

EUROPEAN COAL AND STEEL COMMUNITY

COMMISSION

**Investment in the Community  
coalmining and iron and steel  
industries**

REPORT ON THE 1973 SURVEY

Position as at 1 January 1973

in the six countries of the original Community

JULY 1973

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## I — GENERAL REMARKS

It is the practice of the Commission of the European Communities to conduct an annual survey of past and future investment by coal and steel undertakings in the European Coal and Steel Community and of the impact of such investment on production potential. The survey covers all but a very few small enterprises whose combined share of total production has in any case never amounted to more than 1% for coal, 1% for crude steel and 2% for rolled products.

The figures from previous surveys for the years 1954-1965 are summarized in a Report issued in 1966 entitled "Investment in the Community Coalmining and Iron and Steel Industries: Recapitulative Report on the 1956-1966 Surveys". The statistical annexes to the 1972 survey therefore only show the figures from 1966 onwards.

The present 1973 survey only covers the industries of the six countries who have been part of the ECSC since 1952. Although Denmark, Ireland and the United Kingdom joined this Community on 1 January 1973, enterprises in these countries have not yet been able to take part in the survey since the preparatory work began in mid 1972. Consequently, as previously, the Report deals only with investments in enterprises in the six countries of the original Community.

**Appendix I** to the report sets out the basic definitions adopted. In particular it specifies that investment projects have been classified in three categories, according to their status on 1st January 1973, viz: already completed or in progress (category A), approved (category B), or merely planned (category C). On this point it should be emphasized that this year the presentation of the survey results has been modified. Previously in the case of the extractive industries, investments which were planned (C) were taken into account under the same heading as investments already in progress or approved, while in the case of the iron and steel industry only investments already in progress or approved were taken into consideration in the reports to the exclusion of planned investment. Experience has shown that because of the development of the coal mining industry and iron ore mines it is more appropriate, from the point of view of reliability of forecasts, to consider investments in these industries in the same way as in the iron and steel industry, that is to say that generally speaking only investments completed or approved should be included in the reports. The method followed previously was based on the fact that in the iron and steel industry investments which were planned might not be implemented; in contrast, in the extractive industries, projects in category (C) reflected the technical prolongation of work actually in progress and because of the sustained development which these industries have enjoyed for a considerable time, their completion was virtually certain. Today, the reduction in outlets and the difficulties in financing the extractive industries obliges them to restrict investment to a limited number of investments in the field of rationalization; projects which are simply planned are often postponed, if not cancelled. Thus, to assimilate planned programmes into approved programmes would lead to the report including forecasts which might not be fulfilled. This was true of the reports for 1970 and 1971. In contrast, the figures for projects actually completed would have been much closer to the forecasts had these been based only on projects in progress and approved. In these conditions, the report will henceforth only include those investments in progress or approved for the extractive industries as is the case in the iron and steel industry.

**Appendix II** to the Report gives a regional breakdown of past and future investments and trends in **production potential**.

Since 1st January 1954, when the annual surveys on capital expenditure were first started, the unit of account used for the expenditure figures has successively been that of the European Payments Union (EPU), then that of the European Monetary Agreement (EMA) the value of which has remained at its present level of 0.888671 g. of fine gold. This unit of account has again been used to express the figures in the annual financial report, the balance sheet and the receipts and payments of the ECSC as at 31st December 1972. The exchange rates for the national currencies of member countries of the Community for this unit of account remain those as defined by the official parities, which have not so far been changed by the governments of the Member States by notification to the International Monetary Fund.

For the particular purposes of this year's survey, the figures relating to capital expenditure returned by the enterprises in terms of national currencies as at 1 January 1973, have been converted to a unit of account, this procedure being better suited to statistical requirements. This unit, which was employed in the previous survey, takes account of the monetary readjustments adopted on 18 December 1971 in Washington which have not, however, been officially sanctioned by the International Monetary Fund. The value of this European Communities' unit of account, which will hereafter be referred to by the term "Eur" for convenience, is also 0.888671 g. of fine gold; conversions of sums expressed in national currencies carried out subsequent to the 18th December 1971 are in accordance with the new "central rates" adopted between that date and the 1st January 1973 and recapitulated in Appendix I, 1. Where a parity has been changed in the course of a given period, the figures for that period are expressed on a *pro rata temporis* basis.

With these reservations, and although the Eur unit of account does not fully reflect the variations in the cost of capital equipment<sup>1</sup> and wages incurred during the construction period, the use of this unit of account nevertheless makes it possible to adduce certain observations of a general nature.

#### (a) Capital expenditure

Capital expenditure in the **coal mining industry** was 142 m units of account in 1972 and is estimated at 179 m for 1973 (projects in progress and approved excluding, as mentioned above, planned projects). Although expenditure exceeded the forecast slightly, the 1972 level was below that in all preceding years, with the exception of 1969, 1970 and 1971.

In 1972, capital expenditure in the **iron and steel industry** —which had grown rapidly since 1967— exceeded the record levels of 1970 and 1971, which years reflected the effect of important decisions to increase capacity taken at that time. The total expenditure in 1972 was 2 628 m, or almost four times the level recorded during the previous period which was characterized by weak market conditions. The present forecasts for 1973 are a new record of 2 700 m and indicate that 1974, at over 1 700 m, will be at an even higher level.

Thus capital expenditure of 2 800 m in the coal and iron and steel industries in 1972, is well above the average of 1 300 m recorded since the first annual survey on investments to 1971 inclusive. While expenditure in the coal and iron-ore mining industries in 1972 was very much lower than their respective

<sup>1</sup> See Appendix I, Basic Definitions 1, d.

FIGURE 1

Comparison of Actual Capital Expenditure  
and Estimated Capital Expenditure as at the Beginning of Each Year

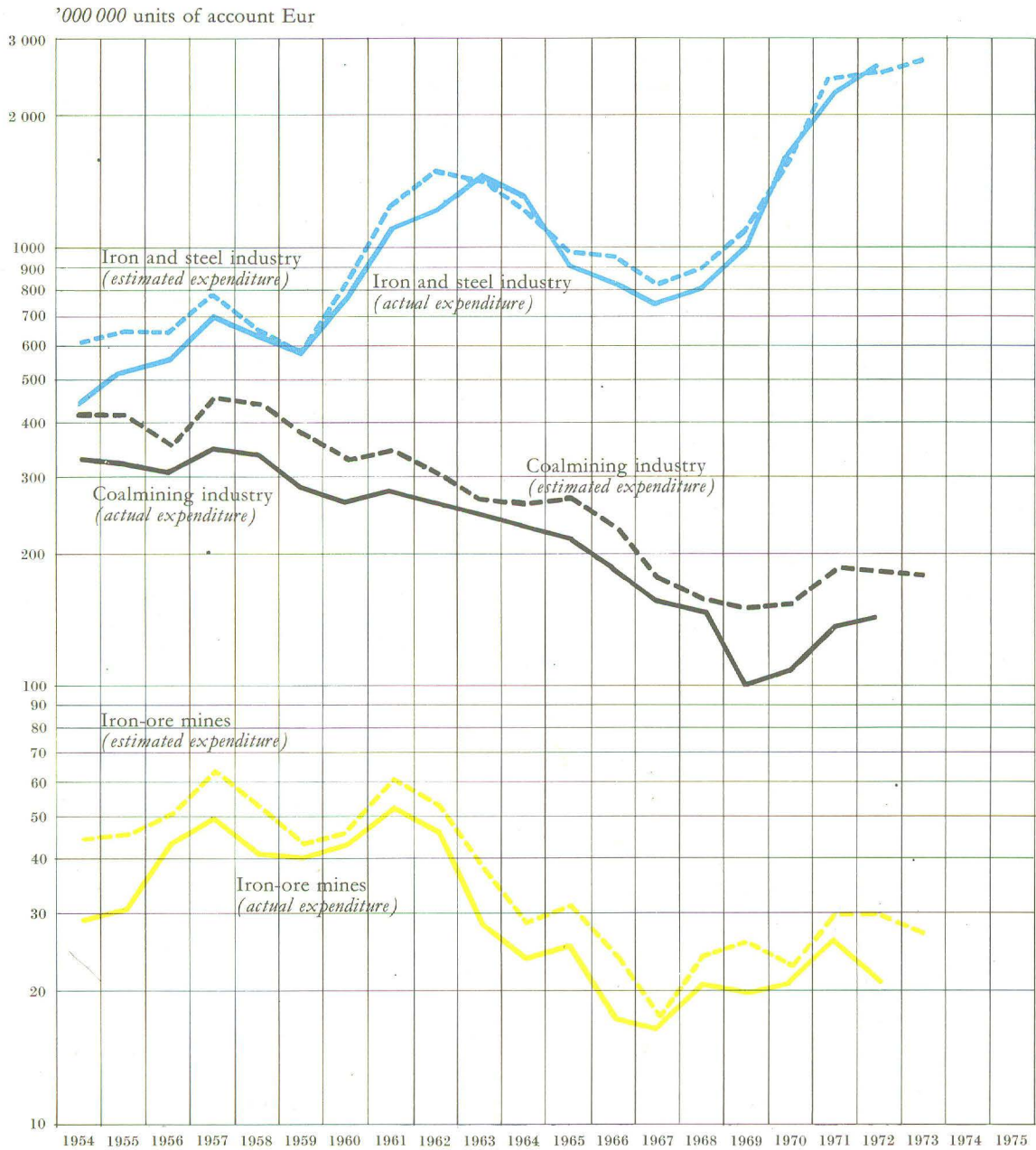


TABLE 1  
Capital Expenditure in the Community Industries, 1954-74

'000 000 units of account Eur

Sectors	Actual expenditure														Estimated expenditure (cat. A+B) <sup>(1)</sup>	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974 <sup>(2)</sup>
Coal mines <sup>(3)</sup> .....	327	268	283	267	250	235	219	189	159	150	101	108	136	142	179	77
Briquette and lignite char plants .....	5	6	4	6	9	8	8	4	5	4	4	2	7	9	7	5
Iron-ore mines .....	39	43	52	47	28	24	25	17	16	21	20	21	26	21	27	8
Iron and steel industry	581	775	1 123	1 230	1 480	1 315	932	848	730	802	1 039	1 706	2 266	2 628	2 693	1 735
<b>Total</b>	<b>952</b>	<b>1 092</b>	<b>1 462</b>	<b>1 550</b>	<b>1 767</b>	<b>1 582</b>	<b>1 184</b>	<b>1 058</b>	<b>910</b>	<b>977</b>	<b>1 164</b>	<b>1 837</b>	<b>2 435</b>	<b>2 800</b>	<b>2 906</b>	<b>1 825</b>
Pithead power-stations and other power generating plants .....	107	103	97	100	76	56	59	61	84	133	...	...	...	...	...	...

<sup>(1)</sup> The estimates for the extractive industries (coal and iron—ore mines) relate, like those for the iron and steel industry, only to expenditure on projects already in progress (cat. A) and on projects approved (cat. B).

<sup>(2)</sup> On 1 January 1973, the enterprises were still unable to give a complete estimate of their actual expenditure in 1974. Accordingly, the estimates shown in all tables of this Report are less accurate for 1974 than for 1973.

<sup>(3)</sup> Excluding capital expenditure on pithead power stations and other generating plants.

annual averages, that of the iron and steel industry was almost three times the annual average figure since 1954.

The figures are of course not strictly comparable throughout the period, and for their interpretation Appendix I 1, d indicates a plant price index for 1960 to 1971.

The figures in this survey for 1971 and 1972 vary slightly from those given in the 1972 report, for the following reasons:

- In the case of 1971 the expenditure figures which were returned before the balance sheets were closed have been corrected;
- in the case of 1972 the actual expenditure differs to a greater or lesser extent from the expenditure forecasts presented on 1st January. In fact, the survey made on 1st January 1972<sup>1</sup> suggested that for the year commencing on that date capital expenditure would be 187 million in the coal mining industry, 26 million in the iron-ore mining industry and 2 601 m in the iron and steel industry. The actual figures were 151 m in the coal mining industry, 21 m in the iron-ore mining industry and 2 628 m in the iron and steel industry, the estimates thus proved to be 81%, 81% and 101% correct respectively (see figure 1).

Exceptionally, in view of the generally mediocre market situation in the iron and steel industry in most of the Community countries during a part of 1972, actual expenditure slightly exceeded the

<sup>1</sup> This concerns expenditure for investment projects in progress (A) and approved (B) and excluding investment projects which are merely planned (C).

forecasts. It is true, however, that this performance was influenced by the increase in the price of materials and equipment; also the performance in relation to forecasts was not uniform in all countries and regions.

TABLE 2  
General Trend in Investment in Recent Years

Sector	Projects effected														Expenditure scheduled for 1973
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	
Coal mines <sup>(1)</sup> .....	100	83	86	82	78	73	68	58	49	46	32	33	42	43	54
Iron-ore mines .....	100	110	133	121	72	62	64	44	41	54	51	54	67	54	69
Iron and steel industry ...	100	133	193	212	255	226	160	146	126	138	179	294	390	452	464
All ECSC industries .....	100	115	154	163	186	166	124	111	96	103	122	193	256	294	305

<sup>(1)</sup> Excluding capital expenditure on pithead power stations and other generating plants.

### (b) Production Potential

According to the estimates returned by the coal undertakings, the annual **coal extraction potential** will drop by some 36 m metric tons between 1972 and 1976 thus declining from 166 to 130 m metric tons. This drop is the largest so far announced by a survey. It confirms the increase in the rate of regression announced by all the preceding surveys: 8 m from 1969 to 1973, 14 m from 1970 to 1974 and 19 m from 1971 to 1975.

**Iron and steel** production potential will increase by 28 m metric tons during the next four years to reach a total of 168 m metric tons in 1976; in absolute figures this increase is of the same order as those predicted by the preceding survey up to 1975.

The utilization rate of production potential has remained practically stationary for some years in the mining industry (coal and iron-ore) although it was true that in 1972 there had been a new rapid decline in production potential.

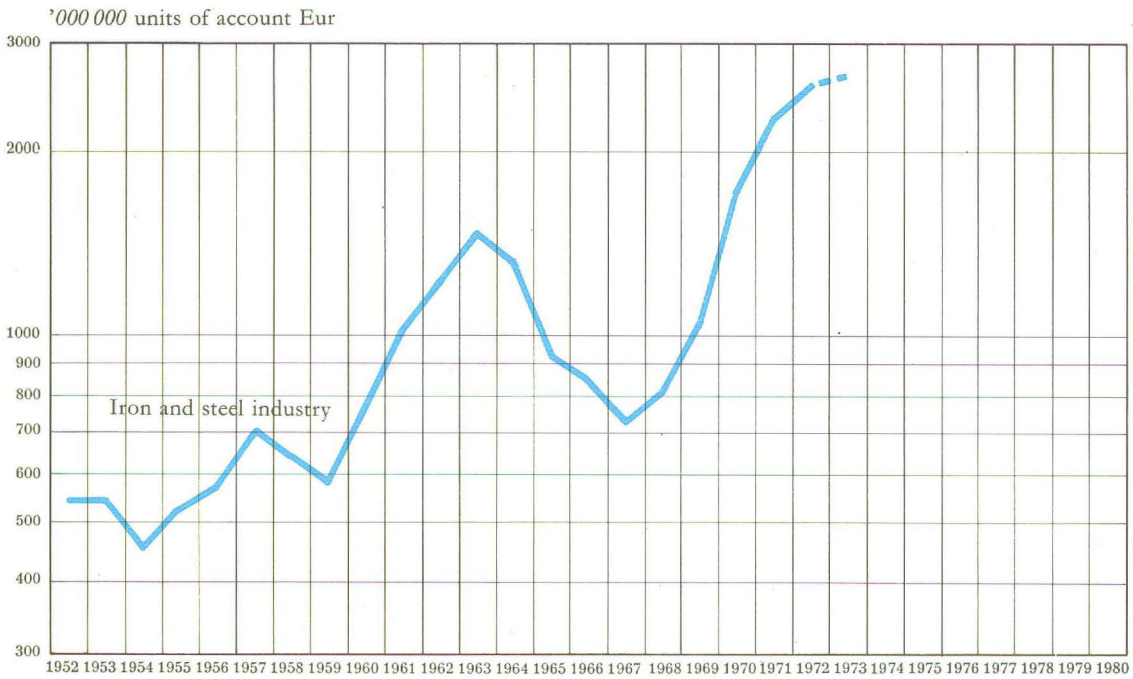
In the pig-iron and steel sectors the rate of utilization which after an unprecedented fall in 1971 had fallen to the lowest point ever recorded, pulled up again during 1972, when a rate of about 80% was again achieved. In the coke-making sector, which of course was not only linked with the iron and steel industry, the rate of utilization had been notable for a fall although a less important one than in 1971.<sup>1</sup>

<sup>1</sup> According to the definitions adopted it is in practice impossible for utilization rates ever to reach 100 %: the total potential declared by all the enterprises together is necessarily above the maximum possible overall production since unforeseeable incidents or circumstances during the course of any year make it impossible for some plants to achieve their maximum even when their sales position is satisfactory

FIGURE 2.

Investment in the Iron and Steel Industries

A—Capital expenditure



B—Actual production and production potential

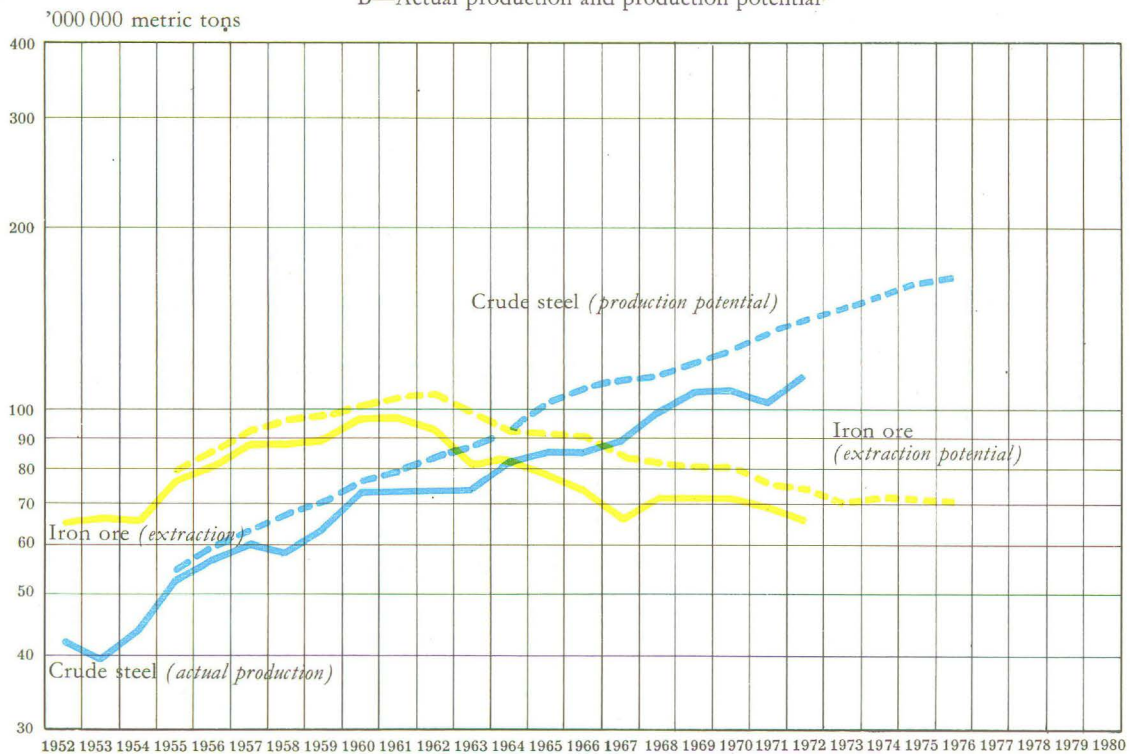
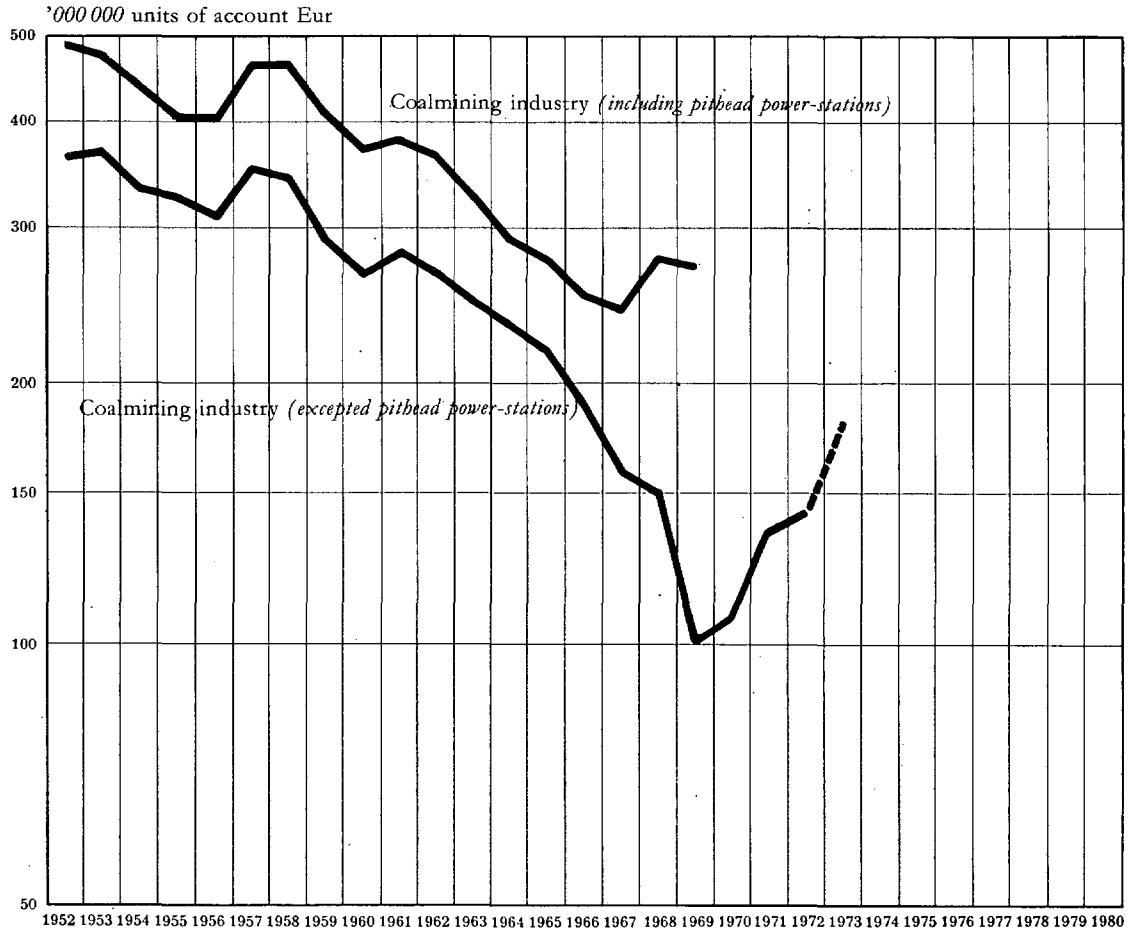




FIGURE 3

Investment in the Coalmining Industry

A—Capital expenditure



B—Actual production and production potential

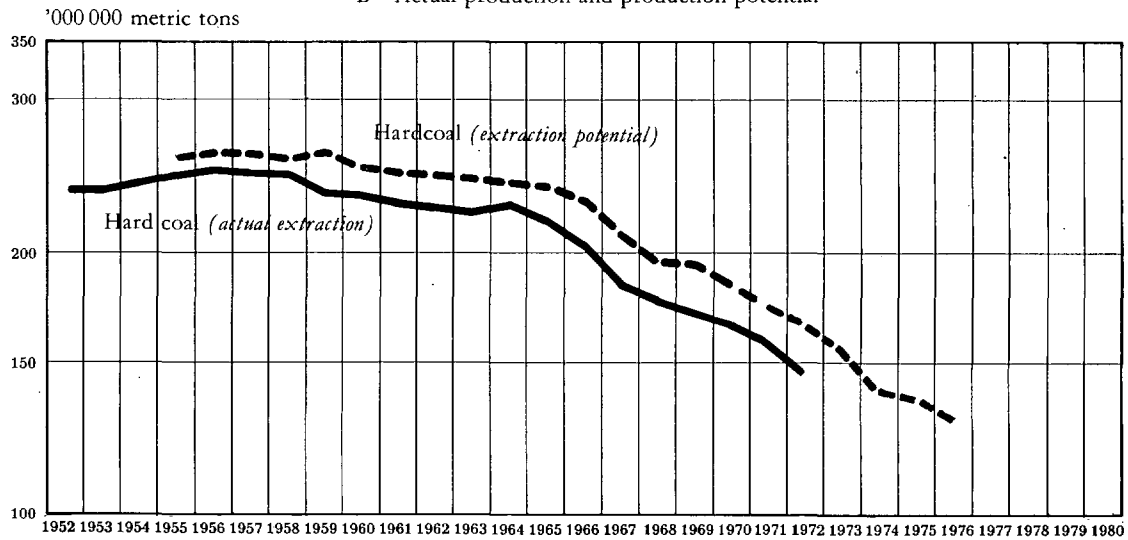


TABLE 3  
Actual Production and Production in the Community Industries

Product	Actual production			Production potential				
	1952 ( <sup>'000 000</sup> metric tons)	Average cumu- lative annual movement (%)	1972 ( <sup>'000 000</sup> metric tons)	(1968 ( <sup>'000 000</sup> metric tons)	Average cumu- lative annual movement (%)	1972 ( <sup>'000 000</sup> metric tons)	Average cumu- lative annual movement (%)	1976 ( <sup>'000 000</sup> metric tons)
Coal (1) .....	237.4	— 2.4	145.7	195.2	— 3.9	166.0	— 6.0	129.7
Coke.....	61.2	+ 0.0	62.2	70.8	+ 0.3	71.6	+ 1.0	74.6
Iron ore .....	65.3	+ 0.0	66.0	81.9	— 2.4	74.1	— 1.2	70.6
Pig-iron.....	34.7	+ 4.3	81.3	85.0	+ 4.6	101.8	+ 5.1	124.4
Crude steel .....	41.8	+ 5.1	113.1	114.8	+ 5.0	139.7	+ 4.7	167.9

(1) Excluding "small mines" (See Annex I, IIa).

