	<b>30.39</b>	<b>33.86</b>	<b>50.78</b>	<b>53.19</b>
<i>Denmark</i> .....	*	1.32	0.24	6.60	5.28	—
<i>Ireland</i> .....	*	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>477.11</b>	<b>451.41</b>	<b>530.42</b>	<b>503.79</b>	<b>372.34</b>

\* Figures not available.

<b>HOT WIDE STRIP MILLS</b>
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Investment  
(already included in  
capital expenditure for  
flat product mills : table 18)

TABLE 19  
Capital expenditure by regions

million u.s.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	31.35	43.50	43.36	47.14	41.87	25.27
North Rhine/Westphalia .....	34.10	10.96	24.04	28.07	25.30	14.65
Southern Germany .....	—	—	—	—	—	—
Saar .....	—	—	—	—	—	—
<b>Germany (FR) .....</b>	<b>65.45</b>	<b>54.46</b>	<b>67.40</b>	<b>75.21</b>	<b>67.17</b>	<b>39.92</b>
<b>Belgium .....</b>	<b>16.54</b>	<b>12.60</b>	<b>50.42</b>	<b>40.16</b>	<b>58.06</b>	<b>21.88</b>
<b>Eastern France .....</b>	<b>0.96</b>	<b>0.71</b>	<b>1.63</b>	<b>1.85</b>	<b>2.57</b>	<b>2.63</b>
<b>Northern France .....</b>	<b>38.87</b>	<b>17.36</b>	<b>4.40</b>	<b>8.30</b>	<b>1.96</b>	<b>0.22</b>
<b>France - other areas .....</b>	<b>85.60</b>	<b>68.80</b>	<b>25.05</b>	<b>29.35</b>	<b>23.05</b>	<b>8.47</b>
<b>France .....</b>	<b>123.43</b>	<b>86.87</b>	<b>31.08</b>	<b>39.50</b>	<b>27.58</b>	<b>11.32</b>
<b>Italy - coastal areas .....</b>	<b>103.08</b>	<b>51.35</b>	<b>22.70</b>	<b>36.92</b>	<b>12.03</b>	<b>2.36</b>
<b>Italy - other areas .....</b>	<b>1.95</b>	<b>1.04</b>	<b>2.76</b>	<b>4.14</b>	<b>17.03</b>	<b>5.26</b>
<b>Italy .....</b>	<b>105.03</b>	<b>52.39</b>	<b>25.46</b>	<b>41.06</b>	<b>29.06</b>	<b>7.62</b>
<b>Luxembourg .....</b>	—	—	0.09	—	0.14	—
<b>Netherlands .....</b>	<b>3.86</b>	<b>0.80</b>	<b>1.72</b>	<b>2.62</b>	<b>1.42</b>	<b>1.76</b>
<b>Total EUR 6 .....</b>	<b>314.34</b>	<b>207.12</b>	<b>176.17</b>	<b>198.55</b>	<b>183.43</b>	<b>82.50</b>
<b>Scotland .....</b>	*	—	—	—	—	—
<b>Wales .....</b>	*	3.62	0.75	1.98	0.34	—
<b>Northern England .....</b>	*	—	—	—	—	—
<b>England - other areas .....</b>	*	—	—	—	—	—
<b>United Kingdom .....</b>	*	3.62	0.75	1.98	0.34	—
<b>Denmark .....</b>	*	—	—	—	—	—
<b>Ireland .....</b>	*	—	—	—	—	—
<b>Total EUR 9 .....</b>	*	210.74	176.92	200.53	183.77	82.50

\* Figures not available.

<b>ROLLING MILLS TOTAL <sup>1</sup></b>
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Investment

**TABLE 20**  
**Capital expenditure by regions**

million u.s.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	67.64	92.14	97.93	105.15	87.08	62.40
North Rhine/Westphalia .....	155.51	84.60	151.77	169.00	192.88	131.67
Southern Germany .....	27.59	12.85	14.73	23.81	12.10	11.35
Saar .....	43.96	25.00	12.72	18.93	35.89	8.90
<b>Germany (FR) .....</b>	<b>294.70</b>	<b>214.59</b>	<b>277.15</b>	<b>316.89</b>	<b>327.95</b>	<b>214.32</b>
<b>Belgium .....</b>	<b>68.70</b>	<b>78.98</b>	<b>170.84</b>	<b>153.24</b>	<b>181.47</b>	<b>88.75</b>
Eastern France .....	43.03	44.01	50.52	50.22	60.52	47.22
Northern France .....	162.61	142.38	94.41	135.26	119.85	108.23
France - other areas .....	224.99	229.35	153.33	174.90	120.61	47.51
<b>France .....</b>	<b>430.63</b>	<b>415.74</b>	<b>298.26</b>	<b>360.38</b>	<b>300.98</b>	<b>202.96</b>
Italy - coastal areas .....	311.40	224.62	127.33	164.37	118.31	136.77
Italy - other areas .....	38.76	57.94	98.78	87.55	109.12	67.35
<b>Italy .....</b>	<b>350.16</b>	<b>282.56</b>	<b>226.11</b>	<b>251.92</b>	<b>227.43</b>	<b>204.12</b>
<b>Luxembourg .....</b>	<b>5.47</b>	<b>15.45</b>	<b>24.68</b>	<b>21.49</b>	<b>16.16</b>	<b>2.93</b>
<b>Netherlands .....</b>	<b>14.30</b>	<b>7.06</b>	<b>12.95</b>	<b>12.31</b>	<b>10.27</b>	<b>11.36</b>
<b>Total EUR 6</b>	<b>1 166.96</b>	<b>1 014.38</b>	<b>1 009.99</b>	<b>1 116.23</b>	<b>1 064.26</b>	<b>724.44</b>
Scotland .....	*	32.81	13.55	14.59	15.53	15.37
Wales .....	*	41.50	41.26	38.23	90.20	87.98
Northern England .....	*	64.45	80.12	90.14	135.97	127.02
England - other areas .....	*	7.75	15.31	20.68	22.90	7.26
<b>United Kingdom .....</b>	<b>*</b>	<b>146.51</b>	<b>150.24</b>	<b>163.64</b>	<b>264.60</b>	<b>237.63</b>
<b>Denmark .....</b>	<b>*</b>	<b>5.28</b>	<b>13.96</b>	<b>16.50</b>	<b>11.22</b>	<b>3.30</b>
<b>Ireland .....</b>	<b>*</b>	<b>—</b>	<b>—</b>	<b>0.14</b>	<b>—</b>	<b>—</b>
<b>Total EUR 9</b>	<b>*</b>	<b>1 116.17</b>	<b>1 174.19</b>	<b>1 296.51</b>	<b>1 340.08</b>	<b>965.37</b>

\* Figures not available.

<sup>1</sup> Including ancillary and auxiliary plants.