Moreover, the rates of utilization, especially in relation to steel production potential are on quite different levels according to country and region. In particular, rates above the Community average have been established in France and the Benelux countries.

TABLE 4  
Community Ratios of Actual Production to Production Potential

Product	in %																	
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Hard coal .....	94.9	94.6	95.1	94.8	89.3	92.6	92.7	92.0	91.7	94.0	91.1	88.9	87.9	90.1	88.8	89.9	90.9	87.8
Coke .....	93.2	96.5	96.1	92.2	84.3	85.7	85.3	85.0	84.2	90.2	92.7	88.9	87.1	92.0	98.3	99.1	89.4	86.9
Iron ore .....	95.4	95.1	94.9	91.3	90.9	94.6	91.7	87.6	81.9	88.3	87.0	80.7	78.2	86.9	88.5	88.5	90.2	89.1
Pig-iron .....	96.3	96.0	94.7	87.9	88.3	94.3	90.9	85.5	81.0	88.2	83.8	77.0	79.2	84.8	89.7	85.4	76.6	79.9
Crude steel .....	95.8	96.1	94.1	85.7	89.6	95.6	91.7	87.3	83.4	90.0	84.3	78.7	80.0	85.9 (1)	88.8 (1)	86.1 (1)	76.1	81.0

(1) These three figures were influenced by industrial unrest in France in 1968 and in Italy in 1969 and 1970.

## II—COAL MINING INDUSTRY

Having fallen to its lowest level in 1969 and 1970, especially in the Ruhr mines where reorganization was taking place, capital expenditure in the coal mining industry of the six countries of the original Community recovered somewhat. Even so the amount was less than half of the expenditure recorded at the beginning of the 1960's whereas, throughout the industries of the Community, annual investments have virtually doubled in the last 10 years. Also, influenced by the rate at which demand was contracting, the companies made only very limited investments strictly aimed at rationalization.

In 1972 as in 1971 the Ruhr collieries accounted for over 60 % of the expenditure in the Community coal mining industry. In 1973 these collieries predict a considerable increase in their expenditure so that the forecasts for the whole of the Community show a 25 % increase in relation to that achieved in 1972.

TABLE 5  
Capital Expenditure in the Coalmining Industry<sup>2</sup> 1954-74

'000 000 units of account Eur

Sector	Actual expenditure															Estimated expenditure (cat. A+B) <sup>(1)</sup>	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	
Collieries .....	253.9	226.0	235.4	220.5	217.5	202.9	190.4	162.8	139.9	127.9	86.2	85.4	93.1	92.0	131.7	56.0	
Coking plants, mine-owned .....	57.5	33.7	43.1	35.9	19.0	17.3	15.8	13.2	10.2	16.6	10.0	18.7	37.8	45.2	41.2	17.9	
Coking plants, independent <sup>(2)</sup> .....	10.8	1.6	1.4	5.1	3.5	5.9	5.0	5.3	3.8	4.6	4.4	2.4	4.7	4.0	3.6	0.8	
Briquetting plants ...	5.0	7.1	3.4	5.1	9.5	9.1	7.5	7.3	4.8	0.9	0.7	1.2	0.9	0.6	2.1	2.2	
<b>Total<sup>(2)</sup></b>	<b>327.2</b>	<b>268.4</b>	<b>283.3</b>	<b>266.6</b>	<b>249.5</b>	<b>235.2</b>	<b>218.7</b>	<b>188.6</b>	<b>158.7</b>	<b>150.0</b>	<b>101.3</b>	<b>107.7</b>	<b>136.5</b>	<b>141.8</b>	<b>178.6</b>	<b>76.9</b>	
Plants producing BKB and low-temperature brown-coal coke .....	5.0	6.0	3.8	6.0	9.0	8.3	7.9	3.8	5.0	3.6	4.4	2.5	7.2	9.4	7.4	5.1	
Pithead power-stations and other generating plants .....	107.0	102.6	96.9	99.9	75.8	55.5	58.9	61.2	84.4	132.7	...	...	...	...	...	...	

<sup>(1)</sup> The estimates relate only to expenditure on projects already in progress (cat. A) and on projects approved (cat. B).

<sup>(2)</sup> Excluding capital expenditure on pithead power stations and other generating plants.

<sup>(3)</sup> Less the French nationalized gas industry (Gaz de France) from 1957.

FIGURE 4

Capital Expenditure in the Coalmining Industry



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

However, during recent years the final figures have generally been considerably below the forecasts made at the beginning of the year. In the longer term the survey reveals hardly any large investment programme: expenditure forecast for 1974 will be extremely modest.<sup>1</sup>

### (a) Pits

Capital expenditure at the pits, after a continuous decline from 1961 to 1970, has stabilized at a level which is however much lower than that observed at the beginning of the sixties.

The capital expenditure per metric ton extracted was of the order of 1.05 Eur units of account between 1954 and 1959 but declined to 0.50 in 1969, 0.52 in 1970, 0.58 in 1971 and 0.63 in 1972, during which time the sale price of Community coal had increased substantially.

TABLE 6  
Capital Expenditure on Pits 1954-72

'000 000 units of account Eur

Type of installation	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Shafts and underground workings .....	56.3	48.7	42.6	37.0	41.3	38.3	35.3	25.8	20.0	18.9	11.2	8.1	10.3	11.7
Mechanical equipment below ground .....	56.8	52.7	58.3	56.4	56.5	59.8	56.6	51.4	50.5	50.4	34.4	37.5	38.1	35.2
Haulage and winding equipment .....	21.4	25.8	24.4	21.3	16.6	14.7	14.8	15.4	15.2	15.0	8.0	7.2	4.1	3.2
Coal extraction .....	134.5	127.2	125.3	114.7	114.4	112.8	106.7	92.6	85.7	84.3	53.6	52.8	52.5	50.1
Screening and washing ...	56.7	45.4	49.3	47.3	42.1	37.2	32.3	29.1	20.4	13.1	10.8	8.2	11.5	14.2
Other surface installations	32.9	32.9	35.1	33.9	35.7	30.2	27.8	21.8	19.3	18.2	13.4	15.0	18.8	18.1
Buildings etc. ....	29.8	20.5	25.7	24.6	25.3	22.7	23.6	19.3	14.5	12.3	8.4	9.4	10.3	9.6
Surface installations .....	119.4	98.8	110.1	105.8	103.1	90.1	83.7	70.2	54.2	43.6	32.6	34.8	40.6	41.9
<b>Total</b>	<b>253.9</b>	<b>226.0</b>	<b>235.4</b>	<b>220.5</b>	<b>217.5</b>	<b>202.9</b>	<b>190.4</b>	<b>162.8</b>	<b>139.9</b>	<b>127.9</b>	<b>86.2</b>	<b>85.4</b>	<b>93.1</b>	<b>92.0</b>

As in the previous survey certain undertakings, particularly in the Ruhr, had declared a slight increase in their capital expenditure for the forthcoming year. However in the Ruhr, as in 1970 and 1971, the actual expenditure on pits remained well below the estimates.

The acceleration in the contraction of the means of extracting coal,<sup>2</sup> already foreseen in early studies, is again evident. This accelerated decline has resulted in a downward revision of forecasts in each successive survey: for 1974 extraction potential would, according to the present survey, be no more than 140 m metric tons. This represents a reduction of 20 m metric tons on the forecast made by the operators two years ago for the same year—1974.

<sup>1</sup> This falling off may result partly from the application of the new methods adopted in the present survey (see general remarks page 7) which deals only with investments in progress and approved (cat. A + B) to the exclusion of planned investments (cat. C).

<sup>2</sup> As expressed in the survey, Appendix I, Basic Definition II, a.

The table below shows how the rate of decline of extraction potential forecasts has accelerated in the last few surveys.

TABLE 7  
Movement of Forecast Extraction Potential

*'000 000 metric tons net extraction*

Survey dates	Extraction potential declared							
	1969	1970	1971	1972	1973	1974	1975	1976
1969 .....	192.9	189.5	187.1	184.8	...	...	...	...
1970 .....	...	183.0	181.5	175.7	173.1	...	...	...
1971 .....	...	...	174.5	171.0	165.6	160.9	...	...
1972 .....	...	...	...	166.0	159.7	150.4	147.0	...
1973 .....	...	...	...	...	154.9	140.2	135.9	129.7

Extrapolation of this trend leads to the conclusion that the extraction potential for coal in 1976 could fall below the 130 m metric tons now forecast.

The survey shows that coalmining will cease in the Netherlands after 1974. Between now and 1976 there will be a considerable decline in the Centre-Midi area of France and a lesser degree of decline in most of the other coalmining regions of the Community, with the exception of the Campine, the Lorraine and Lower Saxony where the producers hope to maintain their present output.

TABLE 8  
Movement of Extraction Potential by Coalfields (1)

*'000 000 metric tons*

Extraction		Extraction potential					
		actual		estimated			
1952	1972	1968	1972	1973	1974	1975	1976
237.4	145.7	195.2	166.0	154.9	140.2	135.9	129.7

(1) As in previous years, mines producing only small tonnages are excluded. Their combined production in 1972 amounted to about 0.3 m tons.

#### (b) Coal briquetting plants

Capital investment in coal briquetting plants which are at their lowest level ever will recover slightly in 1973 mainly due to the construction of a new plant for the production of smokeless briquettes in the Federal Republic of Germany. The expenditure recorded in the other regions of the Community also, almost exclusively, aim at the improvement of product quality.

Annual briquetting potential is expected to continue its decline, falling from 12 to 7 m metric tons between 1972 and 1976.

**(c) Plants producing brown coal briquettes**

Capital expenditure in brown-coal briquette plants remains relatively high especially in comparison with coal briquetting plants. This level of expenditure, which is explained by certain current measures towards rationalization in this sector, contrasts considerably with the rapid reduction in the annual production potential which will drop from 7 to 4 m metric tons during the period 1972 to 1976.

### III—COKING PLANTS

Developments in mine-owned and independent coking plants are increasingly linked with those in the steel industry in the six countries of the original Community. Under these circumstances the data referring to the various kinds of coking plants are being presented in a separate section of the survey from last year. The estimates for capital expenditure and production potential concern only individual investment projects already in progress or approved, as is now the practice for the other sectors.

#### (a) Capital expenditure

The capital expenditure in **mine-owned coking plants**, which had declined gradually during the sixties to a minimum figure in 1969, has recovered progressively since then to exceed 45 m units of account Eur in 1972. Nevertheless, while for a long time they accounted for the major part of expenditure approved for the coking industry, today they represent no more than a quarter.

Expenditure in the Ruhr, which in the case of coking was equal to the estimates, represented almost 85 % of this total. The forecasts for this area for 1973 are at the same level, and exceed the highest figures since 1954. However, in keeping with the forecast made by this survey, this effort will not continue beyond 1974. As before, no investment is envisaged for a number of obsolescent coking plants which seem likely to close down in the near future. Capital investment in the other regions of the Community is expected to remain at the very low levels recorded in recent years with the exception of the Aix-la-Chapelle area.

In the case of **steel works coking plants** capital expenditure, which had been particularly low during the years 1966 to 1968, began to recover in 1969. Since then it has continued to increase rapidly and rose to 126 million in 1972. This level will be maintained in 1973. Most of the investment concerned coastal

TABLE 9

Capital Expenditure at Mine-Owned, Independent and Steelworks Coking Plants 1954-1974

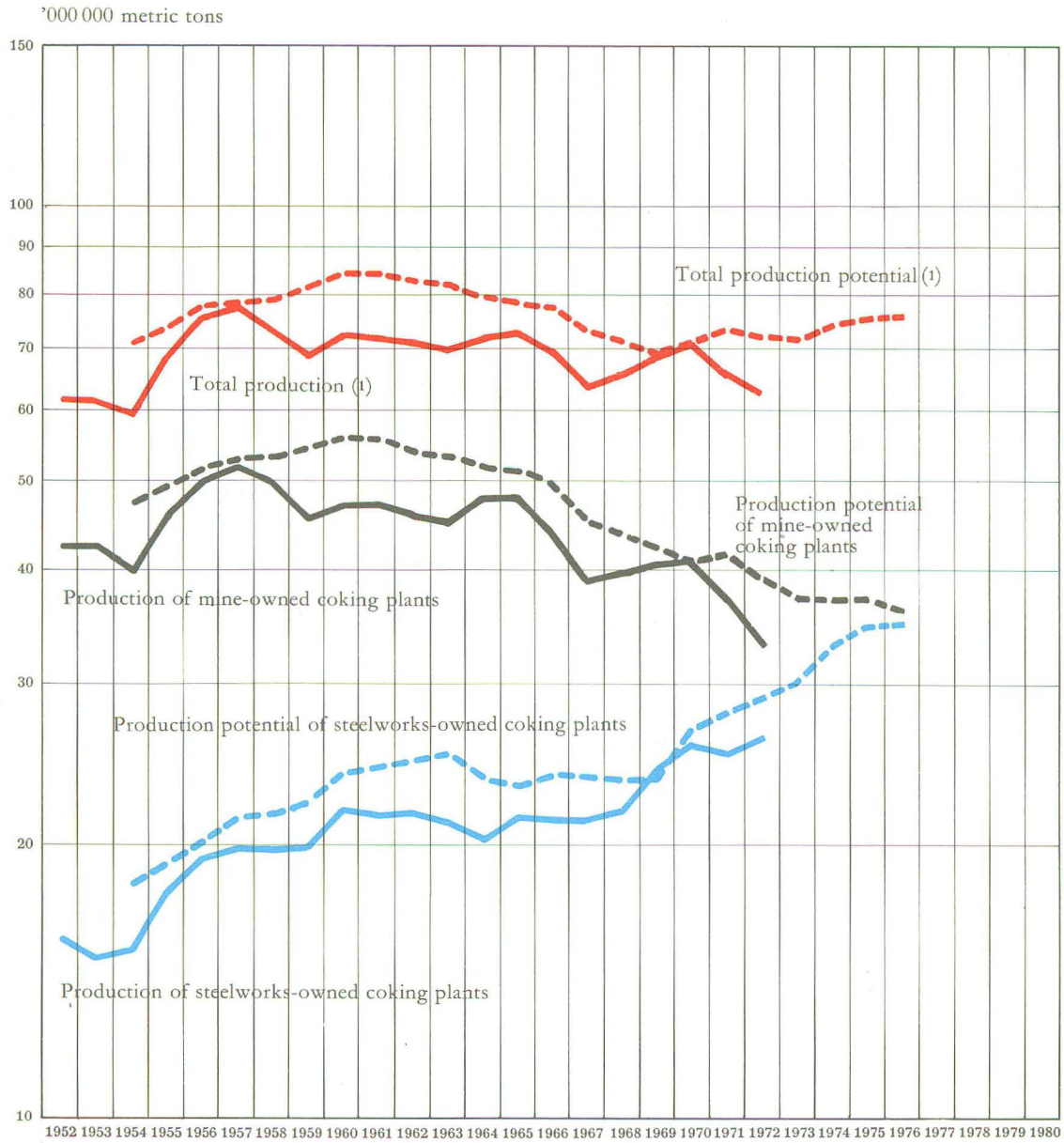
'000 000 units of account Eur

Coking plants	Actual expenditure														Forecast expenditure (cat. A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Mine-owned .....	57.5	33.7	43.1	35.9	19.0	17.3	15.8	13.2	10.2	16.6	10.0	18.7	37.8	45.1	41.2	17.9
Independent .....	10.8	1.6	1.4	5.1	3.5	5.9	5.1	5.2	3.8	4.6	4.4	2.4	4.7	4.0	3.6	0.8
Steelworks .....	22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	13.7	31.1	61.8	136.7	125.9	124.6	70.9
<b>Total</b>	<b>91.2</b>	<b>46.8</b>	<b>62.8</b>	<b>66.0</b>	<b>56.3</b>	<b>52.9</b>	<b>38.1</b>	<b>28.8</b>	<b>25.5</b>	<b>34.9</b>	<b>45.5</b>	<b>82.9</b>	<b>179.2</b>	<b>175.0</b>	<b>169.4</b>	<b>89.6</b>



FIGURE 5.

Production and Production Potential of Coking Plants



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

plants, especially in the Netherlands, Belgium in the North and South of France and in Italy. These two latter regions, which did not meet the forecast made at the beginning of 1972, will increase their efforts in 1973.

As in recent years, the share of expenditure allotted to the construction of new plants increased considerably and now accounts for most of the total. This construction work occurred mainly in steel works coking plants, whereas in the mine-owned and independent coking plants, with very rare exceptions, the work was in repair and replacement projects.

TABLE 10

## Breakdown of Capital Spending at Mine-Owned, Independent and Steelworks Coking Plants 1954-72

'000'000 units of account Eur

Sector	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Coking ovens .....	37.9	20.7	26.6	29.2	28.0	17.6	12.2	9.9	10.6	19.2	30.0	60.7	129.5	134.6
New plant.....	(21.6)	(9.6)	(13.7)	(14.4)	(21.2)	(12.4)	(5.3)	(4.1)	(6.7)	(12.0)	(27.2)	(51.5)	(116.6)	(120.7)
Repairs and replacement	(16.3)	(11.1)	(12.9)	(14.8)	(6.8)	(5.2)	(6.9)	(5.8)	(3.9)	(7.2)	(2.8)	(9.2)	(12.9)	(13.9)
Gas works .....	2.4	0.9	0.6	2.1	0.7	3.6	1.7	0.3	0.1	0.1	0.1	0.1	0.0	—
Gas and by-product plant	29.1	13.1	18.2	18.1	10.8	11.8	9.2	6.8	4.9	4.9	6.3	10.8	19.0	18.7
Miscellaneous .....	21.8	12.1	17.4	16.6	16.8	19.9	15.0	11.8	9.9	10.7	9.1	11.3	30.7	21.7
<b>Total</b>	<b>91.2</b>	<b>46.8</b>	<b>62.8</b>	<b>66.0</b>	<b>56.3</b>	<b>52.9</b>	<b>38.1</b>	<b>28.8</b>	<b>25.5</b>	<b>34.9</b>	<b>45.5</b>	<b>82.9</b>	<b>179.2</b>	<b>175.0</b>

**(b) Production Potential**

The annual production potential at the **mine and coking plants** which has been in constant decline since the sixties is expected to be reduced from 39 m to 36 m metric tons between now and 1976. This decrease, to a varying extent will affect most of the coal mining areas: the Ruhr, the Sarre, the Nord/Pas-de-Calais, Lorraine and Centre-Midi coalfields.

The production potential in **independent coking plants**, which is less than 4 m metric tons, would probably maintain its present level.

In the case of **steelworks coking plants**, production potential which has already increased considerably since the end of the sixties, will increase further from 29 m to almost 35 m between now and 1976. They would then account for 46 % instead of the present 40 %, of the Community's production potential. The new plants currently being installed are almost all in coastal regions.

Altogether, Community coke-making capacity should not increase noticeably in comparison with the present level. The figure given in this report for 1976—75 m metric tons—is still less than the potential stated in the three preceding surveys—some 80 m metric tons. It is not certain that this figure will be reached either. In fact many enterprises had, for social reasons, based their previous forecasts, on the continued operation of a number of plants which are reaching the end of their working lives and for which they will not authorise any new capital expenditure. Their closure would be dictated by technical necessity or by the emergence of modern plants. Bearing these reservations in mind, the mean cumulative annual growth rate or 1% would be substantially below the rate of over 5% declared for pig-iron. Any

assessment of the possible future balance between supply and demand of coke should not confine itself to a comparison of these rates. It should also take into account the anticipated reduction in the coke rate and the development of outlets for coke other than in the iron and steel industry.

Moreover, over the years, the undertakings themselves, have revised their thoughts on the development of their coke-making potential. Compared with preceding surveys the forecasts made in this survey indicate unprecedented reductions: 9 m metric tons for 1973 and 7 m for 1974. As was stressed in the reports of previous years, the large plants which have been commissioned have not compensated for the closures.

**TABLE 11**  
**Movement of Production Potential in Coking Plants**

*'000 000 metric tons*

Coking plants	Production potential							
	Production		Actual		Forecast			
	1952	1972	1968	1972	1973	1974	1975	1976
Mine-owned coking plants .....	42.2	33.3	43.5	39.1	37.0	37.1	36.9	36.4
Independent coking plants .....	3.2	3.1	3.9	3.7	3.7	3.7	3.7	3.7
Steelworks coking plants .....	15.8	25.8	23.4	28.8	30.0	33.1	34.4	34.5
<b>Total</b>	<b>61.2</b>	<b>62.2</b>	<b>70.8</b>	<b>71.6</b>	<b>70.7</b>	<b>73.9</b>	<b>75.0</b>	<b>74.6</b>

**TABLE 12**  
**Trends in Estimates of Coke Production Potential**

*'000 000 metric tons*

Surveys dates	Production potential							
	1969	1970	1971	1972	1973	1974	1975	1976
1969 .....	69.2	69.6	70.5	69.8	...	...	...	...
1970 .....	...	70.7	72.6	74.9	79.5	...	...	...
1971 .....	...	...	73.3	76.0	79.4	80.5	...	...
1972 .....	...	...	...	71.6	74.6	78.5	78.5	...
1973 .....	...	...	...	...	70.7	73.9	75.0	74.6

#### IV—IRON-ORE MINES

Having reached its lowest ever level in 1966 and 1967, capital spending in iron-ore mines fell even further to around 20 m units of account Eur per annum: hardly equal to half that at the beginning of the sixties.

For 1973, the producers forecast some degree of recovery; however, the final figures for recent years have always been considerably below the forecasts made at the beginning of the year. The year 1974 will moreover see a considerable decline in capital expenditure.<sup>1</sup>

TABLE 13  
Capital Expenditure in the Iron-Ore Industry 1954-74

*'000,000 units of account Eur*

Type of installation	Actual expenditure														Estimated expenditure (cat. A+B) <sup>(1)</sup>	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Extraction of ore .....	21.3	26.1	30.8	26.1	19.6	18.2	17.8	12.4	11.8	13.2	15.3	14.5	13.9	16.5	20.3	6.9
Mine-based preparation of ore .....	8.9	7.5	9.6	8.1	3.9	2.3	2.1	2.2	1.6	4.5	1.5	2.3	3.9	0.9	1.0	0.1
Miscellaneous surface installations .....	9.0	9.6	12.0	12.4	4.7	3.4	5.7	2.7	2.6	3.0	3.5	4.4	8.6	3.4	5.6	1.2
<b>Total</b>	<b>39.2</b>	<b>43.2</b>	<b>52.4</b>	<b>46.6</b>	<b>28.2</b>	<b>23.9</b>	<b>25.6</b>	<b>17.3</b>	<b>16.0</b>	<b>20.7</b>	<b>20.3</b>	<b>21.2</b>	<b>26.4</b>	<b>20.8</b>	<b>26.9</b>	<b>8.2</b>

<sup>(1)</sup> The estimates relate only to expenditure on projects already in progress (cat. A) and on projects approved (cat. B).

As a result of competition from the rich ores from overseas, the Community ore mining which had decreased since 1960, fell in 1972 to 66 m metric tons, that is to say to the level achieved in 1952; France accounted for 83% of Community ore mining.

According to company forecasts the considerable reduction in mining potential in recent years is likely to continue.

In 1972, the ore mining companies reduced their production potential from 76 m to 74 m metric tons. They now consider themselves capable of stabilizing their output at a level of 71 m in the next few years.