**STEELWORKS-OWNED  
POWER-GENERATING  
PLANTS AND DISTRIBUTION  
NETWORKS**

Investment

**TABLE 21**  
Capital expenditure by regions

*million u.s.*

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	22.70	17.00	19.40	5.84	4.76	5.10
North Rhine/Westphalia .....	11.80	12.17	11.17	13.82	18.46	14.74
Southern Germany .....	4.97	1.37	3.17	1.88	1.60	1.39
Saar .....	1.95	1.26	0.83	0.66	0.32	—
<i>Germany (FR)</i> .....	<i>41.42</i>	<i>31.80</i>	<i>34.57</i>	<i>22.20</i>	<i>25.14</i>	<i>21.23</i>
<i>Belgium</i> .....	<i>4.35</i>	<i>2.74</i>	<i>10.92</i>	<i>5.32</i>	<i>10.10</i>	<i>3.89</i>
Eastern France .....	8.07	5.26	4.30	4.92	9.95	8.57
Northern France .....	5.83	0.33	3.13	3.74	2.65	0.21
France - other areas .....	20.41	48.65	9.39	19.51	22.91	7.45
<i>France</i> .....	<i>34.31</i>	<i>54.24</i>	<i>16.82</i>	<i>28.17</i>	<i>35.51</i>	<i>16.23</i>
Italy - coastal areas .....	18.77	34.64	15.82	18.83	25.59	28.38
Italy - other areas .....	8.53	18.59	16.26	10.59	8.46	4.01
<i>Italy</i> .....	<i>27.30</i>	<i>53.23</i>	<i>32.08</i>	<i>29.42</i>	<i>34.05</i>	<i>32.39</i>
<i>Luxembourg</i> .....	<i>0.54</i>	<i>0.49</i>	<i>0.40</i>	<i>0.39</i>	<i>1.36</i>	<i>0.04</i>
<i>Netherlands</i> .....	<i>9.09</i>	<i>3.06</i>	<i>4.73</i>	<i>4.90</i>	<i>3.59</i>	<i>4.37</i>
<b>Total EUR 6</b>	<b>117.01</b>	<b>145.56</b>	<b>99.52</b>	<b>90.40</b>	<b>109.75</b>	<b>78.15</b>
Scotland .....	*	0.66	1.18	2.08	0.39	0.33
Wales .....	*	3.45	0.07	4.40	0.17	0.02
Northern England .....	*	4.21	5.84	20.55	20.85	31.40
England - other areas .....	*	0.98	1.50	0.87	0.83	0.05
<i>United Kingdom</i> .....	<i>*</i>	<i>9.30</i>	<i>8.59</i>	<i>27.90</i>	<i>22.24</i>	<i>31.80</i>
<i>Denmark</i> .....	<i>*</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
<i>Ireland</i> .....	<i>*</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
<b>Total EUR 9</b>	<b>*</b>	<b>154.86</b>	<b>108.11</b>	<b>118.30</b>	<b>131.99</b>	<b>109.95</b>

\* Figures not available.



**MISCELLANEOUS  
(IRON- AND STEELWORKS)**

**Investment**

**TABLE 22**  
**Capital expenditure by regions**

*million u.s.*

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	16.58	17.67	21.85	14.95	7.73	3.51
North Rhine/Westphalia .....	18.04	23.31	27.97	39.94	64.82	68.93
Southern Germany .....	2.79	1.91	2.06	1.97	3.54	1.41
Saar .....	13.87	10.51	8.05	11.97	13.66	8.04
<i>Germany (FR)</i> .....	<i>51.28</i>	<i>53.40</i>	<i>60.38</i>	<i>68.83</i>	<i>89.75</i>	<i>81.89</i>
Belgium .....	13.95	20.94	32.24	17.54	10.00	9.16
Eastern France .....	11.83	14.11	16.61	12.51	15.41	10.60
Northern France .....	54.52	43.34	24.56	27.23	18.96	12.07
France - other areas .....	70.28	105.72	34.41	127.11	43.13	14.80
<i>France</i> .....	<i>136.63</i>	<i>163.17</i>	<i>75.58</i>	<i>166.85</i>	<i>77.50</i>	<i>37.47</i>
Italy - coastal areas .....	144.80	146.17	88.25	124.40	89.11	41.62
Italy - other areas .....	14.84	23.76	21.77	30.47	24.57	17.25
<i>Italy</i> .....	<i>159.64</i>	<i>169.93</i>	<i>110.02</i>	<i>154.87</i>	<i>113.68</i>	<i>58.87</i>
Luxembourg .....	7.29	9.27	8.00	6.26	11.17	4.97
Netherlands .....	20.36	14.13	14.23	11.47	17.02	16.51
<b>Total EUR 6</b>	<b>389.15</b>	<b>430.84</b>	<b>300.45</b>	<b>425.82</b>	<b>319.12</b>	<b>208.87</b>
Scotland .....	*	6.36	6.49	13.54	7.34	5.65
Wales .....	*	4.43	2.91	5.07	4.97	2.00
Northern England .....	*	26.56	26.36	32.14	44.27	40.36
England - other areas .....	*	1.85	2.08	6.34	4.84	1.84
<i>United Kingdom</i> .....	<i>*</i>	<i>39.20</i>	<i>37.84</i>	<i>57.09</i>	<i>61.42</i>	<i>49.85</i>
Denmark .....	*	0.98	1.77	1.52	3.11	—
Ireland .....	*	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>471.02</b>	<b>340.06</b>	<b>484.43</b>	<b>383.65</b>	<b>258.72</b>

\* Figures not available.

**GENERAL SERVICES  
(IRON-AND STEEL-  
WORKS) TOTAL**

Investment

**TABLE 23**  
Capital expenditure by regions

*million s.a.*

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1974 for	on Jan. 1, 1975 for	
	1972	1973	1974	1974	1975	1976
Northern Germany .....	39.28	34.67	41.25	20.79	12.49	8.61
North Rhine/Westphalia .....	29.84	35.48	39.14	53.76	83.28	83.67
Southern Germany .....	7.76	3.28	5.23	3.85	5.14	2.80
Saar .....	15.82	11.77	9.33	12.63	13.98	8.04
<i>Germany (FR)</i> .....	<i>92.70</i>	<i>85.20</i>	<i>94.95</i>	<i>91.03</i>	<i>114.89</i>	<i>103.12</i>
<i>Belgium</i> .....	<i>18.30</i>	<i>23.68</i>	<i>43.16</i>	<i>22.86</i>	<i>20.10</i>	<i>13.05</i>
Eastern France .....	19.90	19.37	20.91	17.43	25.36	19.17
Northern France .....	60.35	43.67	27.69	30.97	21.61	12.28
France - other areas .....	90.69	154.37	43.80	146.62	66.04	22.25
<i>France</i> .....	<i>170.94</i>	<i>217.41</i>	<i>92.40</i>	<i>195.02</i>	<i>113.01</i>	<i>53.70</i>
Italy - coastal areas .....	163.57	180.81	104.07	143.23	114.70	70.00
Italy - other areas .....	23.37	42.35	38.03	41.06	33.03	21.26
<i>Italy</i> .....	<i>186.94</i>	<i>223.16</i>	<i>142.10</i>	<i>184.29</i>	<i>147.73</i>	<i>91.26</i>
<i>Luxembourg</i> .....	<i>7.83</i>	<i>9.76</i>	<i>8.40</i>	<i>6.65</i>	<i>12.53</i>	<i>5.01</i>
<i>Netherlands</i> .....	<i>29.45</i>	<i>17.19</i>	<i>18.96</i>	<i>16.37</i>	<i>20.61</i>	<i>20.88</i>
<b>Total EUR 6</b>	<b>506.16</b>	<b>576.40</b>	<b>399.97</b>	<b>516.22</b>	<b>428.87</b>	<b>287.02</b>
Scotland .....	*	7.02	7.67	15.62	7.73	5.98
Wales .....	*	7.88	2.98	9.47	5.14	2.02
Northern England .....	*	30.77	32.20	52.69	65.12	71.76
England - other areas .....	*	2.83	3.58	7.21	5.67	1.89
<i>United Kingdom</i> .....	<i>*</i>	<i>48.50</i>	<i>46.43</i>	<i>84.99</i>	<i>83.66</i>	<i>81.65</i>
<i>Denmark</i> .....	<i>*</i>	<i>0.98</i>	<i>1.77</i>	<i>1.52</i>	<i>3.11</i>	—
<i>Ireland</i> .....	<i>*</i>	—	—	—	—	—
<b>Total EUR 9</b>	<b>*</b>	<b>625.88</b>	<b>448.17</b>	<b>602.73</b>	<b>515.64</b>	<b>368.67</b>

\* Figures not available.

<b>SINTER AND SPONGE IRON</b>
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<b>Production</b>
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**TABLE 24**  
**Production and production potential**

million tonnes

Actual production	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
130.2	<b>Total EUR 6</b>	125.3	131.8	143.1	149.3	152.1	158.7	160.5
144.8	<b>Total EUR 9</b>	*	154.1	163.2	170.7	177.6	190.5	193.1

\* Figures not available.