<sup>1</sup> This reduction is in part due to the application of the new procedures adopted for the present survey (see general remarks p. 7) which only take into account investments in progress and approved (cat. A + B) and excludes planned investments (cat. C).

TABLE 14  
Movement of Crude-Ore Extraction Potential

'000 000 metric tons

Actual extraction		Extraction potential					
1952	1972	1968	1972	1973	1974	1975	1976
65.3	66.0	81.9	74.1	70.3	71.5	70.8	70.6

The following table shows that at least as far as the last few surveys are concerned the decline in extraction potential in most cases proved more rapid than anticipated in company forecasts. The reductions reflected in the present survey compared with the previous survey with respect to the same year, 1973, exceed 4 m metric tons per annum.

TABLE 15  
Movement in Crude-Ore Extraction Potential Declared

'000 000 metric tons

Survey date	Extraction potential declared							
	1969	1970	1971	1972	1973	1974	1975	1976
1969 .....	81.3	82.6	83.8	85.7	...	...	...	...
1970 .....	80.2	80.4	81.6	80.7	79.5	...	...	...
1971 .....	...	80.3	78.4	80.2	79.7	78.4	...	...
1972 .....	...	...	75.8	73.2	74.5	75.6	75.5	...
1973 .....	...	...	...	74.1	70.3	71.5	70.8	70.6

## V—THE IRON AND STEEL INDUSTRY

In the six original Community countries capital investment, having increased consistently from 1967, again exceeded the record levels of 1970 and 1971. In one year the total amount rose from 2 266 to 2 628 m Eur units of account. The present forecasts show a new record figure of 2 700 m for 1973.

TABLE 16  
Capital Expenditure in the Iron and Steel Industry 1954-74

'000 000 units of account Eur

Type of installation	Actual expenditure														Estimated expenditure (cat. A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<i>Plant for production of</i>																
pig-iron .	143.3	172.2	218.8	233.2	258.4	222.7	160.4	132.5	130.6	124.3	188.7	362.6	583.3	627.4	600.2	352.0
steel ...	84.1	95.4	162.8	152.4	175.0	158.3	124.7	122.1	143.8	148.1	186.8	237.6	259.8	343.6	387.4	281.2
rolled products .....	249.8	350.3	532.4	597.6	726.4	634.3	425.5	405.0	317.7	391.1	504.7	870.5	1 032.0	1 152.3	1 130.6	743.5
<i>General services .....</i>	103.8	157.3	209.1	247.1	319.7	300.0	221.7	188.5	138.1	138.6	158.4	235.5	391.3	504.2	575.0	358.6
<b>Total</b>	<b>581.0</b>	<b>775.2</b>	<b>1 123.1</b>	<b>1 230.3</b>	<b>1 479.5</b>	<b>1 315.3</b>	<b>932.3</b>	<b>848.1</b>	<b>730.2</b>	<b>802.1</b>	<b>1 038.6</b>	<b>1 706.2</b>	<b>2 266.4</b>	<b>2 627.5</b>	<b>2 693.2</b>	<b>1 735.3</b>

In 1972, the shares of these four plant categories (iron making, steel making, rolling and general services in total expenditure were 24%, 13%, 44% and 19% respectively as against 26%, 11%, 46% and 17% in 1971.

According to the annexed tables, in particular table XV, the increase in capital spending from 1971 to 1972 was particularly marked in the coastal areas of France and Italy while the other countries, in varying degrees, showed a decline.

While at a Community level actual expenditure slightly exceeded the forecast figures, the situation was quite different from one region to another. The actual amounts expended exceeded the forecasts in North Germany, the Netherlands, Belgium, the North of France and, in contrast with 1971, in the coastal areas of Italy. On the other hand, the amounts spent were below the forecast figures in Rhineland-Westphalia, regions of France, other than those in the North<sup>1</sup>, and the inland areas of Italy.

<sup>1</sup> In the 1972 survey the information for the South of France was given under a separate heading; this year it is included under the "France-other regions" heading.

The tables below show the rate of expenditure in comparison with the forecasts for the different production stages and for countries and regions.

TABLE 17  
Estimated Capital Expenditure in 1972 and Actual Amounts Spent

*'000 000 units of account Eur*

Stage in production	Estimates (1)	Actual amounts spent (2)	Agreement with estimates (%) (3) = (2) : (1)
Pig-iron .....	647.2	627.4	96.9
Crude steel .....	322.7	343.6	106.5
Rolling mills .....	1 101.2	1 152.3	104.6
<b>Total iron and steel industry</b>	<b>2 601.1</b>	<b>2 627.5</b>	<b>101.0</b>

TABLE 18  
Estimated Capital Expenditure in 1972 and Actual Amount Spent  
Iron and Steel Industry

*'000 000 units of account Eur*

Area	Estimates (1)	Actual amounts spent (2)	Agreement with estimates (%) (3) = (2) : (1)
Northern Germany .....	135.82	179.74	132.3
North Rhine-Westphalia .....	370.82	313.28	84.5
Southern Germany .....	27.76	35.57	128.1
Saar .....	76.08	77.41	101.7
<i>Germany (FR)</i> .....	<i>610.48</i>	<i>606.00</i>	<i>99.3</i>
<i>Belgium</i> .....	<i>166.23</i>	<i>178.15</i>	<i>107.2</i>
Eastern France .....	134.83	113.61	84.3
Northern France .....	344.23	366.18	106.4
France : other areas .....	445.45	405.44	91.0
<i>France</i> .....	<i>924.51</i>	<i>885.23</i>	<i>95.7</i>
Italy : coastal areas .....	638.97	716.83	112.2
Italy : other areas .....	106.21	87.83	82.7
<i>Italy</i> .....	<i>745.18</i>	<i>804.66</i>	<i>108.0</i>
<i>Luxembourg</i> .....	<i>47.38</i>	<i>41.66</i>	<i>87.9</i>
<i>Netherlands</i> .....	<i>107.36</i>	<i>111.84</i>	<i>104.2</i>
<b>Total</b>	<b>2 601.14</b>	<b>2 627.54</b>	<b>101.0</b>

Figure 7 shows the development of capital spending per metric ton of crude steel produced by country. This sort of comparison must be interpreted with care. The proportion of repair work and that of expansion vary. The costs of capital plant calculated in units of account are not strictly comparable

FIGURE 6

Capital Expenditure in the Iron and Steel Industry

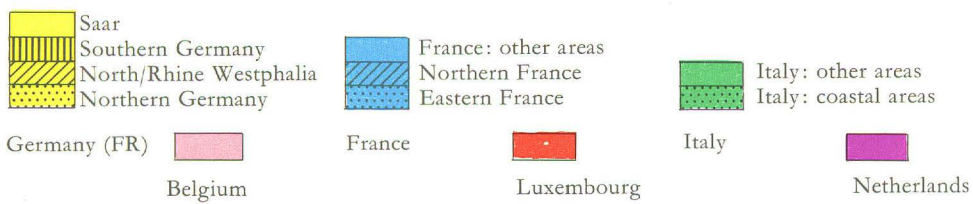
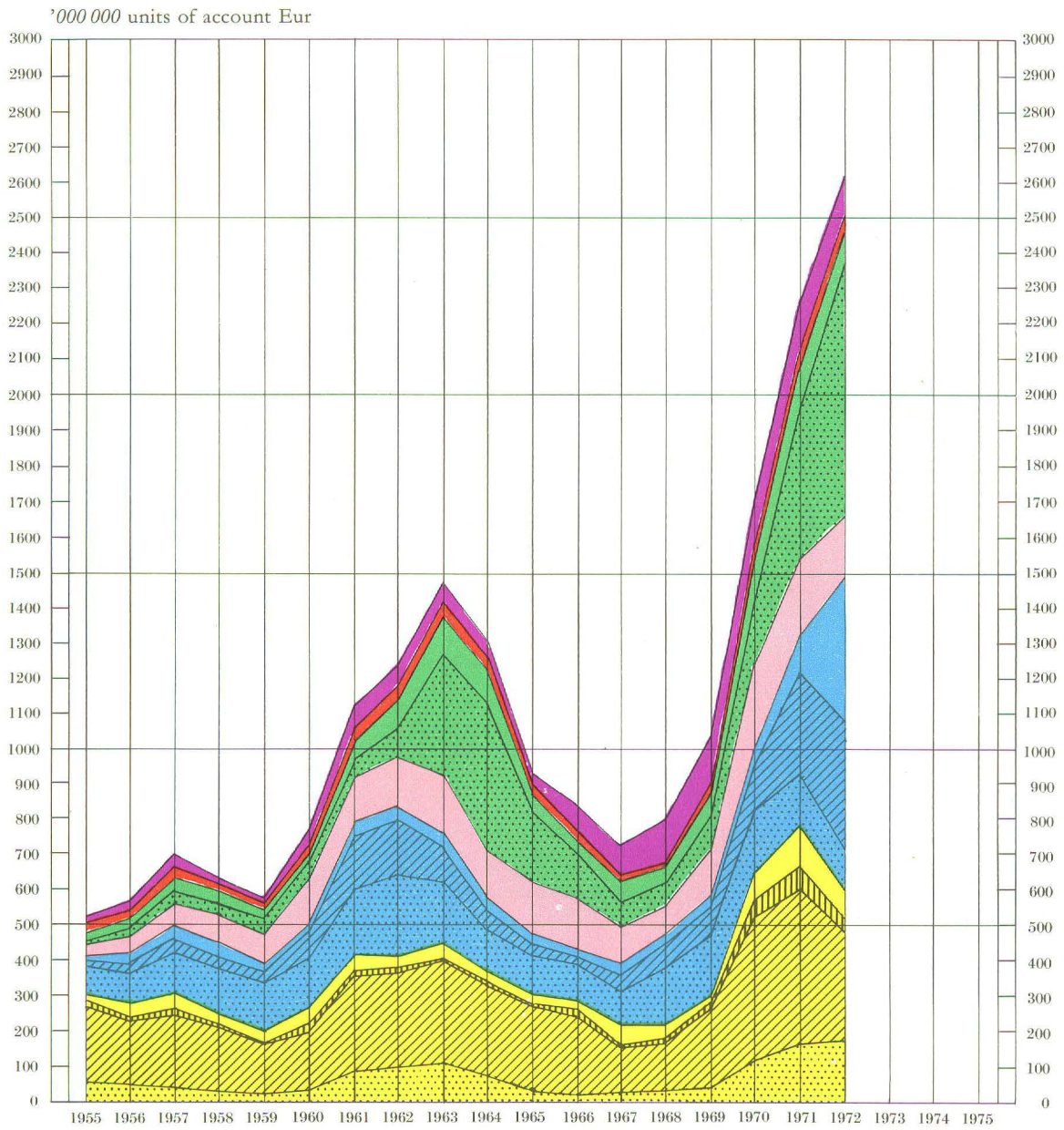
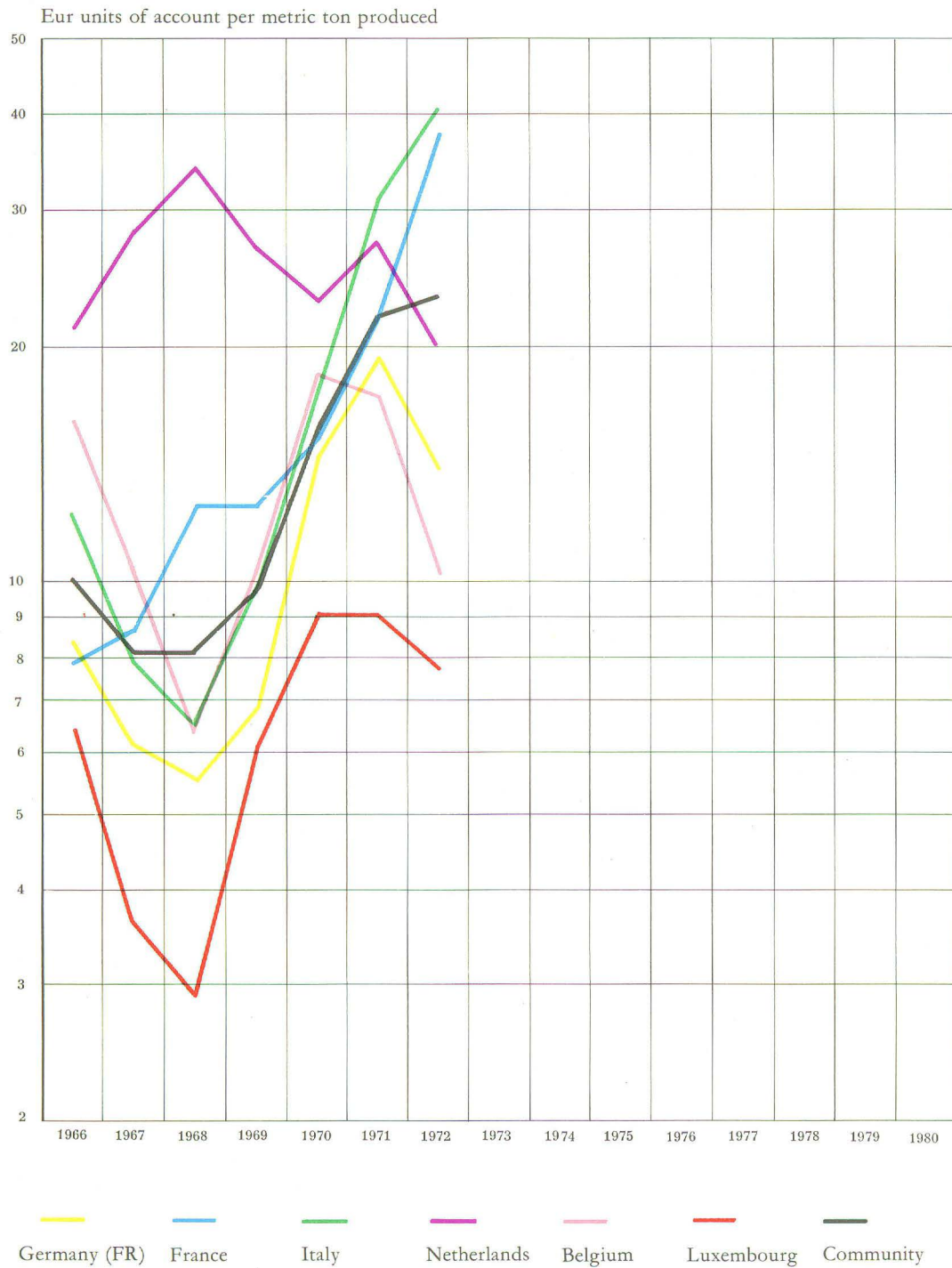




FIGURE 7

Investment Expenditure per Metric Ton of Crude Steel in the Iron and Steel Industry



from year to year and from country to country. The first year dealt with—1966—was characterized by a mediocre market position in the Community, which was lower in some countries than in others.

With these reservations, it appears that since the end of the sixties the level of actual expenditure in Italy, France and the Netherlands is above the Community average; the reverse is true for the Federal Republic of Germany, Belgium and Luxembourg.

The production potential of **sinter**, which for about 10 years has developed at much the same rate as pig-iron production potential, will probably continue this trend in the years to come. The sinter/pig-iron ratio will be maintained at about 1 200 kilograms of sinter per metric ton of pig-iron, not including imported sinter and pellets.

The **direct reduction** of iron-ore for the production of sponge-iron suitable for charging into electric furnaces has recently reached the industrial stage in Northern Germany. The companies have not yet announced any new projects.

TABLE 19  
Movement of Forecast Production Potential

'000 000 metric tons									
	Date of Survey	1969	1970	1971	1972	1973	1974	1975	1976
Pig-iron .....	1969	88.1	91.3	94.0	95.5	...	...	...	...
	1970	88.4	93.7	98.4	105.5	108.9	...	...	...
	1971	...	94.1	99.4	106.4	116.1	123.5	...	...
	1972	...	...	98.8	103.0	113.4	120.3	123.5	...
	1973	...	...	...	101.8	108.9	117.5	122.7	124.4
Crude steel .....	1969	119.8	125.8	131.0	132.2	...	...	...	...
	1970	120.9	128.4	137.4	144.3	146.8	...	...	...
	1971	...	126.6	137.3	145.3	151.9	160.5	...	...
	1972	...	...	135.8	142.4	148.8	157.5	164.0	...
	1973	...	...	...	139.7	146.1	155.7	164.1	167.9
Rolled products .....	1969	93.5	95.3	97.8	100.6	...	...	...	...
	1970	92.6	95.3	100.7	106.9	108.9	...	...	...
	1971	...	96.0	102.1	109.5	113.9	117.0	...	...
	1972	...	...	102.1	110.2	115.4	119.0	120.5	...
	1973	...	...	...	107.5	112.6	117.7	122.0	123.2

The following paragraphs analyse steel investments classified by major categories from the point of view of expenditure and its effect on the production potential of each sector.

**(a) Pig-iron production**

For the fourth consecutive year, capital expenditure on **steel works coking plants, burden preparation, direct reduction and blast furnaces** reached a record level. The amount —627 m— is more than three times the average figure for the sixties. In 1973 expenditure will be maintained at roughly the same level as 1972. In the past year however, its level varied in the different regions: higher in the Netherlands and in the Italian and French coastal regions; lower in other regions, especially in Rhineland-Westphalia.

Having increased from some 99 m to 102 m metric tons between 1971 and 1972, pig-iron production potential will increase from the present time to 1976 at a rate of 5.1% per annum; the output of the six original countries will thus reach 124 m metric tons.

TABLE 20  
Capital Expenditure on Pig-iron Production Plant 1954-74

'000 000 units of account Eur

Type of installation	Actual expenditure														Estimated expenditure (cat. A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Steelworks coking plants .....	22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	13.7	31.1	61.8	136.7	125.9	124.6	70.9
Burden preparation and direct reduction	42.7	73.7	93.3	110.9	123.2	85.0	52.0	45.0	43.8	44.3	68.3	141.6	185.5	196.4	204.4	119.7
Blast furnace .....	77.7	87.0	107.2	97.3	101.4	108.0	91.2	77.1	75.3	66.3	89.3	159.2	261.1	305.1	271.2	161.4
<b>Total</b>	<b>143.3</b>	<b>172.2</b>	<b>218.8</b>	<b>233.2</b>	<b>258.4</b>	<b>222.7</b>	<b>160.4</b>	<b>132.5</b>	<b>130.6</b>	<b>124.3</b>	<b>188.7</b>	<b>362.6</b>	<b>583.3</b>	<b>627.4</b>	<b>600.2</b>	<b>352.0</b>

TABLE 21  
Movement of Pig-iron Production Potential

'000 000 metric tons

Product	Actual production		Production potential					
	1952	1972	1968	1972	1973	1974	1975	1976
Coke (steelworks-owned plant) .....	15.8	25.8	23.4	28.8	30.0	33.1	34.4	34.5
Sinter .....	15.6	105.5	93.5	125.3	129.7	137.5	145.9	147.2
Pig-iron .....	34.7	81.3	85.0	101.8	108.9	117.5	122.7	124.4

FIGURE 8

Capital Expenditure in the Iron-Ore Mines and Iron and Steel Industry

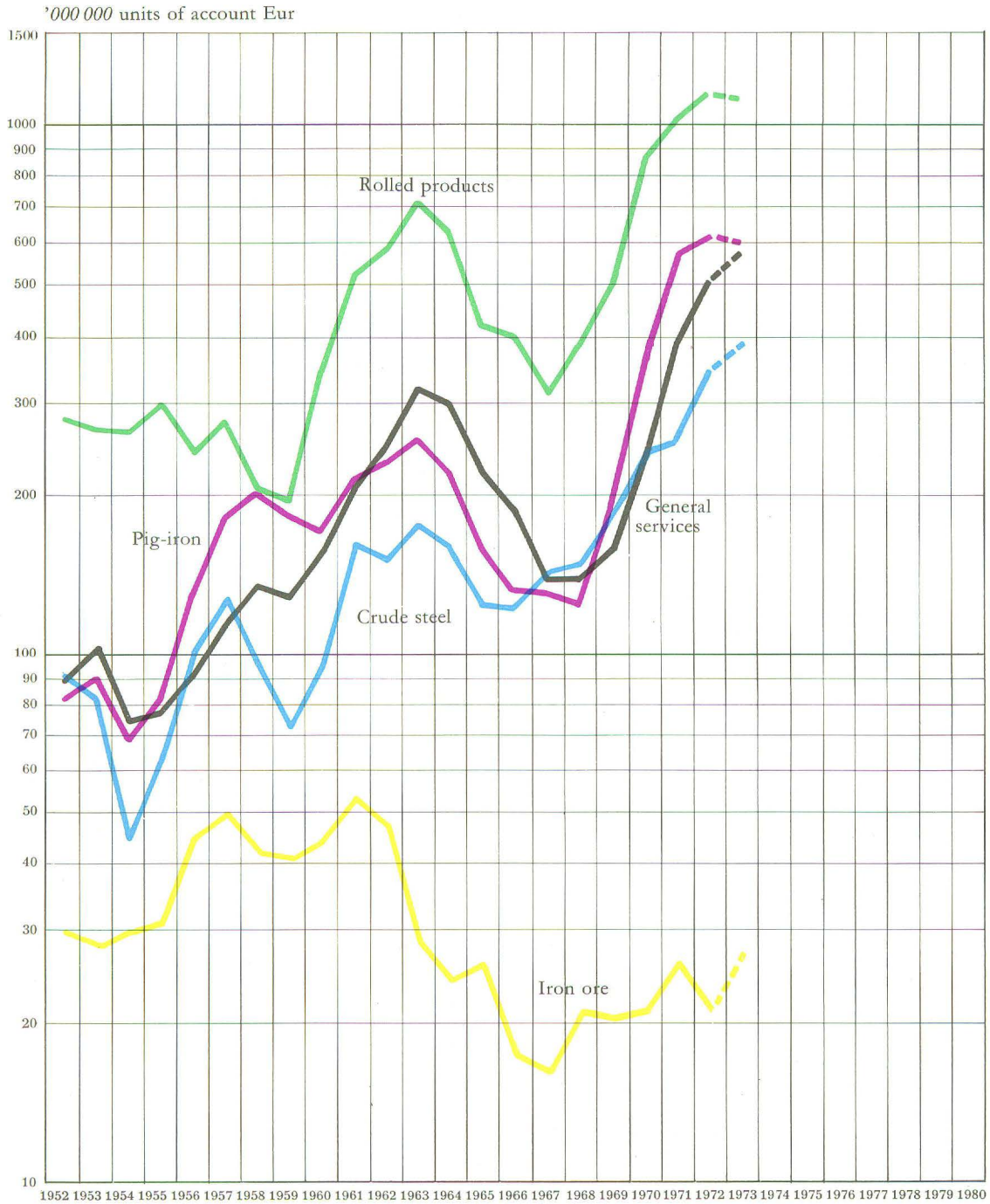
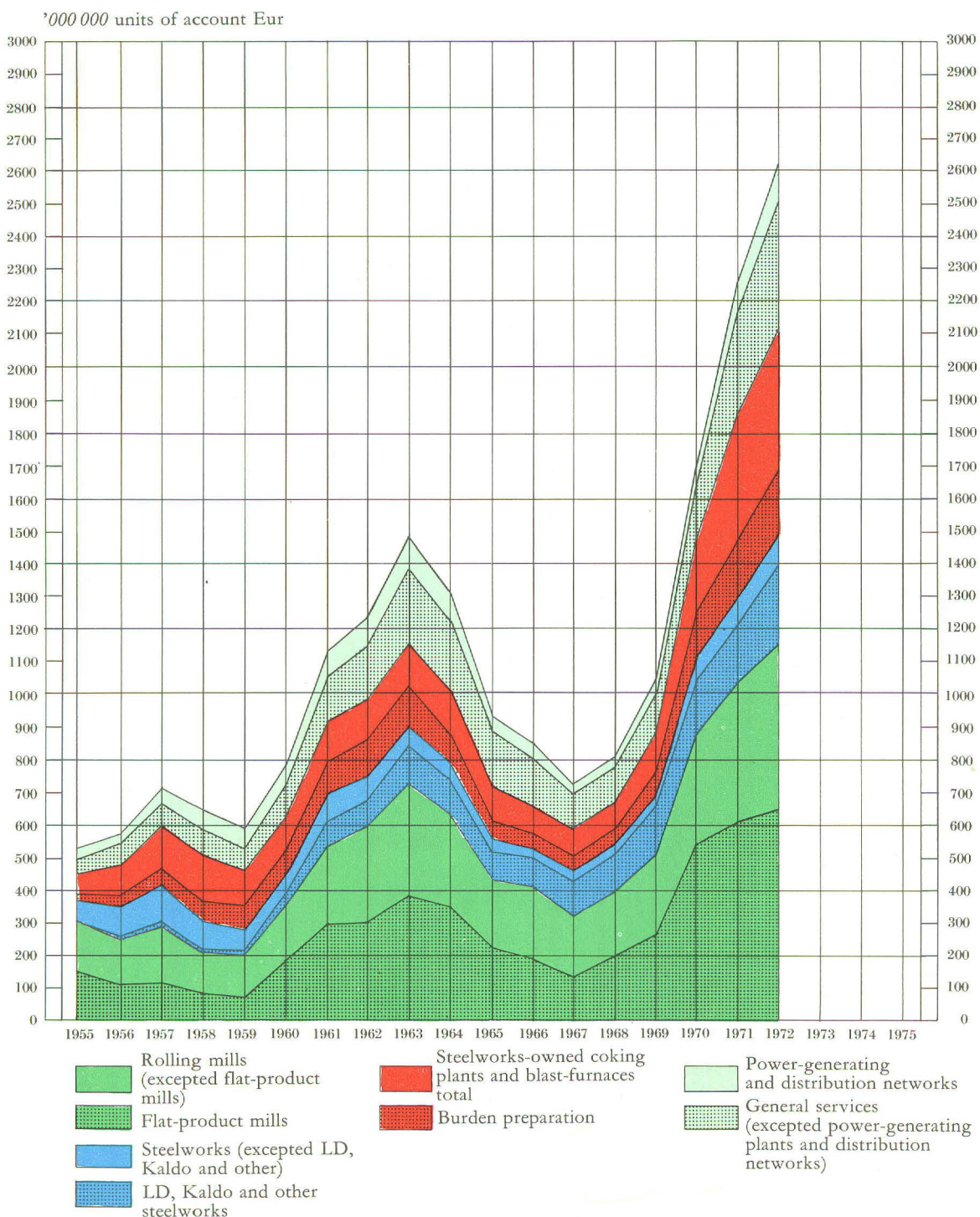


FIGURE 9

Breakdown of Capital Expenditure in the Iron and Steel Industry



**(b) Steel production**

The amount of capital expenditure in steel works in 1972 (344 m units of account) was well above the record levels recorded successively during the five preceding years. It was also considerably above the survey forecast for 1972. Basically, this increase occurred in works on the Mediterranean coastline; in Italy the actual expenditure exceeded the forecasts due to an acceleration of current expansion programmes.

As has been the case for many years capital expenditure in **basic Bessemer steel works** remained insignificant.

As for **OBM steelworks**, the increase in capital expenditure reflects the acceleration of the process of adapting some basic Bessemer converters to the new bottom-blown oxygen process. The present survey does not take into account projects for the installation of completely new OBM steel plants which, at the date of the survey, were only in the planning stage.

In **open-hearth steelworks** capital expenditure which is of almost the same order as for basic Bessemer steel works continued to decline as it had done since 1962; this expenditure represented no more than 15% of the amount recorded at the beginning of the sixties. The sum of both these expenditure categories today hardly accounts for more than 3% of total capital expenditure in steel works.

Expenditure on **electric steel making** continued its rapid growth, and new large increases have been forecast for 1973 and 1974. The proportion of expenditure applied to electric steel making was no more than 12% of the total expenditure on steel works in 1969, while in 1972 it represented almost a quarter, and during the next year it will reach almost a third of the total expenditure.

TABLE 22

Capital Expenditure on Steelmaking Plant 1954-74 according to Production Process

'000 000 units of account Eur

Production process	Actual expenditure														Estimated expenditure (cat. A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Basic Bessemer .....	30.4	21.2	24.2	23.0	18.4	9.2	10.2	10.2	12.9	5.3	7.0	5.6	6.3	5.1	3.5	1.3
OBM etc. ....	.	.	.	.	.	.	.	.	.	.	.	5.7	3.5	6.7	6.8	2.6
Open-hearth .....	33.5	29.1	44.8	30.2	18.5	22.7	13.0	8.7	3.9	6.7	4.9	5.1	5.9	3.3	5.3	1.2
Electric-furnace .....	13.0	11.1	21.8	21.1	18.1	19.9	16.5	10.4	16.8	16.6	21.7	54.5	57.7	79.6	121.0	110.7
LD, Kaldo, etc. ...	7.2	34.0	72.0	78.1	120.0	106.5	85.0	92.8	110.2	119.5	153.2	166.7	186.4	248.9	250.8	165.4
<b>Total</b>	<b>84.1</b>	<b>95.4</b>	<b>162.8</b>	<b>152.4</b>	<b>175.0</b>	<b>158.3</b>	<b>124.7</b>	<b>122.1</b>	<b>143.8</b>	<b>148.1</b>	<b>186.8</b>	<b>237.6</b>	<b>259.8</b>	<b>343.6</b>	<b>387.4</b>	<b>281.2</b>

The main centres of this development are Northern Germany, Rhineland-Westphalia and the inland areas of Italy. Considerable expenditure is expected to be approved in 1973 and 1974 for these same regions as well as for the South of France.

The rapid growth of **pure oxygen** steel works (LD, Kaldo and similar processes) continues; it has accounted for more than 70% of expenditure on steel works.

The major expenditures involved certain coastal areas: the North and South of France and more particularly the coastal regions of Italy. Amounts of a similar size are forecast for 1973 and 1974 in the same areas. A major programme to which the previous survey referred was still planned at the time this survey was made for North Rhine-Westphalia.

In all the production potential for crude steel in the six original countries which has increased from some 135 to 140 m metric tons during the past year should reach 168 m metric tons in 1976; the annual rate of increase would thus be 4.7%.

TABLE 23  
Movement of Estimated Crude Steel Production Potential

'000 000 metric tons

Survey dates	Production potential estimated							
	1969	1970	1971	1972	1973	1974	1975	1976
1969 .....	119.8	125.8	131.0	132.2	...	...	...	...
1970 .....	120.9	128.4	137.4	144.3	146.8	...	...	...
1971 .....	...	126.6	137.3	145.3	151.9	160.5	...	...
1972 .....	...	...	135.8	142.3	148.8	157.5	164.0	...
1973 .....	...	...	...	139.7	146.1	155.7	164.1	167.9

In addition, as can be seen from figure 11, the production potential actually recorded has generally exceeded that originally forecast four years ahead by the companies for each annual capital expenditure survey. Only the figures recorded in 1964 have so far proved an exception to this rule.

The increase in production potential forecast in this survey for the period 1972 to 1976 —28 m metric tons—coincides with that forecast in the previous survey for the period up to 1975.

The production potential for **basic Bessemer steel**, which had already fallen back to 23 m metric tons in 1971 and 19 m metric tons in 1972, will reach a figure of only 11 m metric tons by 1976, of which half will be produced in Lorraine, the rest being shared by the Saar, Belgium and Luxembourg.

It is even possible that production potential will decline more rapidly than the 8 m metric tons forecast by the companies, which are hesitating, in some cases for social or regional reasons to announce changes which are in any case inevitable. This extremely rapid reduction will in most cases result in

FIGURE 10

Actual Production and Production Potential of the Iron and Steel Industry

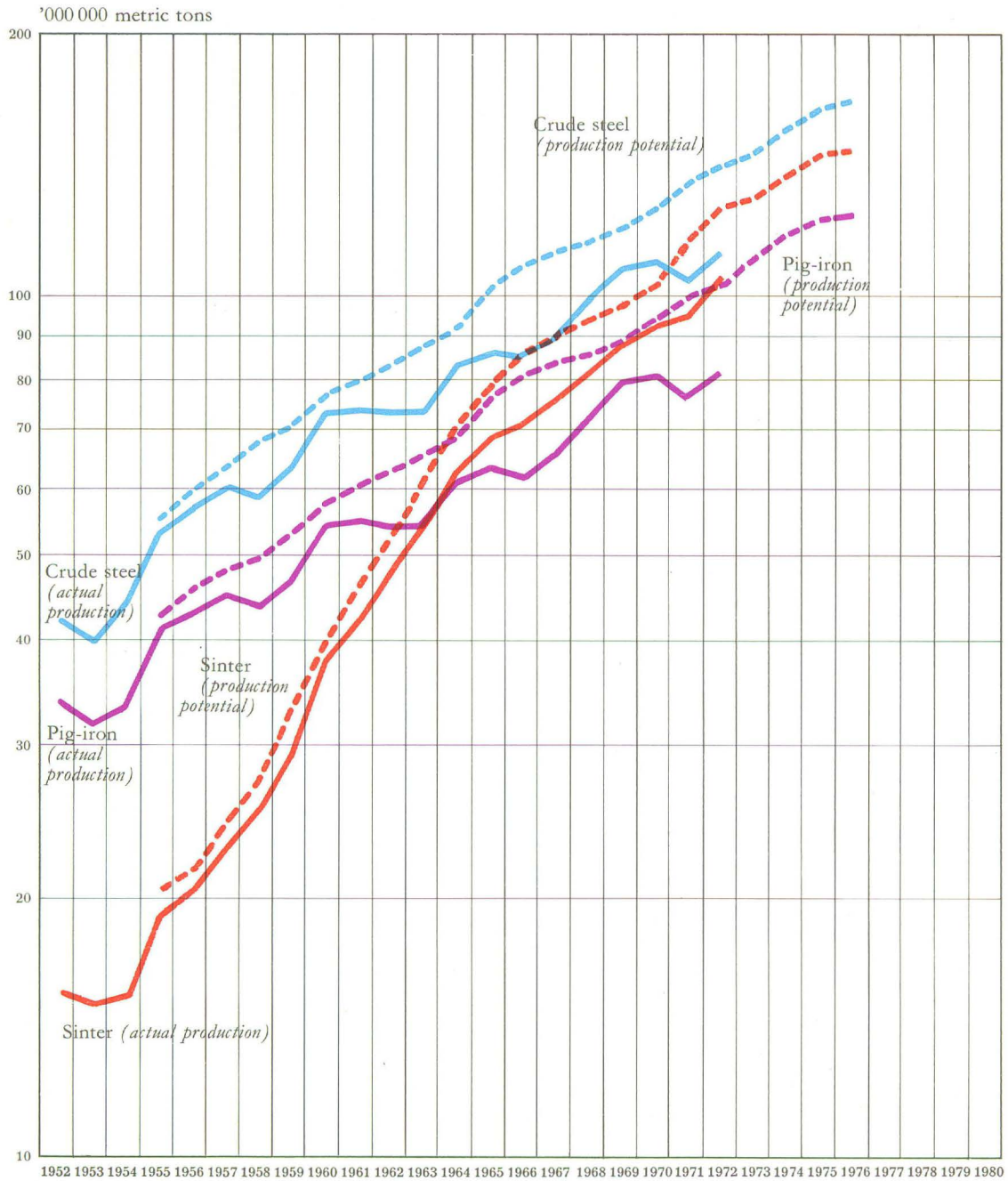
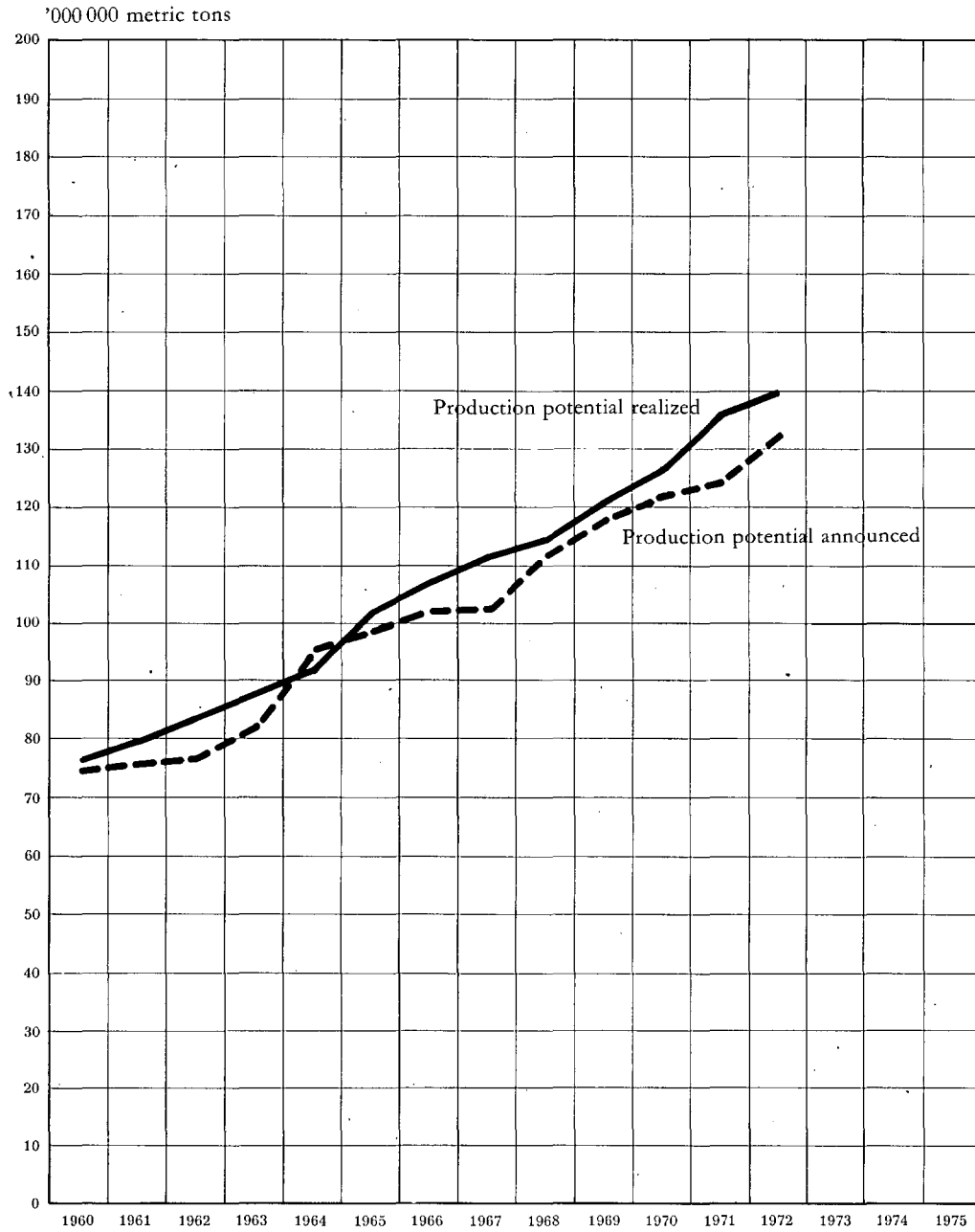




FIGURE 11

Community Crude Steel Production Potential Announced (1) and Realized



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

closures and, to a lesser extent, in the adaptation of certain steel works in inland regions of the Community to bottom-blown oxygen processes.

While the production potential for basic Bessemer steel has fallen more rapidly than forecast by the producers, that of the **bottom-blown oxygen converter** (OBM, etc.) tends to increase more rapidly than forecast in previous surveys. It will rise from 5 to 8 m metric tons per annum between 1972 and 1976, the major share being in Southern Germany.

**Open hearth steel making** potential which fell from 25 m metric tons in 1971 to 20 m metric tons in 1972 will fall further to 15 m metric tons in 1976. This new decline—5 m metric tons per annum—while still considerably exceeding the figure announced in most recent surveys, will not however reach the figure announced in last year's survey for the period 1971 to 1975. Thus the producers plans indicate some slowing down in the trend noted so far. By 1976 more than half the open hearth steel making potential will be accounted for by Germany, mainly in Rhineland-Westphalia. The only other open hearth steel making plants of any importance still in operation at that date—or possibly kept in reserve—will be located in the East and the North of France as well as on the Italian seaboard.

TABLE 24

## Net Decrease in Basic Bessemer and Open-hearth Steelmaking Potential

'000 000 metric tons

	basic Bessemer	open-hearth	Total
1969 .....	2.4	2.0	4.4
1970 .....	5.8	1.3	7.1
1971 .....	1.8	1.5	3.3
1972 .....	3.7	4.3	8.0
Total net (actual) decrease for the period 1968-1972 .....	12.7	9.1	21.8
Total net (forecast) decrease for the period 1972-1976.....	7.8	5.1	12.9

**Electric steel making** potential—19 m metric tons in 1972 as against 18 m in 1971—will increase by 6 m metric tons by 1976. It is worthy of note that each survey produced in the last few years has foreseen an increase in production potential greater than that forecast in the previous survey.

As for **LD, Kaldo and similar steel making plants**, the production potential, which increased from 67 to 76 metric tons per annum between 1971 and 1972 will have increased by another 32 metric tons by 1976. By then they will account for 64% of the total production potential.

Producers' forecasts show that, in 1976, the coastal areas of Italy, the Netherlands and the South of France expect to be able to produce almost all their crude steel by top-blowing converter processes.

In the North of France, the North of Germany, Rhineland-Westphalia and Belgium the proportion will be about three-quarters. In Luxembourg top-blown oxygen converters will account for about half of the production potential.

TABLE 25  
Movement of Estimated Crude Steel Production Potential According to Production Process

'000 000 metric tons

Production process	Date of survey	Production potential							
		1969	1970	1971	1972	1973	1974	1975	1976
Basic Bessemer .....	1969	30.3	25.9	24.9	23.9	...	—	...	...
	1970	30.5	25.7	24.4	22.1	20.6	...	...	...
	1971	...	24.7	23.8	20.0	19.1	19.0	...	...
	1972	...	...	22.9	18.8	14.5	13.5	12.6	...
	1973	...	...	...	19.2	14.0	12.1	11.7	11.4
OBM and similar processes ...	1969	—	—	—	—	—	—	—	—
	1970	—	1.6	2.8	3.1	3.1	...	...	...
	1971	...	2.0	3.9	5.5	5.7	5.8	...	...
	1972	...	...	3.6	5.4	6.5	7.4	7.4	...
	1973	...	...	...	5.4	6.7	8.1	8.4	8.4
Open-hearth .....	1969	27.5	26.0	24.0	23.4	...	...	...	...
	1970	27.4	26.2	25.3	25.3	25.4	...	...	...
	1971	...	26.1	24.6	24.1	22.8	21.7	...	...
	1972	...	...	24.6	22.6	21.0	18.2	17.0	...
	1973	...	...	...	20.3	19.4	18.5	17.5	15.2
Electric .....	1969	15.7	16.1	16.3	16.3	...	...	...	...
	1970	16.1	17.0	17.6	18.1	18.2	...	...	...
	1971	...	16.9	17.8	18.9	19.5	20.7	...	...
	1972	...	...	17.9	19.4	20.4	22.1	23.6	...
	1973	...	...	...	19.2	20.4	22.3	24.2	25.3
LD, Kaldo, etc. ....	1969	46.0	57.8	65.8	68.6	...	...	...	...
	1970	46.9	57.9	67.3	75.7	79.5	...	...	...
	1971	...	56.9	67.0	76.8	84.8	93.3	...	...
	1972	...	...	66.8	76.2	86.4	96.3	103.4	...
	1973	...	...	...	75.6	85.6	94.7	102.3	107.6

FIGURE 12

Actual Production and Production Potential of Crude Steel by Production Process

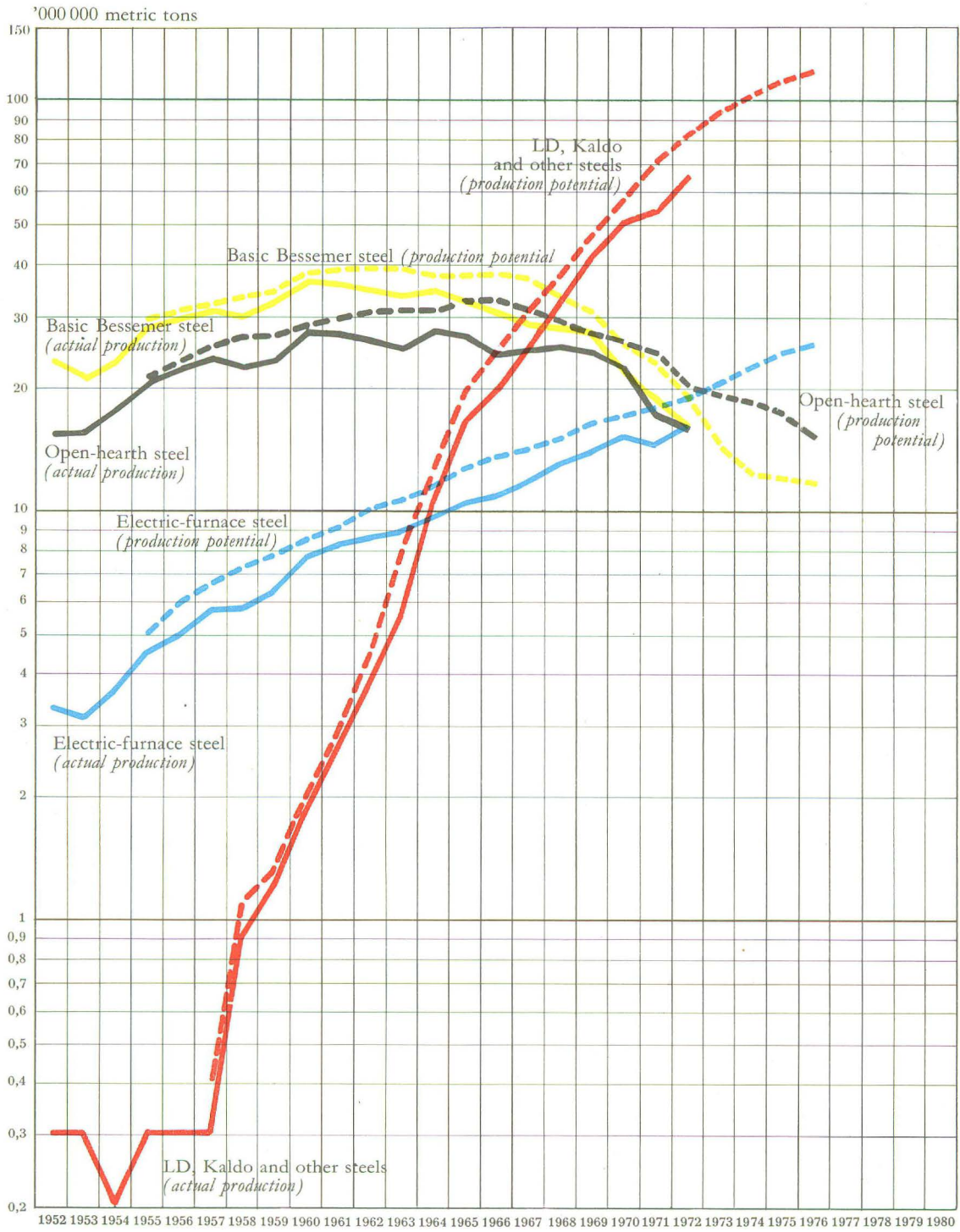


TABLE 26

## Movement of Actual Crude Steel Production Potential According to Steelmaking Process

'000 000 metric tons

Production process	Production		Production potential					
	1952	1972	1968	1972	1973	1974	1975	1976
Basic Bessemer.....	23.0	16.0	32.9	19.2	14.0	12.1	11.7	11.4
OBM and similar processes.....	—	3.9	—	5.4	6.7	8.1	8.4	8.4
Open-hearth .....	15.2	16.0	29.4	20.3	19.4	18.5	17.5	15.2
Electric-furnace .....	3.3	16.1	15.1	19.2	20.4	22.3	24.2	25.3
LD, Kaldo, etc. ....	0.3	61.1	37.4	75.6	85.6	94.7	102.3	107.6
<b>Total</b>	<b>41.8</b>	<b>113.1</b>	<b>114.8</b>	<b>139.7</b>	<b>146.1</b>	<b>155.7</b>	<b>164.1</b>	<b>167.9</b>
Continuous casting .....	0.0	9.8	...	13.9	18.3	22.9	29.3	34.4

TABLE 27

## Shares of the Different Steelmaking Processes in 1952, 1968, 1972 and 1976

in %

Production process	Actual production		Production potential		
	1952	1972	1968	1972	1976 (Estimated share)
Basic Bessemer .....	55.0	14.2	28.7	13.7	6.8
OBM, etc. ....	—	3.4	—	3.9	5.0
Open-hearth .....	36.4	14.2	25.6	14.6	9.0
Electric-furnace .....	7.9	14.2	13.1	13.7	15.1
LD, Kaldo, etc. ....	0.7	54.0	32.6	54.1	64.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

TABLE 28

## Average Annual Movement of the Different Steelmaking Processes

in %

Production process	Average annual movement in actual production 1952-72	Estimated average annual movement in completed or approved production potential	
		1968-1972	1972-1976
Pig-iron (for comparison)	+ 4.3	+ 4.6	+ 5.1
Basic Bessemer .....	— 1.8	— 12.6	— 12.2
OBM, etc. ....	...	...	+ 11.7
Open-hearth .....	+ 0.2	— 8.8	— 7.0
Electric-furnace .....	+ 8.3	+ 6.2	+ 7.1
LD, Kaldo, etc. ....	+ 42.7	+ 19.2	+ 9.2
<b>Total, crude steel</b>	<b>+ 5.1</b>	<b>+ 5.0</b>	<b>+ 4.7</b>

It should be emphasized that the revised rate of annual growth in production potential for crude steel up to 1976 (4.7%) includes large regional differences: 12% for coastal plants as against 3% for plants in the interior.