<b>PIG IRON</b>
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<b>Production</b>
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**TABLE 25**  
**Production and production potential by regions**

million tonnes

7.8	Northern Germany .....	7.9	8.1	8.9	9.5	9.5	10.3	10.2
25.7	North Rhine/Westphalia ..	26.7	28.1	29.1	30.1	32.0	31.9	32.5
1.2	Southern Germany .....	1.3	1.3	1.3	1.3	1.3	1.3	1.3
5.5	Saar .....	6.8	6.8	6.7	7.3	7.5	7.5	7.5
40.2	<b>Germany (FR) .....</b>	<b>42.7</b>	<b>44.3</b>	<b>46.0</b>	<b>48.2</b>	<b>50.3</b>	<b>51.0</b>	<b>51.5</b>
13.0	<b>Belgium .....</b>	<b>14.0</b>	<b>14.6</b>	<b>14.4</b>	<b>14.9</b>	<b>15.4</b>	<b>15.8</b>	<b>16.2</b>
13.2	Eastern France .....	14.0	13.9	13.9	14.1	14.6	15.2	15.3
7.2	Northern France .....	6.8	7.6	8.9	9.6	9.6	10.0	10.4
2.2	France - other areas .....	1.2	1.2	2.4	3.9	4.3	4.3	4.3
22.6	<b>France .....</b>	<b>22.0</b>	<b>22.7</b>	<b>25.2</b>	<b>27.6</b>	<b>28.5</b>	<b>29.5</b>	<b>30.0</b>
11.4	Italy: coastal areas .....	11.9	13.3	13.3	16.3	16.8	17.0	17.0
0.3	Italy: other areas .....	0.6	0.6	0.5	0.6	0.3	0.3	0.3
11.7	<b>Italy .....</b>	<b>12.5</b>	<b>13.9</b>	<b>13.8</b>	<b>16.9</b>	<b>17.1</b>	<b>17.3</b>	<b>17.3</b>
5.5	<b>Luxembourg .....</b>	<b>5.4</b>	<b>5.5</b>	<b>5.7</b>	<b>5.8</b>	<b>5.8</b>	<b>5.9</b>	<b>5.9</b>
4.8	<b>Netherlands .....</b>	<b>4.9</b>	<b>5.5</b>	<b>5.0</b>	<b>5.0</b>	<b>5.7</b>	<b>5.8</b>	<b>6.3</b>
97.8	<b>Total EUR 6</b>	<b>101.5</b>	<b>106.5</b>	<b>110.1</b>	<b>118.4</b>	<b>122.8</b>	<b>125.3</b>	<b>127.2</b>
1.6	Scotland .....	—	2.0	1.9	1.9	2.0	2.6	2.9
4.6	Wales .....	—	6.2	5.3	6.5	7.1	6.9	6.8
6.5	Northern England .....	—	9.2	8.2	8.3	8.7	9.7	10.7
1.3	England - Other regions ...	—	2.6	2.2	2.1	1.9	2.2	2.3
14.0	<b>United Kingdom .....</b>	<b>—</b>	<b>20.0</b>	<b>17.6</b>	<b>18.8</b>	<b>19.7</b>	<b>21.4</b>	<b>22.7</b>
—	<b>Denmark .....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
—	<b>Ireland .....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
111.8	<b>Total EUR 9</b>	<b>—</b>	<b>126.5</b>	<b>127.7</b>	<b>137.2</b>	<b>142.5</b>	<b>146.7</b>	<b>149.9</b>

\* Figures not available.

<b>STEEL - TOTAL</b>
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<b>Production</b>
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TABLE 26

## Production and production potential by regions

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
9.8	Northern Germany .....	9.4	10.2	11.0	11.8	11.9	12.3	12.5
34.6	North Rhine/Westphalia ..	37.3	37.8	38.4	40.1	41.9	42.1	42.3
2.6	Southern Germany .....	2.6	2.7	2.8	2.9	3.1	3.2	3.3
6.4	Saar .....	7.7	8.1	8.2	8.6	9.0	9.0	9.0
53.4	<i>Germany (FR)</i> .....	57.0	58.8	60.4	63.4	65.9	66.6	67.1
16.2	<i>Belgium</i> .....	16.7	17.3	17.8	18.6	19.4	20.5	21.1
14.4	Eastern France .....	15.7	15.5	15.6	15.5	15.9	16.2	16.6
9.0	Northern France .....	8.9	9.6	11.0	12.1	12.3	12.9	13.5
3.6	France - other areas .....	3.1	3.1	3.9	6.4	7.3	7.6	7.7
27.0	<i>France</i> .....	27.7	28.1	30.5	34.0	35.5	36.7	37.8
12.6	Italy - coastal areas .....	13.9	15.3	15.3	18.3	19.2	19.6	20.2
11.2	Italy - other areas .....	11.4	12.8	13.6	14.9	15.5	16.2	16.6
23.8	<i>Italy</i> .....	25.3	28.1	28.9	33.2	34.7	35.8	37.0
6.4	<i>Luxembourg</i> .....	6.2	6.5	6.7	6.9	7.1	7.1	7.1
5.8	<i>Netherlands</i> .....	6.8	6.1	6.1	6.3	7.1	7.2	7.7
132.6	<b>Total EUR 6</b>	139.7	144.9	150.4	162.4	169.7	173.9	177.8
2.6	Scotland .....	*	3.5	3.2	2.8	3.1	3.6	3.8
6.7	Wales .....	*	9.0	7.8	8.8	9.6	9.8	9.5
10.6	Northern England .....	*	12.8	13.3	12.9	13.5	15.2	16.5
2.7	England - Other regions ...	*	3.6	3.5	3.6	3.6	3.8	4.0
22.3	<i>United Kingdom</i> .....	*	28.9	27.8	28.1	29.8	32.4	33.8
0.5	<i>Denmark</i> .....	*	0.6	0.6	0.7	1.0	1.1	1.1
0.1	<i>Ireland</i> .....	*	0.1	0.1	0.1	0.1	0.1	0.1
155.5	<b>Total EUR 9</b>	*	174.5	178.9	191.3	200.6	207.5	212.8

\* Figures not available.

<b>BASIC BESSEMER STEEL</b>
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<b>Production</b>
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*TABLE 27*  
**Production and production potential by regions**

*million tonnes*

Actual pro- duction  1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
—	North Rhine/Westphalia ..	0.6	—	—	—	—	—	—
1.6	Saar .....	3.6	2.2	1.9	1.1	1.1	0.9	—
1.6	Germany (FR) .....	4.2	2.2	1.9	1.1	1.1	0.9	—
2.4	Belgium .....	3.4	2.9	2.6	2.3	1.4	0.6	—
4.8	Eastern France .....	7.7	6.1	5.2	4.3	2.8	2.9	2.9
0.4	France - other areas .....	0.5	0.5	0.5	0.5	0.5	—	—
5.1	France .....	8.2	6.6	5.7	4.8	3.3	2.9	2.9
2.1	Luxembourg .....	3.4	3.2	2.1	2.3	1.9	1.9	1.9
11.2	<b>Total EUR 6</b>	<b>19.2</b>	<b>14.9</b>	<b>12.3</b>	<b>10.5</b>	<b>7.7</b>	<b>6.3</b>	<b>4.8</b>
11.2	<b>Total EUR 9</b>	<b>19.2</b>	<b>14.9</b>	<b>12.3</b>	<b>10.5</b>	<b>7.7</b>	<b>6.3</b>	<b>4.8</b>

<b>OPEN HEARTH STEEL</b>
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<b>Production</b>
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TABLE 28