TABLE 29  
Average Annual Rates of Growth for Pig-iron and Steelmaking Potential

Date of survey	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
	1959-1963	1960-1964	1961-1965	1962-1966	1963-1967	1964-1968	1965-1969	1966-1970	1967-1971	1968-1972	1969-1973	1970-1974	1971-1975	1972-1976
Pig-iron.....	5.2	6.3	6.8	6.1	3.8	4.7	3.1	2.6	2.5	3.0	5.3	7.0	5.7	5.1
Steel .....	3.8	5.8	5.5	5.2	4.0	5.0	3.7	3.1	2.6	3.6	5.0	6.1	4.8	4.7

As previously, this survey reflects the impact of important investment decisions taken generally by producers during the last period which was characterized by good market conditions, aiming amongst other important projects, at the expansion of two coastal steel works and the completion of a third. The rate of growth expected for production potential, which in the 1971 survey reached a maximum of 6% for the period 1970-1974, is still at 4.7% for the period up to 1976, thus showing that producers intend to continue with these programmes which will be reflected by the almost simultaneous commissioning of large plants from the middle of the seventies.

### (c) Semis and Rolled Products

The record expenditure for rolling mills recorded in the previous survey for capital expenditure in the six original countries in 1971 has been maintained and even exceeded in 1972; this has been partly influenced by efforts to catch up in the South of France, and more especially on the Italian seaboard. Forecasts for 1973 are at approximately the same level.

The increase in approved capital expenditure on primary mills in 1971 and 1972 and forecast for 1973—between 100 and 120 m—is due to certain large-scale expansions and/or the construction of new plants.

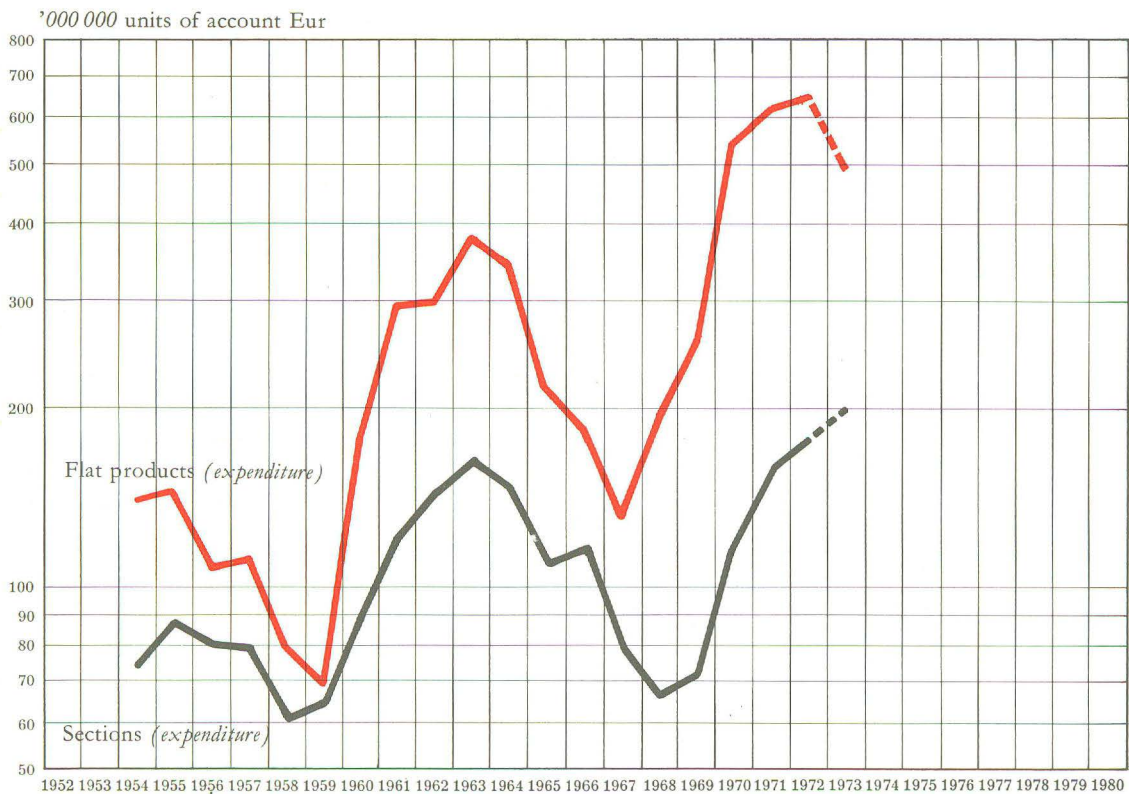
As for continuous casting, expansion continued to be extremely rapid in virtually all the Community countries. The expenditure forecasts for 1973 and 1974—163 and 135 m respectively—are not only the highest since surveys were first begun but also higher than those forecast for the same period for the traditional primary mills. Since the 1969 survey the amounts actually spent have always exceeded the forecasts.

TABLE 30  
Movement of Continuous Casting Potential

	Production 1972	Production potential				
		1972	1973	1974	1975	1976
		Continuous casting .....	9.8	13.9	18.3	22.9

'000 000 metric tons

FIGURE 13  
 Sections and Flat Products  
 A—Capital expenditure



B—Actual production and production potential

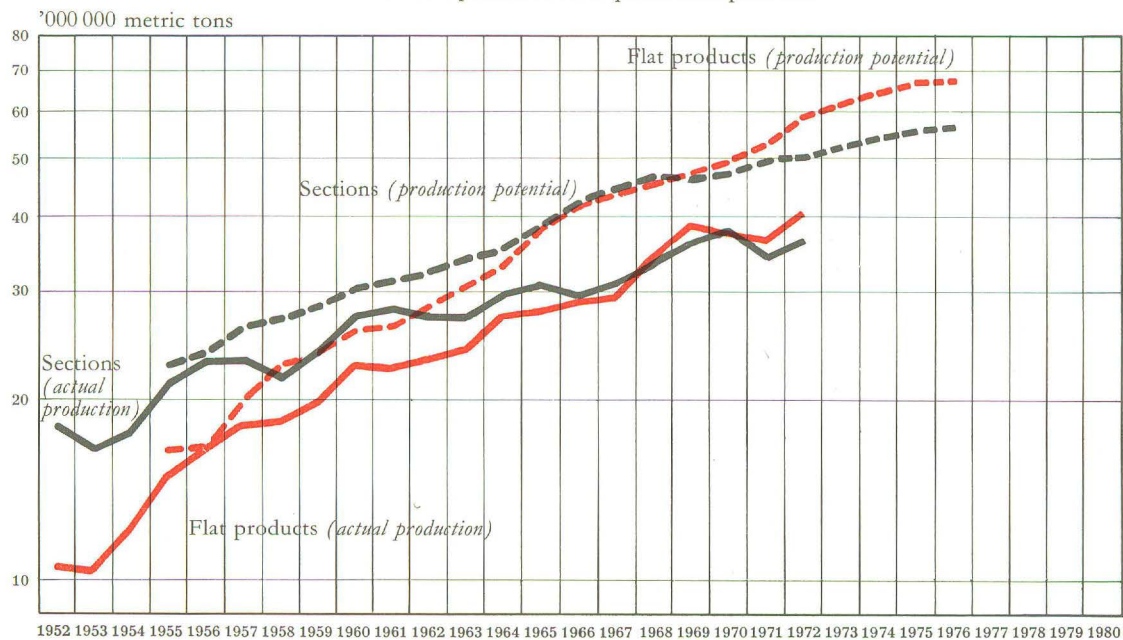


FIGURE 14

Actual Production and Production Potential for the Various Categories of Finished Rolled Products

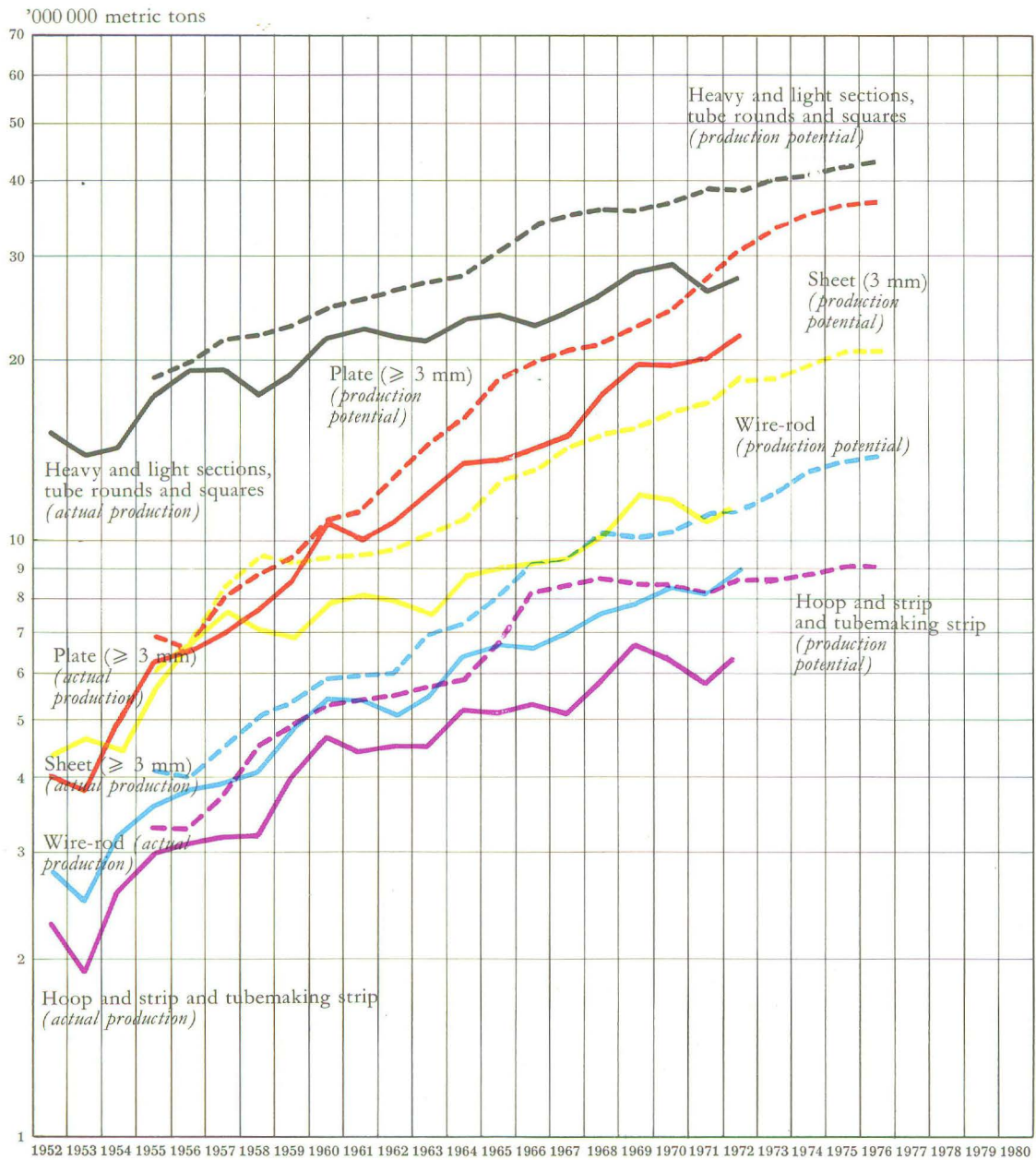




TABLE 31

## Capital Expenditure on Production Capacity for Semis and Rolled Products, 1954-74

'000 000 units of account Eur

Type of mill	Actual expenditure														Estimated expenditure (cat. A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Heavy and medium section mills .....	33.5	55.0	66.4	66.0	74.6	54.9	52.4	51.3	33.9	28.9	31.4	46.0	57.2	76.0	104.4	88.1
Small-bar mills ...	29.9	19.2	26.2	27.5	48.8	67.3	44.3	49.6	23.7	16.5	31.3	48.4	66.0	46.8	37.4	22.2
Wire mills .....	11.0	16.2	28.4	51.0	40.0	24.1	12.8	15.4	21.3	21.0	9.6	20.7	34.9	55.2	57.9	19.0
<i>Total, section mills</i>	<i>74.4</i>	<i>90.4</i>	<i>121.0</i>	<i>144.5</i>	<i>163.4</i>	<i>146.3</i>	<i>109.5</i>	<i>116.3</i>	<i>78.9</i>	<i>66.4</i>	<i>72.3</i>	<i>115.1</i>	<i>158.1</i>	<i>178.0</i>	<i>199.7</i>	<i>129.3</i>
Hoop and strip mills	8.8	4.3	5.5	8.6	8.2	4.8	10.0	13.6	12.7	15.1	9.0	14.1	6.8	5.8	3.8	1.5
Plate and universal mills .....	29.0	24.8	35.4	46.2	64.0	32.2	23.1	33.2	20.5	34.6	43.6	92.8	150.7	116.7	74.4	44.3
Hot-sheet mills ...	2.9	3.7	6.0	2.1	2.3	0.8	1.2	0.7	0.6	0.8	0.7	0.4	1.5	0.6	0.4	0.6
Cold-sheet mills ...	1.4	0.4	0.7	0.4	0.1	0.4	0.5	0.1	3.2	10.9	2.0	1.7	0.3	—	—	—
Hot wide-strip mills .....	27.0	27.5	67.0	65.5	158.7	147.0	86.6	78.8	63.2	90.6	64.0	111.3	196.9	314.3	210.8	139.6
Cold wide-strip mills .....	38.8	114.8	178.6	175.9	147.1	159.3	97.6	59.6	30.7	41.8	141.0	315.8	251.8	206.8	204.9	116.6
<i>Total, flat-product mills</i>	<i>107.9</i>	<i>175.5</i>	<i>293.2</i>	<i>298.7</i>	<i>380.4</i>	<i>344.5</i>	<i>219.0</i>	<i>186.0</i>	<i>130.9</i>	<i>193.8</i>	<i>260.3</i>	<i>536.1</i>	<i>608.0</i>	<i>644.2</i>	<i>494.3</i>	<i>302.6</i>
Blooming and slabbing mills .....	35.5	43.6	74.8	91.3	108.7	78.6	44.1	43.4	52.5	83.0	91.4	79.3	97.9	123.6	113.4	55.8
Continuous-casting plants .....	...	...	...	2.3	4.1	5.6	10.0	13.1	28.2	19.9	30.5	63.1	84.0	70.5	163.4	135.3
Miscellaneous (including coating lines) ...	32.1	40.8	43.4	60.8	69.8	59.3	42.9	46.2	27.2	28.0	50.2	76.9	84.0	136.0	159.8	120.5
<b>Total</b>	<b>249.9</b>	<b>350.3</b>	<b>532.4</b>	<b>597.6</b>	<b>726.4</b>	<b>634.3</b>	<b>425.5</b>	<b>405.0</b>	<b>317.7</b>	<b>391.1</b>	<b>504.7</b>	<b>870.5</b>	<b>1 032.0</b>	<b>1 152.3</b>	<b>1 130.6</b>	<b>734.5</b>

Broken down according to the main types of **rolling mill**, the capital expenditure on **flat products** —644 m—were in 1972 once more higher than the previous year and, mainly due to the installation of new hot wide strip mills in coastal works, represent almost 80% of expenditure allocated to finished product mills —822 m. Expenditure on **section mills** also exceeded the forecasts, especially in the South of France. The difference between the expenditure allocated to the two types of mills will decrease in 1973 and 1974 when certain large programmes will be completed. Expenditure on flat product mills will then be no more than double that on section mills.

TABLE 32  
Average Annual Movement of the Different Types of Finished Products

Product	Actual production			Production potential				
	1952 (mill. tons)	Average cumulative annual movement (%)	1972 (mil l. tons)	1968 (mill. tons)	Average cumulative annual movement (%)	1972 (mill. tons)	Average cumulative annual movement (%)	1976 (mill. tons)
Heavy and light sections, incl. tube rounds and squares .....	15.2	+ 3.0	27.5	36.3	+ 1.6	38.7	+ 2.7	43.0
Wire-rod .....	2.8	+ 6.0	9.0	10.3	+ 2.3	11.3	+ 5.1	13.8
<i>Total, sections</i>	<i>18.0</i>	<i>+ 3.6</i>	<i>36.5</i>	<i>46.6</i>	<i>+ 1.8</i>	<i>50.0</i>	<i>+ 3.2</i>	<i>56.8</i>
Hoop and strip and tube strip	2.3	+ 5.4	6.5	8.7	— 0.3	8.6	+ 1.4	9.1
Plate of 3 mm and over <sup>(1)</sup> .....	4.3	+ 5.0	11.4	15.0	+ 5.1	18.3	+ 2.9	20.5
Hot-rolled sheet under 3 mm <sup>(2)</sup>	3.1	— 10.8	0.4	1.2	— 4.4	1.0	+ 2.4	1.1
Cold-reduced sheet under 3 mm	0.8	+ 18.0	21.7	20.1	+ 10.2	29.6	+ 4.8	35.7
<i>Total, flats <sup>(1)</sup></i>	<i>10.5</i>	<i>+ 6.9</i>	<i>40.0</i>	<i>45.0</i>	<i>+ 6.3</i>	<i>57.5</i>	<i>+ 3.7</i>	<i>66.4</i>
<b>Total, finished rolled products <sup>(2)</sup></b>	<b>28.5</b>	<b>+ 5.1</b>	<b>76.5</b>	<b>91.6</b>	<b>+ 4.1</b>	<b>107.5</b>	<b>+ 3.5</b>	<b>123.2</b>

<sup>(1)</sup> Exclusive of coils rating as end products in respect of which the production potential would increase from 7.6 to 10.8m tons from 1972 to 1976.

The rate of development of production potential in 1972—11%—was again extremely rapid for flat products as defined by the survey.<sup>1</sup> In contrast, the production potential of section products mills remained static.

In the period 1972-1976 the rate of increase in production potential for flat products will be reduced from 5.5% for the period 1971-1975 to 3.7%. There will be a considerable reduction in the case of heavy and medium plate and for cold-rolled thin sheet. The rate of 5.5%, of course, took into account the new potential becoming available from the completion of a number of projects approved at the beginning of the last period of good market conditions, especially in North Rhine/Westphalia, the Saar, Belgium and the Netherlands. The rate of 3.7% applies only to flat products as defined by this survey;<sup>1</sup> it does not include the extensive new production potential for coil for which certain producers have not stated the method of re-rolling or transformation.

The production potential for finished rolled products will increase from 107 to 123 m metric tons between 1972 and 1976. The relative share of flat products will remain unchanged at about 53% of the total.

<sup>1</sup> As regards production potential flat products, in the sense of the survey comprise hoop and strip and tube strip, heavy and medium plate and wide sheet, hot and cold-rolled thin sheet, but not coils — rating as end products — used in the as-delivered state in the Community or exported.

FIGURE 15

Breakdown of Total Production of Finished Rolled Products by Types of Product

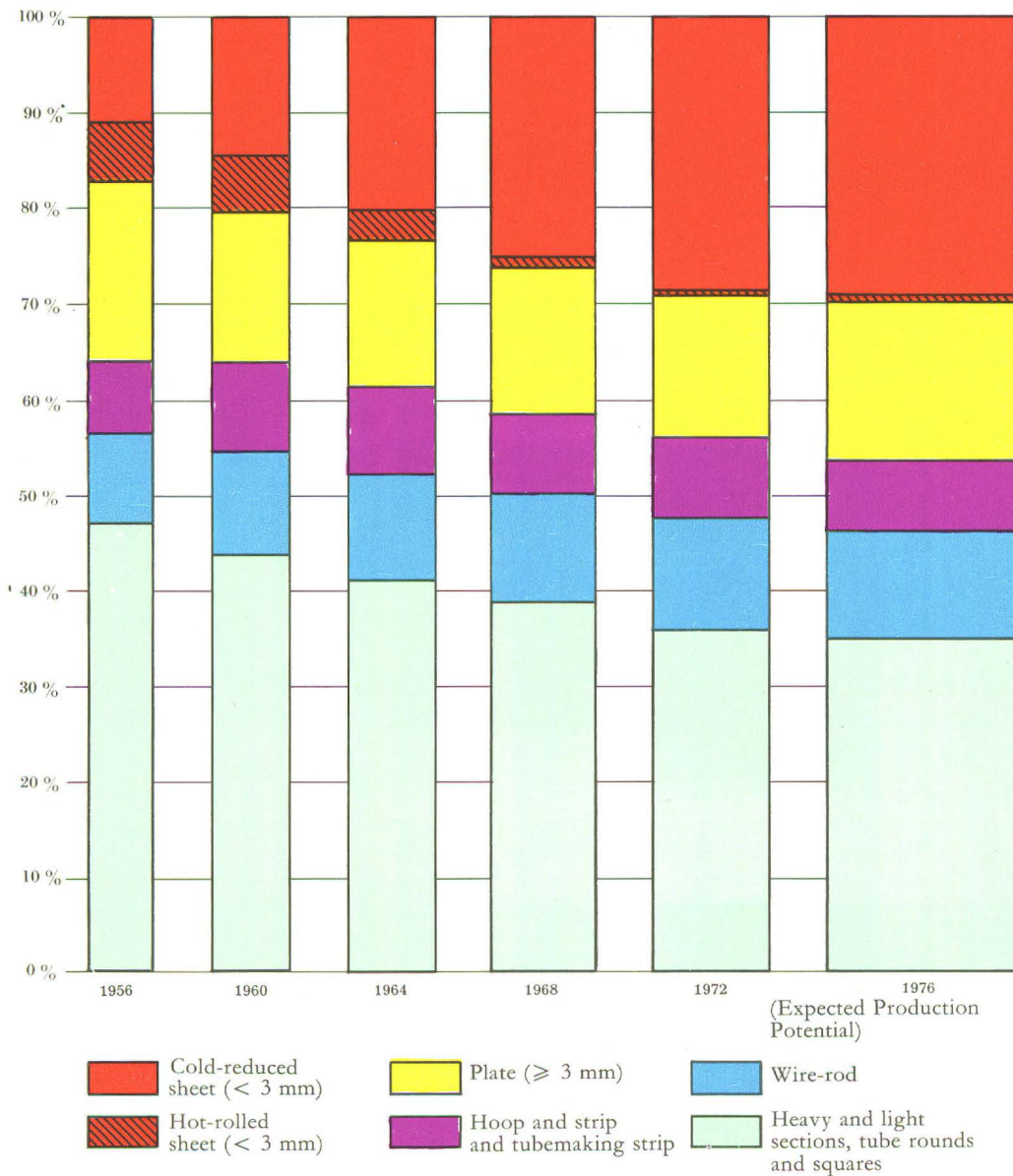


FIGURE 16

Development of Techniques for the Production of Plate  $\geq 3$  mm, Hoop and Strip and Tubemaking Strip

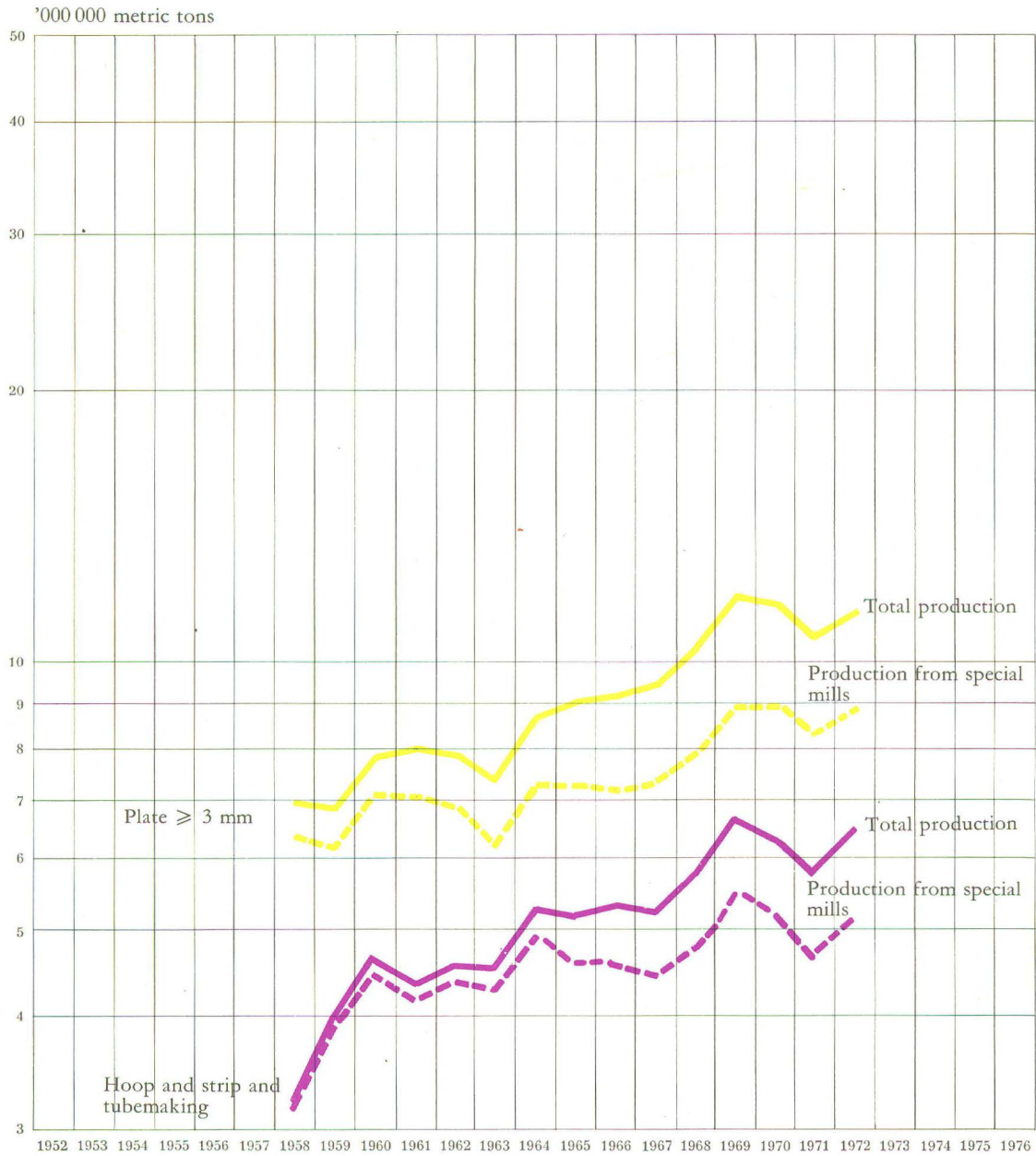


TABLE 33  
Annual Rate of Growth in Coils Production Potential

	Production potential				
	1968 ( <sup>'000 000</sup> tons)	Average cumulative annual movement (%)	1972 ( <sup>'000 000</sup> tons)	Average cumulative annual movement (%)	1976 ( <sup>'000 000</sup> tons)
Coils .....	28.6	+ 10.0	41.9	+ 7.4	55.8