## Production and production potential by regions

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
1.2	Northern Germany .....	1.6	1.5	1.4	1.3	1.3	0.9	0.9
6.9	North Rhine/Westphalia ..	7.7	7.7	7.8	7.8	7.5	6.8	7.0
0.5	Southern Germany .....	0.5	0.5	0.6	0.6	0.6	0.6	0.6
0.6	Saar .....	0.6	0.6	0.6	0.6	0.7	0.4	0.4
9.2	Germany (FR) .....	10.4	10.3	10.4	10.3	10.1	8.7	8.9
0.2	Belgium .....	0.4	0.4	0.3	0.3	0.3	0.1	0.1
1.2	Eastern France .....	1.6	1.6	1.4	1.0	0.7	0.7	0.7
1.4	Northern France .....	1.8	1.6	1.5	1.6	1.5	1.5	1.5
0.4	France - other areas .....	0.5	0.5	0.4	0.4	0.4	0.2	0.2
3.0	France .....	3.9	3.7	3.3	3.0	2.6	2.4	2.4
2.0	Italy: coastal areas .....	2.7	2.6	2.6	2.5	2.4	1.2	—
1.5	Italy: other areas .....	2.2	2.2	1.9	1.4	0.9	0.6	0.5
3.5	Italy .....	4.9	4.8	4.4	3.9	3.3	1.8	0.5
0.1	Netherlands .....	0.7	0.1	0.1	0.1	0.1	0.1	0.1
16.0	<b>Total EUR 6</b>	<b>20.3</b>	<b>19.3</b>	<b>18.5</b>	<b>17.6</b>	<b>16.4</b>	<b>13.1</b>	<b>12.0</b>
1.5	Scotland .....	*	2.0	1.9	1.1	1.1	1.1	0.7
2.8	Wales .....	*	3.2	3.1	2.8	2.8	2.4	2.1
0.9	Northern England .....	*	2.3	1.1	0.8	0.7	0.6	0.3
1.0	England - Other regions ...	*	1.5	1.3	1.0	1.0	0.5	0.4
6.2	United Kingdom .....	*	9.0	7.4	5.7	5.6	4.6	3.5
0.5	Denmark .....	*	0.5	0.5	0.5	0.5	0.5	0.5
0.1	Ireland .....	*	0.1	0.1	0.1	0.1	0.1	0.1
22.8	<b>Total EUR 9</b>	*	<b>28.9</b>	<b>26.5</b>	<b>23.9</b>	<b>22.6</b>	<b>18.3</b>	<b>16.1</b>

\* Figures not available.

<b>ELECTRIC FURNACE STEEL</b>
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**Production**

**TABLE 29**  
**Production and production potential by regions**

*million tonnes*

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
0.9	Northern Germany .....	0.6	0.7	1.2	1.3	1.4	1.4	1.6
3.3	North Rhine/Westphalia ..	3.5	3.6	3.7	3.5	3.6	3.7	3.7
1.1	Southern Germany .....	0.8	1.1	1.1	1.3	1.5	1.5	1.5
0.4	Saar .....	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5.7	<i>Germany (FR)</i> .....	5.4	5.9	6.5	6.6	7.0	7.1	7.3
0.7	<i>Belgium</i> .....	0.6	0.7	0.8	0.8	0.8	1.0	1.3
1.0	Eastern France .....	0.9	0.9	1.1	1.1	1.1	1.2	1.5
0.6	Northern France .....	0.5	0.5	0.7	0.8	1.0	1.1	1.1
1.5	France - other areas .....	1.7	1.6	1.8	2.3	2.6	2.7	2.9
3.1	<i>France</i> .....	3.1	3.0	3.6	4.2	4.7	5.0	5.5
0.3	Italy - coastal areas .....	0.7	0.3	0.4	0.5	1.0	1.2	1.6
9.6	Italy - other areas .....	8.9	10.3	11.5	13.2	14.4	15.4	16.0
9.9	<i>Italy</i> .....	9.6	10.6	11.9	13.7	15.4	16.6	17.6
0.1	<i>Luxembourg</i> .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.4	<i>Netherlands</i> .....	0.4	0.4	0.4	0.4	0.4	0.4	0.4
19.9	<b>Total EUR 6</b>	19.2	20.7	23.3	25.8	28.4	30.2	32.2
0.3	Scotland .....	*	0.3	0.3	0.4	0.5	0.4	0.5
0.4	Wales .....	*	0.5	0.5	0.5	0.6	1.2	1.4
3.9	Northern England .....	*	4.1	4.5	4.8	5.2	5.4	5.4
0.6	England - Other regions ...	*	0.7	0.7	1.2	1.3	1.8	1.8
5.2	<i>United Kingdom</i> .....	*	5.6	6.0	6.9	7.6	8.8	9.1
—	<i>Denmark</i> .....	*	0.1	—	0.2	0.4	0.5	0.5
0.1	<i>Ireland</i> .....	*	—	0.1	0.1	0.1	0.1	0.1
25.2	<b>Total EUR 9</b>	*	26.4	29.4	33.0	36.5	39.6	41.9

\* Figures not available.

**LD, KALDO AND  
OTHER STEELS**

**Production**

*TABLE 30*

**Production and production potential by regions**

*million tonnes*

Actual production  1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
7.5	Northern Germany .....	7.2	8.0	8.5	9.2	9.2	9.9	9.9
24.4	North Rhine/Westphalia ..	25.5	26.5	26.9	28.6	30.5	31.4	31.4
2.7	Saar .....	2.7	4.0	4.0	4.9	5.0	5.0	5.0
<b>34.6</b>	<b>Germany (FR) .....</b>	<b>35.4</b>	<b>38.5</b>	<b>39.4</b>	<b>42.7</b>	<b>44.7</b>	<b>46.3</b>	<b>46.3</b>
<b>11.5</b>	<b>Belgium .....</b>	<b>11.0</b>	<b>12.0</b>	<b>12.5</b>	<b>13.3</b>	<b>14.0</b>	<b>14.5</b>	<b>15.3</b>
4.8	Eastern France .....	4.2	4.8	4.9	5.3	5.4	5.6	5.7
6.1	Northern France .....	5.7	6.7	7.9	8.8	8.9	9.5	10.1
1.3	France - other areas .....	0.4	0.5	1.3	3.2	3.9	4.7	4.7
<b>12.2</b>	<b>France .....</b>	<b>10.3</b>	<b>11.9</b>	<b>14.1</b>	<b>17.3</b>	<b>18.2</b>	<b>19.8</b>	<b>20.5</b>
10.3	Italy: coastal areas .....	10.5	12.4	12.3	15.3	15.9	16.0	16.0
0.2	Italy: other areas .....	0.3	0.3	0.2	0.3	0.3	0.3	0.3
<b>10.5</b>	<b>Italy .....</b>	<b>10.8</b>	<b>12.7</b>	<b>12.5</b>	<b>15.6</b>	<b>16.2</b>	<b>16.3</b>	<b>16.3</b>
<b>3.6</b>	<b>Luxembourg .....</b>	<b>2.4</b>	<b>2.8</b>	<b>3.8</b>	<b>3.8</b>	<b>4.4</b>	<b>4.4</b>	<b>4.4</b>
<b>5.4</b>	<b>Netherlands .....</b>	<b>5.7</b>	<b>5.6</b>	<b>5.6</b>	<b>5.8</b>	<b>6.6</b>	<b>6.7</b>	<b>7.2</b>
<b>77.8</b>	<b>Total EUR 6</b>	<b>75.6</b>	<b>83.5</b>	<b>87.9</b>	<b>98.5</b>	<b>104.0</b>	<b>108.0</b>	<b>110.0</b>
0.9	Scotland .....	*	1.2	1.0	1.2	1.5	2.1	2.6
3.4	Wales .....	*	5.3	4.2	5.5	6.2	6.2	6.0
5.8	Northern England .....	*	6.4	7.8	7.3	7.6	9.2	10.8
0.7	England - Other regions ...	*	1.4	1.4	1.4	1.3	1.5	1.7
<b>10.8</b>	<b>United Kingdom .....</b>	<b>*</b>	<b>14.3</b>	<b>14.4</b>	<b>15.4</b>	<b>16.6</b>	<b>19.0</b>	<b>21.1</b>
<b>88.6</b>	<b>Total EUR 9</b>	<b>*</b>	<b>97.8</b>	<b>102.3</b>	<b>113.9</b>	<b>120.6</b>	<b>127.0</b>	<b>131.1</b>

\* Figures not available.

**BOTTOM BLOWN STEELS  
(OBM, LWS, ETC.)**

**Production**

*TABLE 31*

**Production and production potential**

*million tonnes*

7.6	<b>Total EUR 6</b>	<b>5.4</b>	<b>6.5</b>	<b>8.4</b>	<b>10.0</b>	<b>13.2</b>	<b>16.3</b>	<b>18.9</b>
7.6	<b>Total EUR 9</b>	<b>*</b>	<b>6.5</b>	<b>8.4</b>	<b>10.0</b>	<b>13.2</b>	<b>16.3</b>	<b>18.9</b>

\* Figures not available.



CONTINUOUS CASTING PLANTS
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Production
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TABLE 32  
Production and production potential by regions

Actual pro- duction  1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
1.9	Northern Germany .....	0.3	1.4	2.3	3.2	3.4	3.4	3.5
5.6	North Rhine/Westphalia ..	5.9	6.0	6.2	7.7	10.0	11.8	11.8
1.2	Southern Germany .....	0.9	1.1	1.2	1.4	1.6	1.6	1.7
1.6	Saar .....	1.9	2.0	2.0	2.0	3.2	3.2	3.2
10.3	Germany (FR) .....	9.0	10.5	11.7	14.4	18.2	20.0	20.2
0.2	Belgium .....	—	—	0.4	0.8	1.9	3.0	3.5
0.1	Eastern France .....	0.1	0.1	0.1	0.4	0.4	0.6	0.8
2.5	Northern France .....	0.8	2.1	3.4	4.0	4.2	4.4	5.3
0.2	France - other areas .....	0.1	0.2	0.2	0.5	1.2	1.6	1.7
2.8	France .....	1.0	2.4	3.7	4.9	5.8	6.6	7.8
1.3	Italy - coastal areas .....	1.4	1.6	1.6	4.0	4.9	5.4	6.9
3.3	Italy - other areas .....	2.5	3.0	3.8	4.7	5.7	6.6	7.0
4.6	Italy .....	3.9	4.6	5.4	8.7	10.6	12.0	13.9
—	Luxembourg .....	—	—	—	—	—	—	—
—	Netherlands .....	—	—	—	—	—	—	—
17.9	<b>Total EUR 6</b>	13.9	17.5	21.2	28.8	36.5	41.6	45.4
—	Scotland .....	—	—	0.1	0.6	0.7	0.9	1.1
—	Wales .....	—	—	—	0.1	0.1	0.6	0.6
0.6	Northern England .....	—	—	1.0	1.7	2.0	2.2	3.1
0.5	England - Other regions ...	—	—	0.6	0.9	1.1	1.2	1.3
1.1	United Kingdom .....	—	—	1.7	3.3	4.0	4.9	6.1
—	Denmark .....	—	—	—	0.1	0.4	0.5	0.5
—	Ireland .....	—	—	—	—	—	—	—
19.0	<b>Total EUR 9</b>	13.9	17.5	22.9	32.2	40.9	47.0	52.0

\* Figures not available.

COILS <sup>1</sup>

## Production

TABLE 33

## Production and production potential by regions

million tonnes

Actual production		Region	Production potential			Expected production potential			
Total	of which: coils- finished products		1972	1973	1974	1975	1976	1977	1978
1974									
4.3	1.6	Northern Germany .....	4.9	5.0	5.9	6.3	6.5	6.7	6.7
11.0	2.3	North Rhine/Westphalia .....	11.4	12.8	12.7	12.7	13.2	13.5	13.5
—	—	Southern Germany .....	—	—	—	—	—	—	—
—	—	Saar .....	—	—	—	—	—	—	—
15.3	3.9	<i>Germany (FR)</i> .....	16.3	17.8	18.6	19.0	19.7	20.2	20.2
6.0	0.8	<i>Belgium</i> .....	6.2	6.3	6.7	7.1	7.8	8.8	9.0
3.1	0.1	Eastern France.....	3.2	3.2	3.2	3.2	3.3	3.3	3.5
4.4	0.5	Northern France .....	4.4	5.0	5.8	6.5	6.5	6.5	6.4
1.0	0.3	France: other areas .....	—	—	1.3	2.2	2.8	3.0	3.0
8.5	0.9	<i>France</i> .....	7.6	8.2	10.3	11.9	12.6	12.8	12.9
5.6	1.5	Italy: coastal areas .....	5.6	7.1	6.9	10.3	10.3	10.3	10.3
0.7	—	Italy: other areas .....	0.9	0.9	0.9	0.6	0.9	1.0	1.1
6.3	1.5	<i>Italy</i> .....	6.5	8.0	7.8	10.9	11.2	11.3	11.4
0.5	—	<i>Luxembourg</i> .....	0.5	0.5	0.6	0.6	0.6	0.6	0.6
3.6	0.5	<i>Netherlands</i> .....	4.8	5.0	4.3	4.4	4.9	5.0	5.1
40.2	7.6	<b>Total EUR 6</b>	41.9	45.8	48.3	53.9	56.8	58.7	59.2
0.9	0.2	Scotland .....	*	1.1	1.0	1.3	1.4	1.6	1.0
4.5	0.4	Wales .....	*	6.4	6.1	6.4	6.7	6.6	6.4
0.6	0.4	Northern England .....	*	1.1	0.9	0.9	0.9	1.3	1.5
—	—	England Other regions .....	*	—	—	—	—	—	—
6.0	1.0	<i>United Kingdom</i> .....	*	8.6	8.0	8.6	9.0	9.5	9.7
—	—	<i>Denmark</i> .....	*	—	—	—	—	—	—
—	—	<i>Ireland</i> .....	*	—	—	—	—	—	—
46.2	8.6	<b>Total EUR 9</b>	*	54.4	56.3	62.5	65.8	68.2	68.9

<sup>1</sup> Treaty products obtained by transformation of hot rolled coils are included in the tables 34, 35, 36 and 37.  
\* Figures not available.

**HEAVY AND LIGHT  
SECTIONS (INCLUDING  
TUBE ROUNDS AND  
SQUARES)**

**Production**

TABLE 34

Production and production potential by regions

*million tonnes*

Actual pro- duction  1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
1.7	Northern Germany .....	2.3	2.5	2.1	2.2	2.3	2.3	2.3
6.2	North Rhine/Westphalia ..	8.6	8.6	8.8	8.8	8.8	9.1	9.1
1.4	Southern Germany .....	1.4	1.7	1.7	1.7	1.7	1.8	1.8
2.3	Saar .....	2.5	2.7	2.8	2.9	2.9	2.9	2.9
11.6	<b>Germany (FR) .....</b>	<b>14.8</b>	<b>15.5</b>	<b>15.6</b>	<b>15.6</b>	<b>15.7</b>	<b>16.1</b>	<b>16.1</b>
4.4	<b>Belgium .....</b>	<b>5.6</b>	<b>5.6</b>	<b>5.9</b>	<b>5.7</b>	<b>5.7</b>	<b>5.5</b>	<b>5.5</b>
4.2	Eastern France .....	4.2	4.4	4.5	4.5	4.7	4.8	4.8
1.2	Northern France .....	1.3	1.3	1.4	1.6	1.7	1.7	1.8
1.1	France - other areas .....	1.3	1.2	1.4	1.6	1.7	1.7	1.7
6.5	<b>France .....</b>	<b>6.8</b>	<b>6.9</b>	<b>7.3</b>	<b>7.7</b>	<b>8.1</b>	<b>8.2</b>	<b>8.3</b>
1.3	Italy - coastal areas .....	2.4	2.0	1.9	1.9	2.0	2.2	2.6
6.3	Italy - other areas .....	6.0	7.5	7.3	8.0	8.5	9.0	9.2
7.6	<b>Italy .....</b>	<b>8.4</b>	<b>9.5</b>	<b>9.2</b>	<b>9.9</b>	<b>10.5</b>	<b>11.2</b>	<b>11.8</b>
2.5	<b>Luxembourg .....</b>	<b>2.5</b>	<b>2.8</b>	<b>2.9</b>	<b>3.1</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>
0.3	<b>Netherlands .....</b>	<b>0.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>
32.9	<b>Total EUR 6</b>	<b>38.7</b>	<b>40.7</b>	<b>41.3</b>	<b>42.4</b>	<b>43.6</b>	<b>44.6</b>	<b>45.4</b>
0.4	Scotland .....	*	0.6	0.5	0.3	0.4	0.4	0.4
0.3	Wales .....	*	0.4	0.4	0.4	0.4	0.5	0.7
3.3	Northern England .....	*	3.8	4.4	4.5	4.8	5.1	5.4
2.0	England - Other regions ...	*	2.1	2.4	2.4	2.5	2.2	2.2
6.0	<b>United Kingdom .....</b>	<b>*</b>	<b>6.9</b>	<b>7.7</b>	<b>7.6</b>	<b>8.1</b>	<b>8.2</b>	<b>8.7</b>
0.2	<b>Denmark .....</b>	<b>*</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>
0.1	<b>Ireland .....</b>	<b>*</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
39.2	<b>Total EUR 9</b>	<b>*</b>	<b>47.9</b>	<b>49.4</b>	<b>50.4</b>	<b>52.1</b>	<b>53.2</b>	<b>54.5</b>