TABLE 34  
Movement of Production of Heavy and Medium Plate, Hoop and Strip and Tubemaking Strip

Product	<sup>'000 000 metric tons</sup>														
	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
<i>Heavy and medium plate</i>															
— from special mills .....	6.4	6.2	7.1	7.0	6.9	6.3	7.3	7.3	7.2	7.4	8.0	8.9	8.9	8.3	8.8
— from coils .....	0.6	0.6	0.7	1.0	1.0	1.0	1.4	1.7	1.9	1.9	2.3	2.9	2.7	2.3	2.6
<b>Total</b>	<b>7.0</b>	<b>6.8</b>	<b>7.8</b>	<b>8.0</b>	<b>7.9</b>	<b>7.4</b>	<b>8.7</b>	<b>9.0</b>	<b>9.1</b>	<b>9.3</b>	<b>10.3</b>	<b>11.8</b>	<b>11.6</b>	<b>10.6</b>	<b>11.4</b>
<i>Hoop and strip and tubemaking strip .....</i>															
— from special mills .....	3.2	3.9	4.5	4.2	4.4	4.3	4.9	4.6	4.6	4.4	4.7	5.5	5.2	4.7	5.2
— from coils .....	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.6	0.7	0.8	1.1	1.2	1.1	1.1	1.3
<b>Total</b>	<b>3.2</b>	<b>4.0</b>	<b>4.6</b>	<b>4.4</b>	<b>4.6</b>	<b>4.6</b>	<b>5.3</b>	<b>5.2</b>	<b>5.3</b>	<b>5.2</b>	<b>5.8</b>	<b>6.7</b>	<b>6.3</b>	<b>5.8</b>	<b>6.5</b>

#### (d) General Services

Capital expenditure on general services—power generating plant and distribution networks, civil engineering, workshops, laboratories—which reached a very high level in 1972, will increase again in 1973. This expenditure reflects the influence of large investment programmes for integrated steel works in the coastal areas.

**TABLE 35**  
**Capital Expenditure on the General Services of the Iron and Steel Industry, 1954-74**

*'000 000 units of account Eur*

Type of installation	Actual expenditure															Estimated expenditure (cat. A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	
Power-generating plant and distribution networks .....	45.5	60.7	71.7	84.2	93.6	86.3	55.7	43.1	33.5	33.4	40.8	51.8	88.4	119.3	114.9	76.9	
Miscellaneous .....	58.3	96.6	137.4	162.9	226.1	213.7	166.0	145.4	104.7	105.2	117.6	183.7	302.9	384.9	460.1	281.7	
<b>Total</b>	<b>103.8</b>	<b>157.3</b>	<b>209.1</b>	<b>247.1</b>	<b>319.7</b>	<b>300.0</b>	<b>221.7</b>	<b>188.5</b>	<b>138.2</b>	<b>138.6</b>	<b>158.4</b>	<b>235.5</b>	<b>391.3</b>	<b>504.2</b>	<b>575.0</b>	<b>358.6</b>	

#### IV — CONCLUSIONS

According to the estimates returned by the producers, annual coal extraction potential which fell from 175 to 166 m metric tons between 1971 and 1972 is expected to fall by some 36 m metric tons between now and 1976 to a level of 130 m metric tons. However, as previous reports have emphasized, experience shows that in this industry the actual reductions are generally larger than those forecast. Thus, in 1973 and in 1974 the extraction potential will be about 20 m metric tons below that forecast three years ago for the same year.

In the **coke making** sector the increase in capacity will be relatively small, and it will be due to the efforts of the iron and steel industry concentrated on coastal works. Coke making capacity forecasts for 1976 will be at a much lower level—75 m metric tons—than announced by the previous surveys for the period covered. Although it is almost certain that these forecasts will not be attained, it appears that the figures reached will still be sufficient for the needs of blast furnaces.

From technical and economic necessity as well as the commissioning of modern plant it will be necessary for certain producers to approve closures sooner or to a greater extent than they are forecasting at present. As a comparison, the general objectives for steel 1975 published in 1971 forecast the maximum coke output for the Six at 77 m metric tons for 1975.

In the **iron ore mines**, capital expenditure will remain at a modest level, hardly half that at the beginning of the sixties. Extraction potential has continued to fall; however, the producers forecast that the rate of reduction will decrease, so that they will be capable in 1975 of producing the 21.5 m metric tons of Fe anticipated for 1975 by the general objectives. In this regard it must be remembered that during recent years the fall in extraction potential has in fact been more rapid than the producers had expected both in iron ore and coal mines.

The **iron and steel producers** in their replies to the current survey confirm the major trends announced in the previous report. Their capital expenditure which had continued to increase at a steady rate for five consecutive years reached a new record level of 2 600 million units of account Eur and this will again be exceeded in 1973. The survey reflects the taking of large investment decisions at the same time during the preceding period of good market conditions. It will be shown in the continuance of the approved programmes, despite the unequal market conditions in the six countries of the Community during 1972.

During the last year the actual expenditure exceeded the forecasts; this was due to the increase in the price of plant rather than to a greater propensity to invest. The excess recorded in the Community, which has only really been observed since the beginning of the surveys, did however include considerable differences according to country and region. Overall, the actual expenditure exceeded the forecasts by a considerable amount in coastal regions: Northern Germany, the Netherlands, Belgium, North of France and the Italian seaboard.

In these same regions—with the exception of the Netherlands which all the same considerably increased its capital expenditure during recent years—that the increase in investments was most marked.

This is confirmed by a comparison of the amount of expenditure per ton of steel produced in the iron and steel industry; a comparison of this sort, which must be interpreted with care, shows that the considerable increase during recent years at Community level is mainly due to France, Italy and the Netherlands.

With regard to production potential, the expansion of coastal works has been greater than that of inland works. Their production potential will reach a figure of 46 m metric tons for the Six, while the general objectives for 1975 predicted a level of about 42 m metric tons. As in 1972 the survey shows a rapid rate of growth for oxygen steel works. The production potential for pure oxygen steel with the LD, Kaldo and similar processes will account for more than 64% of the total in 1976 as against 54% now. Bottom-blown oxygen converter steel will account for 5% of the production potential in 1976 as against 4% now.

In the case of electrical steel works a number of producers forecast, despite considerable fluctuations which are typical of the scrap market, a large increase in capital expenditure in conjunction with a growth in production potential; the latter will reach some 15% of the overall Community production potential for the first time since the surveys were started; in contrast, basic Bessemer steel works will possibly not actually reach the level of production predicted for 1976; this survey confirms the decline forecast in previous years; the production potential given in this survey are considerably below the figures announced in previous reports. A number of basic Bessemer converters will be adapted to bottom-blown oxygen processes (OBM, etc.).

By 1975, the production potential of the iron and steel industry should not be far off the 1963 m metric tons per annum predicted by the general objectives for 1975; according to this survey it will reach 168 m in 1976. The growth rate for the production potential of crude steel announced for the period 1972-1976—4.7% per annum—is thus identical with that given in the General Objectives for Steel.

In the case of production processes downstream from steel production the continued rapid growth of **continuous casting** should be emphasized; the production potential of this process which is still modest will increase at a rate of 25% per annum approximately between now and 1976. The production potential of **rolled products** forecast for the period 1972-1976 will increase at a rate of 3.5%, a little under that announced for the period 1971-1975; the rate of growth for flat products in the last survey was of course closely linked with the completion of a number of projects approved during the last period of good market conditions especially in Rhineland-Westphalia, the Saar, Belgium and the Netherlands. The rate forecast this year for flat products<sup>1</sup>—3.7%—is apparently quite close to that for long products—3.2% per annum, but it does not take into account the commissioning of new large production capacity for coil for which certain producers have still not declared the re-rolling or transformation methods.

To be sure, the market situation has improved and this has been seen in the considerable improvement in the rate of utilization of production potential in the iron and steel industry. However, the structures of many enterprises are still subject to imbalances which to some extent prevent them from utilizing their largest capacities. Under these conditions the fears repeatedly expressed in the annual reports on investments which point out the need for continual efforts to adapt supply to demand when making decisions on investments in new production capacity are still valid.

<sup>1</sup> As regards production potential, flat products in the sense of this survey comprise strip and tube strip, medium and heavy plate, hot and cold rolled thin sheet, but not coils — rating as end products — used in the as-delivered state in the Community or exported.



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Of course, during recent years some enterprises have become larger either by internal growth or by regrouping so as to make better use of their modern technical capacity. However, it must be pointed out that in certain cases the simultaneous nature of certain large investments with the resultant rapid increase in supply, has only enabled this target to be achieved after a considerable lapse of time. In this regard, it would seem that certain types of cooperation are likely to facilitate the appropriate adjustments.

## ANNEXES

I—Basic definitions

II—Statistical tables

## I—BASIC DEFINITIONS

To ensure that the figures obtained shall be comparable, the High Authority and subsequently the Commission of the European Communities have adopted the following definitions.

### I—INVESTMENT

#### (a) 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, except the financing of workers' housing schemes, financial participation and all investment not directly connected with ECSC-Treaty products.

#### (b) Classification of investment projects

As regards the trend in capital expenditure and related production potential, the same breakdown of capital schemes as that used in the questionnaires submitted to the enterprises has been adopted, viz.

A—*Projects completed or in progress before 1 January 1973 ;*

B—*Projects approved but not yet in progress on 1 January 1973 ;*

C—*Other projects planned to be started between 1 January 1973 and 31 December 1975.*

*Since investment projects drawn up by iron and steel companies and, to an increasing extent, companies in the extraction industries (coal and iron-ore mining) are often revoked, category C is not considered in this report.*

#### (c) Units of account (Eur)

The unit adopted has been successively the unit of account of the European Payments Union (EPU) and subsequently that of the European Monetary Agreement (EMA). It is at present fixed at the central rates of exchange adopted on 18 December 1971 in Washington. Its equivalent in national currencies is given in the following table :

Country	Currency	Up to and including 1956	1957	1958	1959 and 1960	1961	1962 to 1968	1969	1970	1971 <sup>(8)</sup>	1972 <sup>(8)</sup>	1973 and onwards <sup>(8)</sup>
Germany (Fed. Rep.) ...	DM	4.20	4.20	4.20	4.20	4.03 <sup>(4)</sup>	4.00	3.94 <sup>(7)</sup>	3.66	3.655	3.499	3.499
Belgium/Luxembourg ..	FB-FLux	50	50	50	50	50	50	50	50	49.96	48.657	48.657
France <sup>(1)</sup> .....	FF <sup>(2)</sup>	350	377 <sup>(3)</sup>	420	4.937 <sup>(2)</sup>	4.937	4.937	5.178 <sup>(6)</sup>	5.554	5.554	5.554	5.554
Italy .....	Lit.	625	625	625	625	625	625	625	625	625.19	631.311	631.311
Netherlands ...	Fl.	3.80	3.80	3.80	3.80	3.65 <sup>(5)</sup>	3.62	3.62	3.62	3.617	3.523	3.523

<sup>(1)</sup> And Saar up to 5 July 1959.

<sup>(2)</sup> NF as from 1 January 1959.

<sup>(3)</sup> Mean between official rate of exchange in force from 1 January to 11 August 1957 (350) and that in force from 12 August to 31 December 1957 (420).

<sup>(4)</sup> Mean between official rate of exchange in force from 1 January to 3 March 1961 (4.20) and that in force from 4 March to 31 December 1961 (4.00).

<sup>(5)</sup> Mean between official rate of exchange in force from 1 January to 3 March 1961 (3.80), and that in force from 4 March to 31 December 1961 (3.62).

<sup>(6)</sup> Mean between official rate of exchange in force from 1 January to 26 October 1969 (4.937) and that in force from 11 August to 31 December 1969 (5.554).

<sup>(7)</sup> Mean between official rate of exchange in force from 1 January to 27 October 1969 (4.60) and that in force from 27 October to 31 December 1969 (3.66).

<sup>(8)</sup> For 1971: weighted average of the official rates in force before and after 18 December 1971 (rates in force in 1970 regarded as valid up to the Washington agreement of 18 December 1971 and, for the period from 19 December to 31 December 1971: new central rates resulting from these agreements. For 1972 and after: the central rates resulting from the Washington agreements of 18 December 1971.

#### (d) Capital goods price indices

The statistics for the annual investment surveys are compiled from the enterprises' declarations at the ruling prices for the year concerned, the figures being converted into units of account at the official rates shown above.

Capital goods for the iron and steel (or coal) industry are often highly specific and originate to a large extent in countries outside the Community. It is thus difficult to calculate price indices for these goods applicable to every country in the ECSC. It is nevertheless of interest to draw from the national accounts the indices concerning capital goods for all sectors of industry, and to weight these indices in accordance with the share of each country in Community steel investments.

The table below shows the indices recently revised according to this method with 100 for base-year 1963:

1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
89.4	92.2	95.8	100.0	104.4	106.9	109.4	110.7	112.6	118.3	128.5	137.6

The figures in this report can thus be converted to 1963 prices by applying the index for the year concerned to the annual expenditures recorded.

## II—MINING INDUSTRIES

### (a) Coal

*Extraction potential*—The figures shown represent the net maximum output technically achievable, allowing for the performance capacity of the different installations at the collieries (underground, surface, washeries), and assuming that it is not impeded by marketing difficulties, strikes or 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 1972 of only about 0.3 million metric tons, out of 145.7 million, i.e. 0.2 %.

### (b) 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 performance capacity of the ancillary and auxiliary installations. It is assumed that a ready market and unlimited raw material supplies are assured.

### (c) Iron ore

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

### (d) Geographical breakdown

In the tables, the orefields other than those mentioned by name are:

Central and Southern Germany : Sauerland-Waldeck, Lahn-Dill, Taunus-Hunsruck, Upper Hesse;

Germany : other areas : Dogger orefield, Kreide orefield.

## III—IRON AND STEEL INDUSTRY

### (a) Production potential

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 the usual 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 steel works has not been included in this survey. It was assumed that the production potential of these enterprises would over the next few years remain at the level of actual production for 1972. 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 1.1 % for crude steel and 2.2 % for finished rolled-products.

As the production potential of the *rolling-mills* is governed by the shape (section), thickness and width of the material fed into the mill (metal input) and the products to be obtained, we have proceeded on the assumption that, should no forecast be possible as to future steel-rolling conditions, it will be necessary to base estimates on the conditions obtained in 1972. The same applies to the apportionment of steel availabilities among the different types of mill.

### (b) Geographical breakdown

In the tables, the producer regions other than those mentioned by name are:

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;

France, other areas: all-other Departments.

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<b>HARD-COAL INDUSTRY <sup>(1)</sup></b>
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**Total investment**

**TABLE I**  
**Capital Expenditure by Areas**

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure <sup>(6)</sup>		
	1965	1966	1967	1968	1969	1970	1971	1972	on	on Jan. 1, 1973	
									Jan. 1, 1972 for	1972	1973
Ruhr .....	127.75	110.02	85.87	77.74	55.94	63.42	86.69	89.69	119.83	119.74	45.11
Aachen .....	5.37	6.09	4.05	6.98	5.69	5.77	8.68	6.71	8.24	7.36	8.89
Lower Saxony .....	2.68	1.65	0.89	1.18	2.24	3.13	4.28	3.79	5.89	4.25	0.22
Saar .....	14.61	8.72	9.66	9.21	4.22	6.32	6.92	9.49	11.64	15.08	3.10
<i>Germany (FR)</i> .....	<i>150.41</i>	<i>126.48</i>	<i>100.47</i>	<i>95.11</i>	<i>68.09</i>	<i>78.64</i>	<i>106.57</i>	<i>109.68</i>	<i>145.60</i>	<i>146.43</i>	<i>57.32</i>
Campine <sup>(2)</sup> .....	6.97	5.65	5.49	7.56	4.45	3.71	3.61	5.44	6.97	6.96	3.38
Southern Belgium <sup>(2)</sup> .....	8.09	5.23	5.89	6.01	3.95	3.86	3.72	3.34	4.54	5.04	0.67
Dutch Limburg <sup>(2)</sup> .....	7.39	4.34	2.21	1.90	0.50	2.35	0.28	0.23	2.05	0.22	—
<i>Belgium and the Netherlands</i> .....	<i>22.72</i>	<i>16.27</i>	<i>14.41</i>	<i>16.56</i>	<i>10.43</i>	<i>10.26</i>	<i>10.70</i>	<i>11.23</i>	<i>13.83</i>	<i>13.42</i>	<i>4.05</i>
Nord/Pas-de-Calais .....	16.07	15.55	16.65	15.78	7.40	7.04	7.56	9.30	8.63	6.05	4.42
Lorraine .....	17.05	13.96	12.52	10.92	6.65	6.80	6.06	7.75	7.79	8.75	9.12
Centre-Midi .....	6.94	7.99	6.70	5.82	3.39	2.04	1.99	1.67	1.78	1.58	1.25
Independent plants <sup>(3)</sup> .....	0.64	0.60	0.30	—	—	—	—	—	—	—	—
<i>France</i> .....	<i>40.70</i>	<i>38.10</i>	<i>36.17</i>	<i>32.52</i>	<i>17.44</i>	<i>15.88</i>	<i>15.61</i>	<i>18.72</i>	<i>18.20</i>	<i>16.38</i>	<i>14.79</i>
<i>Italy</i> .....	<i>4.89</i>	<i>7.75</i>	<i>7.67</i>	<i>5.84</i>	<i>5.35</i>	<i>2.87</i>	<i>3.62</i>	<i>2.16</i>	<i>3.63</i>	<i>2.45</i>	<i>0.78</i>
<b>Total</b>	<b>218.72</b>	<b>188.60</b>	<b>158.72</b>	<b>150.03</b>	<b>101.31</b>	<b>107.65</b>	<b>136.50</b>	<b>141.79</b>	<b>181.26</b>	<b>178.68</b>	<b>76.94</b>

<sup>(1)</sup> Without the expenses of the central thermal units and other energetical installations.

<sup>(2)</sup> These figures do not include the independent coking plants at the mines. However these latter are re-inserted in the total Belgium and Netherlands.

<sup>(3)</sup> Manufactures of agglomerates.

<sup>(4)</sup> Without the expenses of the Ruhr part of EBV.

<sup>(5)</sup> Includes the expenses of the Ruhr part of EBV.

<sup>(6)</sup> The estimates relate only to expenditure on projects already in progress (cat. A) and approved (cat. B).



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

TABLE II  
Capital Expenditure by Coalfields

'000 000 units of account Eur

Coalfield	Actual expenditure								Estimated expenditure <sup>(3)</sup>		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Ruhr .....	114.38	98.80	78.75	70.71	47.73	47.61	54.14	48.26	76.07	85.89	34.87
Aachen .....	5.27	4.26	2.36	5.07 <sup>(1)</sup>	5.30 <sup>(1)</sup>	4.84 <sup>(1)</sup>	5.71 <sup>(1)</sup>	5.18 <sup>(1)</sup>	6.99 <sup>(1)</sup>	4.80 <sup>(1)</sup>	4.53 <sup>(1)</sup>
Lower Saxony .....	2.66	1.60	0.88	1.13 <sup>(2)</sup>	2.22 <sup>(2)</sup>	3.08 <sup>(2)</sup>	4.18 <sup>(2)</sup>	3.77 <sup>(2)</sup>	5.81 <sup>(2)</sup>	4.22 <sup>(2)</sup>	0.22 <sup>(2)</sup>
Saar .....	13.62	8.54	9.33	5.23	3.64	5.55	6.59	9.40	10.93	11.42	1.63
<i>Germany (FR)</i> .....	<i>135.93</i>	<i>113.20</i>	<i>91.32</i>	<i>82.14</i>	<i>58.89</i>	<i>61.08</i>	<i>70.62</i>	<i>66.61</i>	<i>99.80</i>	<i>106.33</i>	<i>41.25</i>
Campine .....	4.51	4.71	5.49	7.56	4.45	3.71	3.61	5.44	6.97	6.96	3.38
Southern Belgium .....	7.55	5.06	5.72	5.83	3.77	3.81	3.59	3.10	4.46	4.91	0.66
<i>Belgium</i> .....	<i>12.06</i>	<i>9.77</i>	<i>11.21</i>	<i>13.39</i>	<i>8.22</i>	<i>7.52</i>	<i>7.20</i>	<i>8.54</i>	<i>11.43</i>	<i>11.87</i>	<i>4.04</i>
<i>Netherlands (Limburg)</i> .....	<i>7.04</i>	<i>3.63</i>	<i>2.08</i>	<i>1.80</i>	<i>0.50</i>	<i>1.02</i>	<i>0.28</i>	<i>0.23</i>	<i>0.38</i>	<i>0.22</i>	—
Nord/Pas-de-Calais .....	13.33	13.51	13.07	12.34	6.40	5.03	5.55	7.92	7.05	5.25	3.69
Lorraine .....	16.03	13.09	12.24	10.59	6.49	6.71	5.55	6.88	6.80	6.68	6.20
Centre-Midi .....	5.97	6.13	5.30	5.52	3.28	1.91	1.86	1.42	1.36	1.35	0.82
<i>France</i> .....	<i>35.33</i>	<i>32.73</i>	<i>30.61</i>	<i>28.45</i>	<i>16.17</i>	<i>13.65</i>	<i>12.96</i>	<i>16.22</i>	<i>15.21</i>	<i>13.28</i>	<i>10.71</i>
<i>Italy</i> .....	—	3.51	4.66	2.13	2.46	2.10	2.01	0.43	—	—	—
<b>Total</b>	<b>190.36</b>	<b>162.84</b>	<b>139.88</b>	<b>127.91</b>	<b>86.24</b>	<b>85.37</b>	<b>93.07</b>	<b>92.03</b>	<b>126.82</b>	<b>131.70</b>	<b>56.00</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).

**MINE-OWNED AND  
INDEPENDENT  
COKING-PLANTS <sup>(1)</sup>**

**Investment**

TABLE III  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure <sup>(4)</sup>		
	1965	1966	1967	1968	1969	1970	1971	1972	on	on Jan. 1, 1973	
									Jan. 1, 1972 for	1972	1973
<b>Mine-owned coking-plants</b>											
Ruhr .....	12.18	10.43	6.91	6.97	8.05	15.62	32.42	41.39	42.91	32.01	8.30
Aachen .....	0.06	0.16	0.23	1.84	0.34	0.25	2.52	1.37	1.13	2.55	4.36
Saar .....	0.99	0.18	0.33	3.98	0.58	0.77	0.33	0.09	0.71	3.66	1.47
Germany (FR) .....	13.23	10.77	7.47	12.79	8.97	16.64	35.27	42.85	44.75	38.22	14.13
Belgium and the Netherlands .....	0.11	0.01	—	0.21	—	—	—	—	—	—	—
Nord/Pas-de-Calais .....	1.10	1.37	1.96	3.16	0.77	1.83	1.87	1.20	1.32	0.67	0.45
Lorraine .....	1.02	0.87	0.28	0.33	0.16	0.09	0.51	0.87	0.99	2.07	2.92
Centre-Midi .....	0.34	0.16	0.45	0.14	0.10	0.11	0.13	0.25	0.42	0.23	0.43
France .....	2.46	2.40	2.69	3.63	1.03	2.03	2.51	2.32	2.73	2.97	3.80
<b>Total</b>	<b>15.80</b>	<b>13.18</b>	<b>10.16</b>	<b>16.63</b>	<b>10.00</b>	<b>18.67</b>	<b>37.78</b>	<b>45.17</b>	<b>47.48</b>	<b>41.19</b>	<b>17.93</b>
<b>Independent coking-plants</b>											
Belgium and the Netherlands .....	0.16	1.04	0.82	0.88	1.53	1.67	3.09	2.22	1.94	1.20	—
Italy .....	4.89	4.24	3.01	3.71	2.89	0.77	1.61	1.73	3.63	2.45	0.78
<b>Total</b>	<b>5.05</b>	<b>5.28</b>	<b>3.83</b>	<b>4.59</b>	<b>4.42</b>	<b>2.44</b>	<b>4.70</b>	<b>3.95</b>	<b>5.57</b>	<b>3.65</b>	<b>0.78</b>
<b>Grand Total</b>	<b>20.85</b>	<b>18.46</b>	<b>13.99</b>	<b>21.22</b>	<b>14.42</b>	<b>21.11</b>	<b>42.48</b>	<b>49.12</b>	<b>53.05</b>	<b>44.84</b>	<b>18.71</b>

<sup>(1)</sup> Including low and medium-temperature coking-plants.

<sup>(2)</sup> Without the expenses of the Ruhr part of EBV.

<sup>(3)</sup> Includes the expenses of the Ruhr part of EBV.

<sup>(4)</sup> The estimates relate only to expenditure on projects already in progress (cat. A) and approved (cat. B).

**HARD-COAL  
BRIQUETTING-PLANTS**

**Investment**

*TABLE IV*  
**Capital Expenditure by Areas**

*'000 000 units of account Eur*

Area	Actual expenditure								Estimated expenditure <sup>(3)</sup>		
	1965	1966	1967	1968	1969	1970	1971	1972	on	on Jan. 1, 1973	
									Jan. 1, 1972 for	1972	for
Ruhr .....	1.19	0.79	0.21	0.06 <sup>(1)</sup>	0.16 <sup>(1)</sup>	0.19 <sup>(1)</sup>	0.13 <sup>(1)</sup>	0.04 <sup>(1)</sup>	0.85 <sup>(1)</sup>	1.84 <sup>(1)</sup>	1.94 <sup>(1)</sup>
Aachen .....	0.04	1.67	1.46	0.07 <sup>(2)</sup>	0.05 <sup>(2)</sup>	0.68 <sup>(2)</sup>	0.45 <sup>(2)</sup>	0.16 <sup>(2)</sup>	0.12 <sup>(2)</sup>	0.01 <sup>(2)</sup>	—
Lower Saxony .....	0.02	0.05	0.01	0.05	0.02	0.05	0.10	0.02	0.08	0.03	—
<i>Germany (FR)</i> .....	<i>1.25</i>	<i>2.51</i>	<i>1.68</i>	<i>0.18</i>	<i>0.23</i>	<i>0.92</i>	<i>0.68</i>	<i>0.22</i>	<i>1.05</i>	<i>1.88</i>	<i>1.94</i>
Campine .....	2.46	0.94	—	—	—	—	—	—	—	—	—
Southern Belgium .....	0.54	0.17	0.17	0.18	0.18	0.05	0.13	0.24	0.08	0.13	0.01
<i>Belgium</i> .....	<i>3.00</i>	<i>1.11</i>	<i>0.17</i>	<i>0.18</i>	<i>0.18</i>	<i>0.05</i>	<i>0.13</i>	<i>0.24</i>	<i>0.08</i>	<i>0.13</i>	<i>0.01</i>
<i>Netherlands (Limburg)</i> .....	<i>0.35</i>	<i>0.71</i>	<i>0.13</i>	<i>0.10</i>	—	—	—	—	—	—	—
Nord/Pas-de-Calais .....	1.64	0.67	1.62	0.28	0.23	0.18	0.14	0.18	0.26	0.13	0.28
Centre-Midi .....	0.63	1.70	0.95	0.16	0.01	0.02	—	—	—	—	—
Independent plants .....	0.64	0.60	0.30	—	—	—	—	—	—	—	—
<i>France</i> .....	<i>2.91</i>	<i>2.97</i>	<i>2.87</i>	<i>0.44</i>	<i>0.24</i>	<i>0.20</i>	<i>0.14</i>	<i>0.18</i>	<i>0.26</i>	<i>0.13</i>	<i>0.28</i>
<b>Total</b>	<b>7.51</b>	<b>7.30</b>	<b>4.85</b>	<b>0.90</b>	<b>0.65</b>	<b>1.17</b>	<b>0.95</b>	<b>0.64</b>	<b>1.39</b>	<b>2.14</b>	<b>2.23</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).

## HARD COAL

## Extraction

TABLE VI  
Extraction and Extraction Potential by Coalfields

'000 000 metric tons

Actual extraction	Coalfield	Extraction potential							Expected extraction potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
1972												
83.3	Ruhr .....	121.7	108.8	100.7	104.3	101.4	98.8	94.4	90.1	81.9	80.9	77.7
6.3	Aachen .....	8.4	8.4	8.2	7.5	6.9	7.1	7.3	7.2	7.0	6.9	6.5
2.5	Lower Saxony .....	2.0	2.3	2.3	2.7	2.8	2.8	2.7	2.7	2.7	2.7	2.7
10.4	Saar .....	14.3	13.9	12.2	14.1	14.2	12.2	12.6	12.4	9.9	9.9	9.9
102.5	Germany (FR) .....	146.4	133.4	123.4	128.6	125.3	120.9	117.0	112.4	101.5	100.4	96.8
7.3	Campine .....	10.0	9.0	9.4	9.4	9.1	9.1	9.1	9.1	9.1	9.1	9.1
3.2	Southern Belgium .....	10.0	9.4	6.8	5.7	4.9	4.4	4.1	3.3	2.8	2.7	2.6
10.5	Belgium .....	20.0	18.4	16.2	15.1	14.0	13.5	13.2	12.4	11.9	11.8	11.7
2.8	Netherlands (Limburg) ...	11.4	9.3	8.6	5.8	5.0	4.5	3.5	2.2	1.1	—	—
12.7	Nord/Pas-de-Calais .....	25.7	24.1	22.2	19.9	17.3	15.4	13.5	11.5	10.3	9.5	8.4
10.9	Lorraine .....	15.5	15.2	15.2	14.7	13.4	12.7	12.0	11.1	10.9	10.7	10.6
6.2	Centre-Midi .....	9.9	9.4	9.2	8.4	7.6	7.2	6.7	5.3	4.5	3.5	2.2
29.8	France .....	51.1	48.7	46.6	43.0	38.3	35.3	32.2	27.9	25.7	23.7	21.2
0.1	Italy .....	0.7	0.7	0.4	0.4	0.4	0.3	0.1	—	—	—	—
145.7	<b>Total</b>	<b>229.6</b>	<b>210.5</b>	<b>195.2</b>	<b>192.9</b>	<b>183.0</b>	<b>174.5</b>	<b>166.0</b>	<b>154.9</b>	<b>140.2</b>	<b>135.9</b>	<b>129.7</b>

N.B.: The above table does not take into account the extraction of some mines of small capacity (258 000 metric tons in 1972 of which 237 000 metric tons from the "small" German mines, which do not figure in the official production statistics).

## COKE

## Production

TABLE VII a  
Production and Production Potential by Areas

'000 000 metric tons

Actual production ( <sup>1</sup> ) 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
	<b>Mine-owned coking-plants</b>											
23.3	Ruhr .....	34.4	30.5	28.8	28.2	27.5	28.1	26.6	24.9	26.2	26.2	26.3
2.1	Aachen .....	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
1.1	Saar .....	1.3	1.3	1.8	1.8	1.9	2.0	1.6	1.5	1.5	1.5	1.5
26.5	Germany (FR) .....	37.6	33.7	32.6	32.0	31.5	32.2	30.3	28.5	29.8	29.8	29.9
—	Belgium and Netherlands ..	3.4	2.4	2.1	1.0	0.1	—	—	—	—	—	—
3.8	Nord/Pas-de-Calais .....	5.2	5.2	5.1	5.3	5.3	5.5	5.1	5.0	4.3	4.3	4.1
2.4	Lorraine .....	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.4	2.5	2.0
0.6	Centre-Midi .....	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.6	0.3	0.4
6.8	France .....	8.9	8.9	8.8	9.0	9.0	9.2	8.8	8.5	7.3	7.1	6.5
33.3	<b>Total</b>	49.9	45.0	43.5	42.0	40.6	41.4	39.1	37.0	37.1	36.9	36.4
	<b>Independent coking-plants</b>											
1.1	Belgium and Netherlands ..	1.4	1.4	1.4	1.2	1.0	1.5	1.2	1.2	1.2	1.2	1.2
2.0	Italy .....	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.1	<b>Total</b>	3.9	3.9	3.9	3.7	3.5	4.0	3.7	3.7	3.7	3.7	3.7
	<b>Steelworks-owned coking-plant</b>											
7.9	Germany (FR) .....	8.4	8.1	7.9	7.6	8.3	8.7	8.9	8.4	8.4	8.9	8.9
8.1	Belgium and Netherlands ..	6.6	6.7	6.8	6.9	8.3	8.3	8.8	9.9	10.4	10.5	10.5
4.7	France .....	4.5	4.6	4.4	4.7	5.3	5.4	4.9	4.8	6.0	6.7	6.8
5.1	Italy .....	4.3	4.3	4.3	4.3	4.7	5.5	6.2	6.9	8.3	8.3	8.3
25.8	<b>Total</b>	23.8	23.7	23.4	23.5	26.6	27.9	28.8	30.0	33.1	34.4	34.5
62.2	<b>Grand Total</b>	77.6	72.6	70.8	69.2	70.7	73.3	71.6	70.7	73.9	75.0	74.6

(<sup>1</sup>) These figures are not the same as those published in the Commission's *Bulletin Statistique*, since certain coking-plants have been classified differently.

## COKING-PLANTS

## Technical Data

TABLE VIII

## Coal Input and Coke Output (Mine-Owned, Independent and Steelworks-Owned Coking-Plants)

Type of coal	1966 <sup>(1)</sup>		1967		1968 <sup>(1)</sup>		1969		1970		1971		1972	
	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%
Group V <sup>(2)</sup> . . . .	65 877	75.7	61 124	72.9	61 885	73.4	69 022	77.0	71 469	78.0	69 998	80.8	64 611	78.4
Group VI <sup>(2)</sup> ' . . .	16 168	18.5	17 092	20.4	17 971	21.3	15 050	16.8	15 148	16.5	12 288	14.2	13 665	16.6
Other groups . . .	4 244	4.9	4 900	5.8	3 593	4.3	4 585	5.1	4 315	4.7	3 497	4.0	3 014	3.6
Coke breeze and low temperature coke breeze	764	0.9	730	0.9	812	1.0	1 031	1.1	758	0.8	847	1.0	1 159	1.4
<b>Total</b>	<b>87 053</b>	<b>100.0</b>	<b>83 846</b>	<b>100.0</b>	<b>84 261</b>	<b>100.0</b>	<b>89 688</b>	<b>100.0</b>	<b>91 690</b>	<b>100.0</b>	<b>86 630</b>	<b>100.0</b>	<b>82 449</b>	<b>100.0</b>
	'000 metric tons	output kg/t <sup>(3)</sup>	'000 metric tons	output kg/t <sup>(3)</sup>	'000 metric tons	output kg/t <sup>(3)</sup>	'000 metric tons	output kg/t <sup>(3)</sup>	'000 metric tons	output kg/t <sup>(3)</sup>	'000 metric tons	output kg/t <sup>(3)</sup>	'000 metric tons	output kg/t <sup>(3)</sup>
Coke production	65 630	753.9	63 256	754.4	63 499	753.6	67 951	757.6	70 103	764.6	65 490	756.0	62 195	754.4
	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input
Oil input . . . . .	55 204	0.063	27 463	0.033	32 315	0.038	29 117	0.032	34 764	0.038	26 358	0.030	17 121	0.021

<sup>(1)</sup> The 1966 and 1968 figures represent only part of the independent coking-plants.

<sup>(2)</sup> The breakdown between Groups V and VI is only approximate.

<sup>(3)</sup> Output of coke (ton for ton) for coal input (also ton for ton). The figure is of practical value; considerable variations may, however, arise as a result of variations in the moisture content of the coal input and the coke produced.

	1966	1967	1968	1969	1970	1971	1972
a) Coke-oven gas delivered . . . . . Tcal . . . . .	126 768	122 989	123 397	132 418	132 698	130 776	105 346
b) Gas output . . . . . Kcal per tonne of wet-charged coal . . . . .	1 456	1 467	1 464	1 476	1 447	1 510	1 278
c) Coke-oven gas delivered to outside enterprises or for consumption other than d) . . . . . Tcal . . . . .	85 677	84 564	82 908	88 300	86 383	86 228	60 824
	(67.6)	(68.7)	(67.2)	(66.7)	(65.1)	(65.9)	(57.7)
d) Consumption for heating oven:							
d) Coke-oven gas . . . . . Tcal . . . . .	41 091	38 423	40 489	44 118	46 315	44 548	34 308
	(70.8)	(71.3)	(74.1)	(77.9)	(80.5)	(82.8)	(76.9)
2. Producer gas . . . . . Tcal . . . . .	3 019	2 374	1 823	830	271	499	376
	(5.2)	(4.4)	(3.3)	(1.5)	(0.5)	(0.9)	(0.8)
3. Blast-furnace and other gases . . . . . Tcal . . . . .	13 919	13 115	12 358	11 679	10 961	8 746	9 928
	(24.0)	(24.3)	(22.6)	(20.6)	(19.0)	(16.3)	(22.3)
4. Total consumption of gas for heating ovens . . . . . Tcal . . . . .	58 029	53 912	54 670	56 627	57 547	53 793	44 612
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
e) Specific consumption in kcal/kg of dry-charged coal (assuming an average moisture content of 8 %) . . . . .	725	699	705	686	682	675	588

N.B.: The gas volumes have been calculated on the basis of a calorific power of 4 300 Kilocalories per standard cubic metre.

<b>HARD-COAL BRIQUETTES</b>
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<b>Production</b>
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TABLE IX  
Production and Production Potential by Areas

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
1.2	Ruhr .....	4.6	4.4	3.8	3.2	2.8	2.7	2.5	1.2	1.0	0.6	0.6
0.9	Aachen .....	0.8	0.9	1.0	1.1	1.0	1.1	1.2	1.1	1.1	1.0	1.0
0.3	Lower Saxony .....	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
2.4	Germany (FR) .....	6.0	5.9	5.4	4.9	4.5	4.5	4.4	3.0	2.8	2.3	2.3
—	Campine .....	0.2	0.2	0.2	0.1	—	—	—	—	—	—	—
0.5	Southern Belgium .....	2.3	1.8	1.8	1.6	1.5	1.2	1.2	1.0	0.9	0.9	0.9
0.5	Belgium .....	2.5	2.0	2.0	1.7	1.5	1.2	1.2	1.0	0.9	0.9	0.9
0.5	Netherlands (Limburg) ...	1.7	1.7	1.7	1.6	1.5	1.3	0.8	0.6	—	—	—
2.0	Nord/Pas-de-Calais .....	4.1	4.1	3.8	3.6	3.3	3.3	3.3	2.9	2.7	2.7	2.7
0.7	Centre-Midi .....	2.0	1.9	1.8	1.7	1.5	1.3	1.1	1.1	0.8	0.8	0.2
0.6	Independent plants .....	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0
3.3	France .....	7.6	7.5	7.1	6.8	6.3	6.1	5.4	5.0	4.5	4.5	3.9
6.7	<b>Total</b>	<b>17.8</b>	<b>17.1</b>	<b>16.2</b>	<b>15.0</b>	<b>13.8</b>	<b>13.1</b>	<b>11.8</b>	<b>9.6</b>	<b>8.2</b>	<b>7.7</b>	<b>7.1</b>





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

**TABLE XV**  
**Capital Expenditure by Areas**

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany.....	35.60	21.66	30.02	35.84	43.28	120.19	169.34	179.74	135.82	168.65	125.21
North Rhine/Westphalia ..	238.20	220.84	128.27	131.90	220.42	403.85	435.15	313.28	370.82	316.33	222.19
Southern Germany .....	9.06	22.78	9.35	15.12	21.15	49.13	61.81	35.57	27.76	23.33	10.10
Saar .....	28.70	29.05	55.93	41.71	21.75	76.63	115.77	77.41	76.08	58.17	26.85
<i>Germany (FR) .....</i>	<i>311.56</i>	<i>294.33</i>	<i>223.57</i>	<i>224.57</i>	<i>306.60</i>	<i>649.80</i>	<i>782.07</i>	<i>606.00</i>	<i>610.48</i>	<i>566.48</i>	<i>384.35</i>
<i>Belgium .....</i>	<i>142.35</i>	<i>142.87</i>	<i>100.17</i>	<i>74.45</i>	<i>132.66</i>	<i>233.25</i>	<i>214.72</i>	<i>178.15</i>	<i>166.23</i>	<i>178.45</i>	<i>135.61</i>
Eastern France .....	111.45	99.91	99.36	161.03	165.76	181.80	145.14	113.61	134.83	109.09	38.89
Northern France .....	30.93	22.42	42.97	66.15	79.30	128.84	289.38	366.18	344.23	300.03	146.33
France: other areas .....	27.53	25.23	28.08	25.94	34.00	51.27	110.81	405.44	445.45	544.74	404.52
<i>France .....</i>	<i>169.91</i>	<i>147.56</i>	<i>170.41</i>	<i>253.12</i>	<i>279.06</i>	<i>361.91</i>	<i>545.33</i>	<i>885.23</i>	<i>924.51</i>	<i>953.86</i>	<i>589.74</i>
Italy: coastal areas .....	193.98	131.50	69.11	64.90	102.42	189.32	424.54	716.83	638.97	750.54	436.07
Italy: other areas.....	52.29	35.09	56.53	46.53	57.21	108.10	113.62	87.83	106.21	137.58	126.44
<i>Italy .....</i>	<i>246.27</i>	<i>166.59</i>	<i>125.64</i>	<i>111.43</i>	<i>159.63</i>	<i>297.42</i>	<i>538.16</i>	<i>804.66</i>	<i>745.18</i>	<i>888.12</i>	<i>562.51</i>
<i>Luxembourg .....</i>	<i>24.83</i>	<i>28.37</i>	<i>15.80</i>	<i>13.55</i>	<i>34.13</i>	<i>49.01</i>	<i>47.13</i>	<i>41.66</i>	<i>47.38</i>	<i>50.60</i>	<i>25.38</i>
<i>Netherlands .....</i>	<i>37.32</i>	<i>68.35</i>	<i>94.61</i>	<i>124.95</i>	<i>126.57</i>	<i>114.79</i>	<i>138.96</i>	<i>111.84</i>	<i>107.36</i>	<i>55.73</i>	<i>37.66</i>
<b>Total</b>	<b>932.24</b>	<b>848.07</b>	<b>730.20</b>	<b>802.07</b>	<b>1 038.65</b>	<b>1 706.18</b>	<b>2 266.37</b>	<b>2 627.54</b>	<b>2 601.14</b>	<b>2 693.24</b>	<b>1 735.25</b>

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

TABLE XVI a  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	0.26	0.10	0.03	0.08	0.28	5.29	6.44	2.27	2.33	4.45	1.23
North Rhine/Westphalia .....	0.10	0.50	0.31	1.11	1.41	7.23	15.90	3.58	2.70	13.50	3.70
Southern Germany .....	0.03	0.02	0.06	—	—	—	—	—	—	—	—
Saar .....	0.12	0.10	0.88	0.42	0.32	0.28	0.27	0.23	0.51	0.05	—
<i>Germany (FR)</i> .....	<i>0.51</i>	<i>0.72</i>	<i>1.28</i>	<i>1.61</i>	<i>2.01</i>	<i>12.80</i>	<i>22.61</i>	<i>6.08</i>	<i>5.54</i>	<i>18.00</i>	<i>4.93</i>
<i>Belgium</i> .....	<i>1.91</i>	<i>2.18</i>	<i>1.27</i>	<i>0.44</i>	<i>0.89</i>	<i>15.13</i>	<i>34.25</i>	<i>18.85</i>	<i>16.55</i>	<i>7.33</i>	<i>2.79</i>
Eastern France .....	0.17	0.40	0.28	0.32	0.29	0.34	0.77	1.54	5.90	0.56	0.30
Northern France .....	0.45	0.21	3.96	9.51	16.40	10.93	16.38	15.84	14.40	12.06	7.38
France: other areas .....	0.10	0.02	0.08	0.06	0.03	0.75	2.22	16.70	29.41	28.71	20.71
<i>France</i> .....	<i>0.72</i>	<i>0.63</i>	<i>4.32</i>	<i>9.89</i>	<i>16.72</i>	<i>12.02</i>	<i>19.37</i>	<i>34.08</i>	<i>49.71</i>	<i>41.33</i>	<i>28.39</i>
Italy: coastal areas .....	12.49	5.47	1.72	1.03	11.23	19.37	40.00	35.72	53.10	51.44	32.67
Italy: other areas .....	—	—	—	—	—	—	—	—	—	—	—
<i>Italy</i> .....	<i>12.49</i>	<i>5.47</i>	<i>1.72</i>	<i>1.03</i>	<i>11.23</i>	<i>19.37</i>	<i>40.00</i>	<i>35.72</i>	<i>53.10</i>	<i>51.44</i>	<i>32.67</i>
<i>Luxembourg</i> .....	—	—	—	—	—	—	—	—	—	—	—
<i>Netherlands</i> .....	<i>1.61</i>	<i>1.37</i>	<i>2.88</i>	<i>0.73</i>	<i>0.24</i>	<i>2.46</i>	<i>20.48</i>	<i>31.14</i>	<i>28.11</i>	<i>6.46</i>	<i>2.08</i>
<b>Total</b>	<b>17.24</b>	<b>10.37</b>	<b>11.47</b>	<b>13.70</b>	<b>31.09</b>	<b>61.78</b>	<b>136.71</b>	<b>125.87</b>	<b>153.01</b>	<b>124.56</b>	<b>70.86</b>

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

TABLE XVI c  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	7.73	4.19	5.35	3.66	6.89	21.78	30.24	21.68	29.92	31.65	6.81
North Rhine/Westphalia .....	28.63	16.31	8.19	12.82	16.18	51.88	67.29	75.19	98.20	59.38	29.85
Southern Germany .....	0.59	0.49	0.66	0.80	1.10	1.43	1.59	0.83	0.94	1.29	—
Saar .....	4.34	1.96	1.75	2.62	4.85	5.71	7.96	3.50	1.41	10.63	5.72
Germany (FR) .....	41.29	22.95	15.95	19.90	29.02	80.80	107.08	101.20	130.47	102.95	42.38
Belgium .....	11.26	16.22	12.89	9.01	10.71	19.77	25.33	31.17	32.42	20.28	18.57
Eastern France .....	9.82	7.31	10.93	10.65	11.02	7.51	15.93	7.58	15.51	19.69	9.09
Northern France .....	2.31	2.50	11.26	11.38	9.34	9.02	35.28	67.95	43.39	40.07	10.50
France: other areas .....	0.56	0.22	0.28	0.44	1.44	1.79	3.34	26.60	36.37	39.85	34.44
France .....	12.69	10.03	22.47	22.47	21.80	18.32	54.55	102.13	95.27	99.61	54.03
Italy: coastal areas .....	18.14	12.81	9.90	11.24	16.20	23.26	44.92	44.59	32.14	44.96	43.22
Italy: other areas .....	0.25	0.27	0.56	0.16	0.34	0.30	0.42	0.35	0.51	0.22	0.82
Italy .....	18.39	13.08	10.46	11.40	16.54	23.56	45.34	44.94	32.65	45.18	44.04
Luxembourg .....	4.27	2.11	0.53	2.66	8.00	7.99	3.36	0.43	0.22	0.65	0.70
Netherlands .....	3.29	12.67	13.02	0.91	3.28	8.72	25.46	25.26	17.19	2.52	1.65
<b>Total</b>	<b>91.19</b>	<b>77.06</b>	<b>75.32</b>	<b>66.35</b>	<b>89.35</b>	<b>159.16</b>	<b>261.12</b>	<b>305.13</b>	<b>308.22</b>	<b>271.19</b>	<b>161.37</b>