\* Figures not available.

<b>WIRE ROD</b>
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<b>Production</b>
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TABLE 35

## Production and production potential by regions

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
0.5	Northern Germany .....	0.4	0.4	0.6	0.7	0.7	0.7	0.8
2.9	North Rhine/Westphalia ..	3.5	3.6	3.5	3.5	3.5	3.5	3.6
0.2	Southern Germany .....	0.4	0.3	0.3	0.3	0.4	0.4	0.4
1.1	Saar .....	0.7	0.9	1.3	1.5	1.5	1.5	1.5
4.7	<i>Germany (FR)</i> .....	5.0	5.2	5.7	6.0	6.1	6.1	6.3
0.8	<i>Belgium</i> .....	0.9	0.9	0.9	0.9	0.9	1.1	1.5
2.3	Eastern France .....	2.2	2.3	2.7	2.9	3.0	3.0	3.0
0.2	Northern France .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.5	France - other areas .....	0.4	0.5	0.6	0.7	0.8	0.9	0.9
3.0	<i>France</i> .....	2.9	3.1	3.6	3.9	4.1	4.2	4.2
0.2	Italy - coastal areas .....	0.3	0.3	0.3	0.3	0.3	0.3	0.5
1.0	Italy - other areas .....	1.3	1.4	1.5	1.6	1.6	1.7	1.8
1.2	<i>Italy</i> .....	1.6	1.7	1.8	1.9	1.9	2.0	2.3
0.5	<i>Luxembourg</i> .....	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.4	<i>Netherlands</i> .....	0.4	0.5	0.5	0.5	0.5	0.5	0.5
10.6	<b>Total EUR 6</b>	11.3	11.9	13.0	13.7	14.0	14.4	15.3
—	Scotland .....	*	—	—	—	—	—	—
0.4	Wales .....	*	0.4	0.4	0.4	0.5	0.6	0.7
1.6	Northern England .....	*	1.8	1.8	1.9	2.1	2.4	2.6
0.1	England - Other regions ...	*	0.1	0.1	0.1	0.2	0.3	0.4
2.1	<i>United Kingdom</i> .....	*	2.3	2.3	2.4	2.8	3.3	3.7
—	<i>Denmark</i> .....	*	0.1	—	—	—	—	—
—	<i>Ireland</i> .....	*	—	—	—	—	—	—
12.7	<b>Total EUR 9</b>	*	14.3	15.3	16.1	16.8	17.7	19.0

\* Figures not available.

<b>HOOP AND STRIP FOR TUBE MAKING</b>
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<b>Production</b>
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*TABLE 36*  
Production and production potential by regions

*million tonnes*

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
0.3	Northern Germany .....	0.1	0.1	0.2	0.2	0.3	0.2	0.3
2.4	North Rhine/Westphalia ..	3.3	3.3	3.4	3.5	3.8	3.9	3.6
0.1	Southern Germany .....	0.0	0.1	0.1	0.1	0.1	0.1	0.1
0.2	Saar .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3
3.0	<i>Germany (FR)</i> .....	3.7	3.8	4.0	4.1	4.5	4.5	4.3
0.2	<i>Belgium</i> .....	0.4	0.2	0.3	0.3	0.3	0.3	0.3
1.3	Eastern France .....	1.4	1.5	1.5	1.6	1.6	1.6	1.6
0.1	Northern France .....	0.1	0.1	0.2	0.2	0.2	0.2	0.2
0.1	France - other areas .....	—	0.0	0.2	0.4	0.4	0.5	0.5
1.5	<i>France</i> .....	1.5	1.6	1.9	2.2	2.2	2.3	2.3
0.7	Italy - coastal areas .....	0.9	0.9	0.8	0.9	0.9	0.9	0.9
0.5	Italy - other areas .....	0.6	0.7	0.7	0.7	0.8	0.8	0.8
1.2	<i>Italy</i> .....	1.5	1.6	1.5	1.6	1.7	1.7	1.7
1.0	<i>Luxembourg</i> .....	1.1	1.1	1.1	1.1	1.1	1.1	1.1
0.2	<i>Netherlands</i> .....	0.4	0.3	0.3	0.3	0.4	0.4	0.5
7.1	<b>Total EUR 6</b>	8.6	8.6	9.1	9.6	10.2	10.3	10.2
—	Scotland .....	*	—	—	—	—	—	—
0.1	Wales .....	*	0.2	0.2	0.1	0.1	0.2	0.2
0.4	Northern England .....	*	0.6	0.5	0.4	0.4	0.4	0.4
0.6	England - Other regions ...	*	1.1	1.1	1.1	1.1	1.2	1.3
1.1	<i>United Kingdom</i> .....	*	1.9	1.8	1.6	1.6	1.8	1.9
—	<i>Denmark</i> .....	*	—	—	—	—	—	—
—	<i>Ireland</i> .....	*	—	—	—	—	—	—
8.2	<b>Total EUR 9</b>	*	10.5	10.9	11.2	11.8	12.1	12.1

\* Figures not available.

**PLATE  $\geq$  3 mm  
(INCLUDING  
WIDE FLATS) <sup>1</sup>**

**Production**

*TABLE 37*

**Production and production potential by regions**

*million tonnes*

Actual pro- duction  1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
0.9	Northern Germany .....	1.3	1.1	1.0	1.0	1.0	1.1	1.1
5.3	North Rhine/Westphalia ..	6.9	6.6	6.3	6.3	6.4	6.6	7.2
—	Southern Germany .....	0.0	—	—	—	—	—	—
1.1	Saar .....	2.0	1.9	1.9	1.9	2.1	2.0	2.0
7.3	<i>Germany (FR)</i> .....	10.2	9.6	9.2	9.2	9.5	9.7	10.3
2.0	<i>Belgium</i> .....	1.8	1.8	2.2	2.3	2.3	2.4	2.4
0.9	Eastern France .....	1.2	1.1	1.1	1.1	1.0	1.0	1.0
1.1	Northern France .....	1.2	1.2	1.2	1.3	1.3	1.4	1.7
0.3	France - other areas .....	0.2	0.2	0.4	0.6	0.7	0.7	1.0
2.3	<i>France</i> .....	2.6	2.5	2.7	3.0	3.0	3.1	3.7
2.2	Italy - coastal areas .....	1.8	2.4	2.9	3.4	3.4	3.9	3.9
0.6	Italy - other areas .....	0.8	0.8	0.8	0.9	1.0	1.0	1.0
2.8	<i>Italy</i> .....	2.6	3.2	3.7	4.3	4.4	4.9	4.9
0.2	<i>Luxembourg</i> .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.5	<i>Netherlands</i> .....	0.8	0.8	0.8	0.8	0.8	0.8	0.8
15.1	<b>Total EUR 6</b>	18.3	18.2	18.9	19.9	20.3	21.2	22.4
0.5	Scotland .....	*	0.6	0.6	0.6	0.6	0.7	0.7
0.2	Wales .....	*	0.2	0.2	0.1	0.1	0.1	0.1
1.4	Northern England .....	*	1.5	1.5	1.5	1.6	1.7	1.7
0.2	England - Other regions ...	*	0.3	0.3	0.3	0.3	0.3	0.3
2.3	<i>United Kingdom</i> .....	*	2.6	2.6	2.5	2.6	2.8	2.8
0.2	<i>Denmark</i> .....	*	0.2	0.3	0.3	0.4	0.5	0.5
—	<i>Ireland</i> .....	*	—	—	—	—	—	—
17.6	<b>Total EUR 9</b>	*	21.0	21.8	22.7	23.3	24.5	25.7

<sup>1</sup> Except coils - finished products.  
\* Figures not available.

<b>HOT-ROLLED SHEET</b> <b>&lt; 3 mm <sup>1</sup></b>
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**Production**

**TABLE 38**  
**Production and production potential by regions**

Actual pro- duction  1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
—	Northern Germany .....	—	—	—	—	—	—	—
0.1	North Rhine/Westphalia ..	0.2	0.2	0.2	0.2	0.2	0.2	0.2
—	Southern Germany .....	—	—	—	—	—	—	—
—	Saar .....	—	—	—	—	—	—	—
0.1	<i>Germany (FR)</i> .....	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.1	<i>Belgium</i> .....	0.2	0.2	0.2	0.2	0.2	0.3	0.3
0.1	Eastern France .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	Northern France .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1
—	France - other areas .....	0.1	0.1	0.1	0.1	0.2	0.2	0.2
0.2	<i>France</i> .....	0.3	0.3	0.3	0.3	0.4	0.4	0.4
—	Italy: coastal areas .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4
—	Italy: other areas .....	—	—	—	—	—	—	—
—	<i>Italy</i> .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4
—	<i>Netherlands</i> .....	0.0	—	—	—	—	—	0.1
0.4	<b>Total EUR 6</b>	1.0	1.0	1.0	1.1	1.2	1.3	1.4
—	Scotland .....	*	0.0	0.0	0.0	0.0	0.0	0.0
0.1	Wales .....	*	0.1	0.1	0.0	0.0	0.0	0.0
—	Northern England .....	*	0.0	0.0	0.0	0.0	0.0	0.0
—	England - Other regions ...	*	—	—	—	—	—	—
0.1	<i>United Kingdom</i> .....	*	0.1	0.1	0.1	0.1	0.1	0.1
—	<i>Denmark</i> .....	*	—	—	—	—	—	—
—	<i>Ireland</i> .....	*	—	—	—	—	—	—
0.5	<b>Total EUR 9</b>	*	1.1	1.1	1.2	1.3	1.4	1.5

<sup>1</sup> Except coils - finished products.  
\* Figures not available.

**COLD-REDUCED SHEET  
< 3 mm**

**Production**

TABLE 39

**Production and production potential by regions**

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
1.6	Northern Germany .....	2.3	2.2	2.2	2.5	2.5	2.6	2.7
4.9	North Rhine/Westphalia ..	6.6	7.7	7.0	7.2	7.5	7.6	7.6
1.7	Southern Germany .....	2.4	2.9	2.8	2.8	2.8	2.8	2.8
—	Saar .....	—	—	—	—	—	—	—
8.2	<i>Germany (FR)</i> .....	11.3	12.8	12.0	12.5	12.8	13.0	13.1
3.7	<i>Belgium</i> .....	4.4	4.4	4.5	5.1	5.2	5.2	5.2
3.3	Eastern France .....	3.3	3.4	3.5	3.6	3.8	3.8	3.8
2.6	Northern France .....	2.4	2.8	3.3	3.9	4.1	4.2	4.2
0.5	France - other areas .....	0.4	0.6	0.7	0.7	0.9	0.9	0.9
6.4	<i>France</i> .....	6.1	6.8	7.5	8.2	8.8	8.9	8.9
1.6	Italy - coastal areas .....	2.0	2.3	2.6	2.6	2.6	2.6	3.3
2.4	Italy - other areas .....	2.9	2.8	2.8	2.9	3.0	3.0	3.0
4.0	<i>Italy</i> .....	4.9	5.1	5.4	5.5	5.6	5.6	6.3
0.3	<i>Luxembourg</i> .....	0.3	0.4	0.4	0.4	0.4	0.4	0.4
1.9	<i>Netherlands</i> .....	2.6	2.1	2.3	2.4	2.6	2.7	2.8
24.5	<b>Total EUR 6</b>	29.6	31.6	32.1	34.1	35.4	35.8	36.7
0.4	Scotland .....	*	0.5	0.5	0.5	0.6	0.8	0.9
3.8	Wales .....	*	4.9	9.1	5.3	5.4	5.8	6.0
—	Northern England .....	*	—	0.1	0.1	0.1	0.2	0.2
—	England - Other regions ...	*	—	—	—	—	—	—
4.2	<i>United Kingdom</i> .....	*	5.4	5.6	5.9	6.1	6.8	7.1
—	<i>Denmark</i> .....	*	—	—	—	—	—	—
—	<i>Ireland</i> .....	*	—	—	—	—	—	—
28.7	<b>Total EUR 9</b>	*	37.0	37.7	40.0	41.5	42.6	43.8

\* Figures not available.



## SECTIONS

## Production

TABLE 40  
Production and production potential by regions

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
2.2	Northern Germany .....	2.7	2.9	2.6	2.9	3.0	3.0	3.1
9.1	North Rhine/Westphalia ..	12.1	12.2	12.2	12.3	12.3	12.7	12.7
1.7	Southern Germany .....	1.8	2.0	2.0	2.0	2.1	2.1	2.2
3.3	Saar .....	3.2	3.6	4.1	4.3	4.3	4.3	4.3
16.3	<b>Germany (FR) .....</b>	<b>19.8</b>	<b>20.7</b>	<b>20.9</b>	<b>21.5</b>	<b>21.7</b>	<b>22.1</b>	<b>22.3</b>
5.2	<b>Belgium .....</b>	<b>6.5</b>	<b>6.5</b>	<b>6.8</b>	<b>6.7</b>	<b>6.6</b>	<b>6.6</b>	<b>7.1</b>
6.5	Eastern France .....	6.4	6.7	7.2	7.4	7.7	7.9	8.0
1.4	Northern France .....	1.6	1.6	1.7	1.9	2.1	2.1	2.1
1.6	France - other areas .....	1.7	1.7	2.0	2.3	2.5	2.6	2.6
9.5	<b>France .....</b>	<b>9.7</b>	<b>10.0</b>	<b>10.9</b>	<b>11.6</b>	<b>12.3</b>	<b>12.6</b>	<b>12.6</b>
1.5	Italy - coastal areas .....	2.7	2.3	2.2	2.2	2.3	2.5	3.1
7.3	Italy - other areas .....	7.3	8.9	9.2	9.5	10.1	10.5	10.9
8.8	<b>Italy .....</b>	<b>10.0</b>	<b>11.2</b>	<b>11.4</b>	<b>11.7</b>	<b>12.4</b>	<b>13.0</b>	<b>14.0</b>
3.0	<b>Luxembourg .....</b>	<b>3.0</b>	<b>3.3</b>	<b>3.4</b>	<b>3.6</b>	<b>3.7</b>	<b>3.7</b>	<b>3.7</b>
0.7	<b>Netherlands .....</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>
43.5	<b>Total EUR 6</b>	<b>50.0</b>	<b>52.6</b>	<b>54.3</b>	<b>56.1</b>	<b>57.6</b>	<b>59.0</b>	<b>60.7</b>
0.4	Scotland .....	*	0.6	0.5	0.4	0.4	0.4	0.3
0.7	Wales .....	*	0.8	0.8	0.8	0.9	1.1	1.4
4.9	Northern England .....	*	5.6	6.2	6.4	6.9	7.5	8.0
2.1	England - Other regions ...	*	2.3	2.5	2.5	2.8	2.5	2.7
8.1	<b>United Kingdom .....</b>	<b>*</b>	<b>9.3</b>	<b>10.0</b>	<b>10.1</b>	<b>11.0</b>	<b>11.5</b>	<b>12.4</b>
0.2	<b>Denmark .....</b>	<b>*</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>
0.1	<b>Ireland .....</b>	<b>*</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
51.9	<b>Total EUR 9</b>	<b>*</b>	<b>62.2</b>	<b>64.7</b>	<b>66.5</b>	<b>68.9</b>	<b>70.9</b>	<b>73.5</b>

\* Figures not available.

<b>FLAT PRODUCTS <sup>1</sup></b>
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**Production**

TABLE 41

## Production and production potential by regions

million tonnes

Actual production 1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
2.8	Northern Germany .....	3.7	3.4	3.5	3.7	3.7	3.9	4.1
12.7	North Rhine/Westphalia ..	17.0	17.8	16.9	17.2	18.0	18.3	18.6
1.8	Southern Germany .....	2.4	3.0	2.8	2.9	2.9	2.9	2.9
1.4	Saar .....	2.3	2.2	2.2	2.2	2.3	2.3	2.3
18.7	<b>Germany (FR) .....</b>	<b>25.4</b>	<b>26.4</b>	<b>25.4</b>	<b>26.0</b>	<b>26.9</b>	<b>27.4</b>	<b>27.9</b>
5.9	<b>Belgium .....</b>	<b>6.8</b>	<b>6.6</b>	<b>7.3</b>	<b>7.8</b>	<b>8.0</b>	<b>8.1</b>	<b>8.1</b>
5.6	Eastern France .....	6.0	6.1	6.2	6.4	6.5	6.4	6.5
3.9	Northern France .....	3.8	4.2	4.8	5.5	5.6	5.8	6.1
0.8	France - other areas .....	0.7	0.9	1.4	1.9	2.3	2.4	2.7
10.3	<b>France .....</b>	<b>10.5</b>	<b>11.2</b>	<b>12.4</b>	<b>13.8</b>	<b>14.4</b>	<b>14.6</b>	<b>15.3</b>
4.5	Italy - coastal areas .....	5.0	5.9	6.5	7.3	7.4	7.9	8.5
3.5	Italy - other areas .....	4.3	4.3	4.3	4.5	4.8	4.9	4.9
8.0	<b>Italy .....</b>	<b>9.3</b>	<b>10.2</b>	<b>10.8</b>	<b>11.8</b>	<b>12.2</b>	<b>12.8</b>	<b>13.4</b>
1.6	<b>Luxembourg .....</b>	<b>1.7</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>
2.7	<b>Netherlands .....</b>	<b>3.8</b>	<b>3.2</b>	<b>3.4</b>	<b>3.5</b>	<b>3.8</b>	<b>3.9</b>	<b>4.2</b>
47.2	<b>Total EUR 6</b>	<b>57.5</b>	<b>59.4</b>	<b>61.1</b>	<b>64.7</b>	<b>67.1</b>	<b>68.6</b>	<b>70.7</b>
0.9	Scotland .....	*	1.2	1.2	1.1	1.2	1.5	1.6
4.1	Wales .....	*	5.3	5.5	5.5	5.6	6.1	6.3
1.8	Northern England .....	*	2.1	2.1	2.2	2.2	2.4	2.4
0.8	England - Other regions ...	*	1.4	1.4	1.4	1.4	1.5	1.6
7.6	<b>United Kingdom .....</b>	<b>*</b>	<b>10.0</b>	<b>10.2</b>	<b>10.2</b>	<b>10.4</b>	<b>11.5</b>	<b>11.9</b>
0.2	<b>Denmark .....</b>	<b>*</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>
—	<b>Ireland .....</b>	<b>*</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
55.0	<b>Total EUR 9</b>	<b>*</b>	<b>69.6</b>	<b>71.5</b>	<b>75.2</b>	<b>77.9</b>	<b>80.6</b>	<b>83.1</b>

<sup>1</sup> Except coils - finished products.  
 \* Figures not available.

<b>TOTAL FINISHED ROLLED PRODUCTS <sup>1</sup></b>
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Production

**TABLE 42**  
**Production and production potential by regions**

*million tonnes*

Actual pro- duction  1974	Region	Production potential			Expected production potential			
		1972	1973	1974	1975	1976	1977	1978
5.0	Northern Germany .....	6.4	6.3	6.1	6.6	6.7	6.9	7.1
21.9	North Rhine/Westphalia ..	29.1	30.0	29.1	29.5	30.3	31.0	31.3
3.5	Southern Germany .....	4.2	5.0	4.9	4.9	5.0	5.0	5.0
4.7	Saar .....	5.5	5.8	6.4	6.6	6.7	6.7	6.7
35.1	<b>Germany (FR) .....</b>	<b>45.2</b>	<b>47.1</b>	<b>46.5</b>	<b>47.6</b>	<b>48.7</b>	<b>49.6</b>	<b>50.1</b>
11.2	Belgium .....	13.3	13.1	14.1	14.5	14.6	14.8	15.2
12.0	Eastern France .....	12.4	12.8	13.4	13.9	14.2	14.2	14.2
5.4	Northern France .....	5.4	5.8	6.5	7.4	7.7	7.9	8.3
2.4	France - other areas .....	2.4	2.6	3.3	4.2	4.8	5.0	5.3
19.8	<b>France .....</b>	<b>20.2</b>	<b>21.2</b>	<b>23.2</b>	<b>25.5</b>	<b>26.7</b>	<b>27.1</b>	<b>27.8</b>
5.9	Italy - coastal areas .....	7.7	8.2	8.7	9.5	9.7	10.4	11.6
11.0	Italy - other areas .....	11.6	13.2	13.5	14.0	14.9	15.4	15.8
16.9	<b>Italy .....</b>	<b>19.3</b>	<b>21.4</b>	<b>22.2</b>	<b>23.5</b>	<b>24.6</b>	<b>25.8</b>	<b>27.4</b>
4.5	Luxembourg .....	4.7	5.1	5.2	5.4	5.4	5.4	5.4
3.4	Netherlands .....	4.8	4.1	4.3	4.4	4.7	4.9	5.3
90.9	<b>Total EUR 6</b>	<b>107.5</b>	<b>112.0</b>	<b>115.5</b>	<b>120.9</b>	<b>124.7</b>	<b>127.6</b>	<b>131.2</b>
1.4	Scotland .....	*	1.8	1.7	1.4	1.6	1.9	2.0
4.8	Wales .....	*	6.1	6.3	6.4	6.5	7.2	7.7
6.5	Northern England .....	*	7.7	8.3	8.6	9.0	9.8	10.4
2.9	England - Other regions ...	*	3.7	3.9	3.9	4.2	4.0	4.2
15.6	<b>United Kingdom .....</b>	<b>*</b>	<b>19.3</b>	<b>20.2</b>	<b>20.3</b>	<b>21.3</b>	<b>22.9</b>	<b>24.3</b>
0.5	Denmark .....	*	0.5	0.5	0.5	0.7	0.9	0.8
0.1	Ireland .....	*	—	—	—	—	—	—
107.1	<b>Total EUR 9</b>	<b>*</b>	<b>131.8</b>	<b>136.2</b>	<b>141.7</b>	<b>146.7</b>	<b>151.4</b>	<b>156.3</b>

<sup>1</sup> Except coils - finished products.  
\* Figures not available.