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

Investment

TABLE XVI d  
Capital Expenditure by Areas

<sup>1</sup>000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	9.15	4.64	5.54	4.96	9.26	32.44	49.50	44.02	36.42	39.36	8.20
North Rhine/Westphalia .....	31.89	18.76	11.06	16.37	25.85	104.08	145.70	102.44	121.59	95.55	48.62
Southern Germany .....	0.86	0.57	0.88	0.81	1.12	1.59	1.71	0.95	1.07	1.38	—
Saar .....	6.02	5.69	18.95	4.62	6.36	7.93	8.95	3.78	2.46	10.69	5.72
Germany (FR) .....	47.92	29.66	36.43	26.76	42.59	146.04	205.86	151.19	161.54	146.98	62.54
Belgium .....	18.28	29.81	21.05	13.10	16.83	48.47	81.83	63.74	60.71	36.60	41.79
Eastern France .....	23.50	19.50	20.91	28.06	20.46	29.95	28.92	26.48	40.90	34.66	10.59
Northern France .....	7.76	7.91	17.72	25.99	33.44	33.49	81.17	103.83	80.15	66.19	19.27
France: other areas .....	1.20	0.35	0.76	1.38	1.64	2.61	6.35	68.36	95.81	107.04	88.51
France .....	32.46	27.76	39.39	55.43	55.54	66.05	116.44	198.67	216.86	207.89	118.37
Italy: coastal areas .....	50.54	27.89	15.09	18.31	31.21	52.58	115.75	141.09	143.77	176.98	112.43
Italy: other areas .....	0.30	0.29	0.62	0.26	0.57	0.34	0.45	0.40	0.51	0.22	0.82
Italy .....	50.84	28.18	15.71	18.57	31.78	52.92	116.20	141.49	144.28	177.20	113.25
Luxembourg .....	4.89	2.54	0.81	3.51	16.61	28.12	14.84	12.61	14.62	19.61	10.58
Netherlands .....	5.98	14.53	17.20	6.97	25.36	20.96	48.17	59.75	49.16	11.90	5.41
<b>Total</b>	<b>160.37</b>	<b>132.48</b>	<b>130.59</b>	<b>124.34</b>	<b>188.71</b>	<b>362.56</b>	<b>583.34</b>	<b>627.45</b>	<b>647.17</b>	<b>600.18</b>	<b>351.94</b>

<b>BASIC BESSEMER STEELWORKS</b>
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Investment

TABLE XVII a  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	0.60	0.52	0.07	0.14	—	—	—	—	—	—	—
North Rhine/Westphalia .....	1.32	0.69	6.20	—	0.02	—	—	—	—	—	—
Southern Germany .....	0.52	0.16	0.88	0.78	1.17	—	—	—	—	—	—
Saar .....	1.61	1.37	0.96	0.34	0.52	0.49	0.59	0.08	0.06	—	—
Germany (FR) .....	4.05	2.74	8.11	1.26	1.71	0.49	0.59	0.08	0.06	—	—
Belgium .....	2.37	1.80	0.89	1.17	1.16	1.80	2.62	3.40	2.95	1.96	0.72
Eastern France .....	2.32	3.33	2.88	2.80	3.98	2.98	2.53	0.97	2.53	0.85	0.51
Northern France .....	0.20	0.20	—	—	—	—	—	—	—	—	—
France: other areas .....	0.11	0.08	0.04	0.03	0.05	0.10	0.18	0.27	0.09	0.12	0.02
France .....	2.63	3.61	2.92	2.83	4.03	3.08	2.71	1.24	2.62	0.97	0.53
Luxembourg .....	1.11	2.08	0.95	0.09	0.04	0.29	0.42	0.40	0.65	0.54	0.08
<b>Total</b>	<b>10.16</b>	<b>10.23</b>	<b>12.87</b>	<b>5.35</b>	<b>6.94</b>	<b>5.66</b>	<b>6.34</b>	<b>5.12</b>	<b>6.28</b>	<b>3.47</b>	<b>1.33</b>

<p style="text-align: center;"><b>OPEN-HEARTH STEELWORKS</b></p>
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**Investment**

*TABLE XVII c*  
**Capital Expenditure by Areas**

*'000 000 units of account Eur*

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	2.19	0.59	0.13	0.26	0.65	0.16	1.34	0.49	0.68	0.32	—
North Rhine/Westphalia .....	4.80	3.37	1.54	1.32	0.98	1.43	1.43	0.67	0.88	1.94	0.32
Southern Germany .....	0.35	0.37	0.13	0.05	0.02	0.75	0.19	0.37	0.11	0.16	0.03
Saar .....	0.46	0.32	0.32	1.35	0.55	0.26	0.14	0.07	0.04	—	—
<i>Germany (FR)</i> .....	<i>7.80</i>	<i>4.65</i>	<i>2.12</i>	<i>2.98</i>	<i>2.20</i>	<i>2.60</i>	<i>3.10</i>	<i>1.60</i>	<i>1.71</i>	<i>2.42</i>	<i>0.35</i>
<i>Belgium</i> .....	<i>0.21</i>	<i>0.05</i>	<i>0.03</i>	<i>0.01</i>	—	<i>0.02</i>	<i>0.02</i>	<i>0.13</i>	<i>0.04</i>	<i>0.02</i>	—
Eastern France .....	1.03	0.86	0.37	0.72	0.60	0.43	0.76	0.26	0.82	0.42	0.30
Northern France .....	0.20	0.67	0.21	0.28	0.76	1.00	1.06	0.57	0.74	0.49	0.17
France: other areas .....	0.07	0.03	0.06	0.04	0.14	0.31	0.59	0.38	0.16	0.09	0.41
<i>France</i> .....	<i>1.30</i>	<i>1.56</i>	<i>0.64</i>	<i>1.04</i>	<i>1.50</i>	<i>1.74</i>	<i>2.41</i>	<i>1.21</i>	<i>1.72</i>	<i>1.00</i>	<i>0.88</i>
Italy: coastal areas .....	2.32	0.41	0.24	0.13	0.41	0.03	—	—	0.34	—	—
Italy: other areas .....	0.90	1.35	0.85	1.94	0.59	0.58	0.39	0.32	0.07	1.81	—
<i>Italy</i> .....	<i>3.22</i>	<i>1.76</i>	<i>1.09</i>	<i>2.07</i>	<i>1.00</i>	<i>0.61</i>	<i>0.39</i>	<i>0.32</i>	<i>0.41</i>	<i>1.81</i>	—
<i>Netherlands</i> .....	<i>0.52</i>	<i>0.63</i>	<i>-0.02</i>	<i>0.56</i>	<i>0.19</i>	<i>0.10</i>	<i>0.03</i>	<i>0.01</i>	<i>0.02</i>	<i>0.03</i>	—
<b>Total</b>	<b>13.05</b>	<b>8.65</b>	<b>3.86</b>	<b>6.66</b>	<b>4.89</b>	<b>5.07</b>	<b>5.95</b>	<b>3.27</b>	<b>3.90</b>	<b>5.28</b>	<b>1.23</b>

ELECTRIC-FURNACES  
STEELWORKS

## Investment

TABLE XVII d  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	0.05	—	0.06	—	0.08	5.56	12.09	14.46	2.05	4.54	4.78
North Rhine/Westphalia .....	2.51	1.21	1.68	1.77	3.98	9.81	6.46	12.37	15.05	17.48	29.76
Southern Germany .....	0.51	0.38	0.10	4.01	0.67	3.74	6.24	0.33	1.96	0.38	0.37
Saar .....	—	1.49	4.66	0.13	0.38	—	0.54	0.32	0.37	4.57	5.72
<i>Germany (FR)</i> .....	<i>3.07</i>	<i>3.08</i>	<i>6.50</i>	<i>5.91</i>	<i>5.11</i>	<i>19.11</i>	<i>25.33</i>	<i>27.48</i>	<i>19.43</i>	<i>26.97</i>	<i>40.63</i>
<i>Belgium</i> .....	<i>0.34</i>	<i>0.23</i>	<i>0.17</i>	<i>0.63</i>	<i>1.97</i>	<i>7.05</i>	<i>0.66</i>	<i>6.10</i>	<i>3.47</i>	<i>9.06</i>	<i>1.58</i>
Eastern France .....	0.77	0.05	0.04	0.07	0.56	1.12	2.25	4.15	4.01	4.59	2.61
Northern France .....	0.34	0.38	0.82	0.09	1.12	7.43	4.36	5.42	5.50	7.12	7.74
France: other areas .....	6.30	3.58	2.53	2.39	5.92	7.04	5.51	11.05	6.37	32.76	16.45
<i>France</i> .....	<i>7.41</i>	<i>4.01</i>	<i>3.39</i>	<i>2.55</i>	<i>7.60</i>	<i>15.59</i>	<i>12.12</i>	<i>20.62</i>	<i>15.88</i>	<i>44.47</i>	<i>26.80</i>
Italy: coastal areas .....	1.41	0.85	0.25	0.67	0.73	1.40	5.06	5.62	1.19	1.67	0.80
Italy: other areas .....	3.46	2.06	6.47	6.82	6.23	10.65	13.38	19.68	24.35	38.67	40.92
<i>Italy</i> .....	<i>4.87</i>	<i>2.91</i>	<i>6.72</i>	<i>7.49</i>	<i>6.96</i>	<i>12.05</i>	<i>18.44</i>	<i>25.30</i>	<i>25.54</i>	<i>40.34</i>	<i>41.72</i>
<i>Luxembourg</i> .....	<i>0.01</i>	<i>0.01</i>	—	—	—	<i>0.34</i>	<i>0.43</i>	<i>0.04</i>	<i>0.04</i>	—	—
<i>Netherlands</i> .....	<i>0.75</i>	<i>0.19</i>	<i>0.05</i>	—	<i>0.09</i>	<i>0.37</i>	<i>0.67</i>	<i>0.08</i>	<i>0.19</i>	<i>0.12</i>	—
<b>Total</b>	<b>16.45</b>	<b>10.43</b>	<b>16.83</b>	<b>16.58</b>	<b>21.73</b>	<b>54.51</b>	<b>57.65</b>	<b>79.62</b>	<b>64.55</b>	<b>120.96</b>	<b>110.73</b>

**LD, KALDO AND  
OTHER STEELWORKS**

**Investment**

*TABLE XVII e*  
**Capital Expenditure by Areas**

*'000 000 units of account Eur*

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	0.63	0.18	12.43	15.23	16.30	7.87	5.19	7.99	9.54	7.72	4.03
North Rhine/Westphalia .....	23.58	31.96	14.20	19.67	43.24	35.89	17.71	12.72	19.71	33.33	43.67
Southern Germany .....	—	—	—	—	—	—	—	—	—	—	—
Saar .....	0.36	3.26	10.19	9.10	2.55	1.61	2.60	10.08	4.71	3.03	3.43
Germany (FR) .....	24.57	35.40	36.82	44.00	62.09	45.37	25.50	30.79	33.96	44.08	51.13
Belgium .....	25.86	21.72	27.09	12.40	22.85	30.67	14.52	16.07	15.00	24.14	15.52
Eastern France .....	2.51	3.36	7.84	22.99	32.51	35.12	32.74	16.15	18.66	5.82	1.66
Northern France .....	2.40	1.20	2.60	4.60	2.97	13.14	38.84	33.55	34.52	19.01	4.97
France: other areas .....	0.15	1.27	1.91	1.77	1.26	1.26	1.77	28.02	43.57	39.70	34.30
France .....	5.06	5.83	12.35	29.36	36.74	49.52	73.35	77.72	96.75	64.53	40.93
Italy: coastal areas .....	18.16	8.37	7.52	9.00	21.77	28.69	47.51	102.45	77.94	97.34	41.82
Italy: other areas .....	—	—	0.73	—	2.41	2.37	1.89	1.28	0.35	1.92	0.77
Italy .....	18.16	8.37	8.25	9.00	24.18	31.06	49.40	103.73	78.29	99.26	42.59
Luxembourg .....	9.79	12.59	7.73	1.64	1.81	4.76	9.39	12.32	10.26	4.92	2.44
Netherlands .....	1.59	8.90	17.95	23.13	5.54	5.82	14.21	8.25	8.59	14.02	12.78
<b>Total</b>	<b>85.03</b>	<b>92.81</b>	<b>110.19</b>	<b>119.53</b>	<b>153.21</b>	<b>167.20</b>	<b>186.37</b>	<b>248.88</b>	<b>242.85</b>	<b>250.95</b>	<b>165.39</b>

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

**Investment**

*TABLE XVII b*  
**Capital Expenditure by Areas**

*'000 000 units of account Eur*

<b>Total</b>	—	—	—	—	—	5.20	3.49	6.67	5.18	6.77	2.56
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**STEELWORKS  
TOTAL**

**Investment**

*TABLE XVII f*  
**Capital Expenditure by Areas**

*'000 000 units of account Eur*

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	3.47	1.29	12.69	15.63	17.03	13.59	18.62	22.94	12.27	12.58	8.81
North Rhine/Westphalia .....	32.21	37.23	23.62	22.76	48.22	47.13	25.60	25.76	35.64	52.75	73.75
Southern Germany .....	1.38	0.91	1.11	4.84	1.86	5.14	6.83	1.15	2.68	0.65	0.40
Saar .....	2.43	6.44	16.13	10.92	4.00	2.37	5.00	13.78	8.21	10.62	10.78
<i>Germany (FR)</i> .....	<i>39.49</i>	<i>45.87</i>	<i>53.55</i>	<i>54.15</i>	<i>71.11</i>	<i>68.23</i>	<i>56.05</i>	<i>63.63</i>	<i>58.80</i>	<i>76.60</i>	<i>93.74</i>
<i>Belgium</i> .....	<i>28.78</i>	<i>23.80</i>	<i>28.18</i>	<i>14.21</i>	<i>25.98</i>	<i>39.60</i>	<i>18.46</i>	<i>26.95</i>	<i>22.74</i>	<i>36.53</i>	<i>18.10</i>
Eastern France .....	6.63	7.60	11.13	26.58	37.65	43.46	39.44	23.13	26.21	13.81	5.73
Northern France .....	3.14	2.45	3.63	4.97	4.85	22.24	44.42	39.68	40.83	26.78	12.88
France: other areas .....	6.63	4.96	4.54	4.23	7.37	8.71	8.05	39.72	50.19	72.67	51.18
<i>France</i> .....	<i>16.40</i>	<i>15.01</i>	<i>19.30</i>	<i>35.78</i>	<i>49.87</i>	<i>74.41</i>	<i>91.91</i>	<i>102.53</i>	<i>117.23</i>	<i>113.26</i>	<i>69.79</i>
Italy: coastal areas .....	21.89	9.63	8.01	9.80	22.91	30.12	52.57	108.07	79.47	99.01	42.62
Italy: other areas .....	4.36	3.41	8.05	8.76	9.23	13.60	15.66	21.28	24.77	42.40	41.69
<i>Italy</i> .....	<i>26.25</i>	<i>13.04</i>	<i>16.06</i>	<i>18.56</i>	<i>32.14</i>	<i>43.72</i>	<i>68.23</i>	<i>129.35</i>	<i>104.24</i>	<i>141.41</i>	<i>84.31</i>
<i>Luxembourg</i> .....	<i>10.91</i>	<i>14.68</i>	<i>8.68</i>	<i>1.73</i>	<i>1.85</i>	<i>5.39</i>	<i>10.24</i>	<i>12.76</i>	<i>10.95</i>	<i>5.46</i>	<i>2.52</i>
<i>Netherlands</i> .....	<i>2.86</i>	<i>9.72</i>	<i>17.98</i>	<i>23.69</i>	<i>5.82</i>	<i>6.29</i>	<i>14.91</i>	<i>8.34</i>	<i>8.80</i>	<i>14.17</i>	<i>12.78</i>
<b>Total</b>	<b>124.69</b>	<b>122.12</b>	<b>143.75</b>	<b>148.12</b>	<b>186.77</b>	<b>237.64</b>	<b>259.80</b>	<b>343.56</b>	<b>322.76</b>	<b>387.43</b>	<b>281.24</b>

<b>BLOOMING AND SLABBING MILLS</b>
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<b>Investment</b>
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TABLE XVIII a  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	1.53	1.25	1.20	1.57	1.52	6.09	3.91	3.88	5.49	9.91	3.78
North Rhine/Westphalia .....	6.59	13.11	8.15	9.42	11.66	13.04	23.07	8.39	9.12	14.94	10.25
Southern Germany .....	0.56	3.48	0.45	0.13	0.47	0.33	0.23	0.64	0.21	0.93	—
Saar .....	4.14	0.82	0.47	0.24	1.51	0.84	0.16	0.08	0.11	—	—
Germany (FR) .....	12.82	18.66	10.27	11.36	15.16	20.30	27.37	12.99	14.93	25.78	14.03
Belgium .....	10.95	10.29	7.89	3.89	3.72	6.20	9.64	3.08	2.51	5.10	2.09
Eastern France .....	2.57	4.66	18.10	44.85	35.79	23.31	14.35	10.35	15.50	9.76	1.57
Northern France .....	1.80	0.90	2.50	5.80	2.40	0.58	0.20	0.23	0.16	0.15	—
France: other areas .....	0.25	0.32	0.32	0.33	0.29	0.77	4.50	29.68	35.26	25.31	20.66
France .....	4.62	5.88	20.92	50.98	38.48	24.66	19.05	40.26	50.92	35.22	22.23
Italy: coastal areas .....	8.96	5.33	5.62	2.60	7.57	9.55	22.57	53.61	50.91	33.83	9.68
Italy: other areas .....	3.51	1.68	2.70	2.19	1.51	0.80	0.81	2.68	4.74	3.93	2.61
Italy .....	12.47	7.01	8.32	4.79	9.08	10.35	23.38	56.29	55.65	37.76	12.29
Luxembourg .....	0.06	0.16	0.15	0.78	2.42	9.33	14.81	6.98	10.87	6.90	2.11
Netherlands .....	3.22	1.43	4.95	11.17	22.53	8.43	3.61	4.03	2.60	2.65	3.09
<b>Total</b>	<b>44.14</b>	<b>43.43</b>	<b>52.50</b>	<b>82.97</b>	<b>91.39</b>	<b>79.27</b>	<b>97.86</b>	<b>123.63</b>	<b>137.48</b>	<b>113.41</b>	<b>55.84</b>

CONTINUOUS CASTING  
PLANTS

Investment

TABLE XVIII b  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	—	—	—	—	—	3.84	6.65	17.16	10.42	16.41	10.83
North Rhine/Westphalia .....	9.55	9.56	12.58	4.73	15.55	18.12	21.58	4.88	7.89	31.15	28.69
Southern Germany .....	0.02	0.20	0.05	1.19	4.31	2.92	4.06	2.10	0.07	1.46	—
Saar .....	0.15	1.88	8.34	6.46	0.54	2.28	2.03	0.07	—	—	—
<i>Germany (FR)</i> .....	<i>9.72</i>	<i>11.64</i>	<i>20.97</i>	<i>12.38</i>	<i>20.40</i>	<i>27.16</i>	<i>34.32</i>	<i>24.21</i>	<i>18.38</i>	<i>49.02</i>	<i>39.52</i>
<i>Belgium</i> .....	—	—	—	—	—	—	1.07	4.72	4.62	9.55	10.01
Eastern France .....	0.03	—	—	—	0.02	—	0.42	0.01	0.02	0.20	0.07
Northern France .....	—	—	0.67	1.22	5.00	15.38	33.41	27.50	28.16	21.55	10.62
France: other areas .....	—	—	—	0.95	0.62	0.14	0.10	0.10	2.70	21.31	17.71
<i>France</i> .....	<i>0.03</i>	—	<i>0.67</i>	<i>2.17</i>	<i>5.64</i>	<i>15.52</i>	<i>33.93</i>	<i>27.61</i>	<i>30.88</i>	<i>43.06</i>	<i>28.40</i>
Italy: coastal areas .....	—	0.41	0.01	—	1.41	12.17	12.47	8.86	11.47	46.80	38.65
Italy: other areas .....	0.26	1.07	6.61	5.34	3.07	8.25	2.25	5.13	4.90	14.97	18.73
<i>Italy</i> .....	<i>0.26</i>	<i>1.48</i>	<i>6.62</i>	<i>5.34</i>	<i>4.48</i>	<i>20.42</i>	<i>14.72</i>	<i>13.99</i>	<i>16.37</i>	<i>61.77</i>	<i>57.38</i>
<i>Luxembourg</i> .....	—	—	—	—	—	—	—	—	—	—	—
<i>Netherlands</i> .....	—	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>10.01</b>	<b>13.12</b>	<b>28.26</b>	<b>19.89</b>	<b>30.52</b>	<b>63.10</b>	<b>84.04</b>	<b>70.53</b>	<b>70.25</b>	<b>163.40</b>	<b>135.31</b>

## SECTION MILLS

## Investment

TABLE XVIII c  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	3.79	2.86	0.87	0.48	1.26	11.44	17.11	12.75	7.29	27.21	38.08
North Rhine/Westphalia .....	22.45	16.07	18.08	11.71	10.45	16.29	19.49	16.72	17.57	11.32	7.74
Southern Germany .....	0.93	2.35	0.33	4.27	2.15	8.81	15.66	11.35	7.75	7.93	0.02
Saar .....	1.60	2.42	2.38	11.74	0.94	4.84	23.41	34.09	39.09	21.82	2.14
Germany (FR) .....	28.77	23.70	21.66	28.20	14.80	41.38	75.67	74.91	71.70	68.28	47.98
Belgium .....	4.93	3.62	2.70	5.17	18.42	32.09	22.47	13.49	16.43	15.77	19.34
Eastern France .....	25.88	41.10	21.31	14.49	11.68	16.75	13.15	16.70	12.77	15.40	7.82
Northern France .....	1.35	1.47	1.80	2.62	1.78	2.15	2.52	3.54	5.28	5.58	4.71
France: other areas .....	8.39	6.12	3.83	2.75	2.09	2.91	10.72	39.93	13.86	60.80	23.44
France .....	35.62	48.69	26.94	19.86	15.55	21.81	26.39	60.17	31.91	81.78	35.97
Italy: coastal areas .....	20.57	22.49	11.54	4.54	2.10	1.92	6.82	12.24	3.69	5.42	4.16
Italy: other areas .....	6.33	9.23	12.29	7.25	10.64	14.68	23.98	16.26	18.74	20.68	14.60
Italy .....	26.90	31.72	23.83	11.79	12.74	16.60	30.80	28.50	22.43	26.10	18.76
Luxembourg .....	5.42	2.58	0.38	0.86	9.40	2.31	2.16	0.61	1.16	7.29	7.24
Netherlands .....	7.83	5.97	3.33	0.51	1.43	0.95	0.58	0.32	0.12	0.42	0.05
<b>Total</b>	<b>109.47</b>	<b>116.28</b>	<b>78.84</b>	<b>66.39</b>	<b>72.34</b>	<b>115.14</b>	<b>158.07</b>	<b>178.00</b>	<b>143.75</b>	<b>199.64</b>	<b>129.34</b>

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

TABLE XVIII d  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	7.01	5.07	2.10	2.85	5.48	26.87	37.14	37.12	40.87	47.94	46.83
North Rhine/Westphalia .....	77.51	84.90	31.33	32.88	56.52	134.98	129.26	90.19	91.08	57.97	23.80
Southern Germany .....	2.40	4.17	2.24	0.70	2.40	11.70	17.95	10.98	8.50	3.51	1.22
Saar .....	0.48	0.43	0.42	0.42	1.01	39.61	53.68	7.70	9.39	1.39	—
Germany (FR) .....	87.40	94.57	36.09	36.85	65.41	213.16	238.03	145.99	149.84	110.81	71.85
Belgium .....	51.87	47.76	22.04	25.46	47.87	90.96	53.77	38.23	32.59	40.31	23.02
Eastern France .....	13.93	4.40	6.86	13.13	25.10	32.02	16.26	7.48	12.60	3.52	0.53
Northern France .....	10.68	4.67	10.42	19.67	19.42	30.02	70.93	113.22	118.86	98.93	56.32
France: other areas .....	6.04	5.41	8.17	9.13	14.09	19.66	30.33	111.82	108.51	68.77	59.17
France .....	30.65	14.48	25.45	41.93	58.61	81.70	117.42	232.52	239.97	171.22	116.02
Italy: coastal areas .....	10.65	3.35	4.57	17.07	19.50	52.64	114.98	203.36	161.14	146.68	69.58
Italy: other areas .....	29.87	12.41	14.38	14.12	17.72	45.99	42.93	13.72	22.16	20.17	19.44
Italy .....	40.53	15.76	18.95	31.19	37.22	98.63	157.91	217.08	183.30	166.85	89.02
Luxembourg .....	1.56	3.31	3.81	3.49	0.85	0.33	0.36	0.60	1.19	1.08	0.39
Netherlands .....	7.03	10.12	24.52	54.90	50.29	51.30	40.50	9.74	13.44	4.07	2.20
<b>Total</b>	<b>219.04</b>	<b>186.00</b>	<b>130.86</b>	<b>193.82</b>	<b>260.25</b>	<b>536.08</b>	<b>607.99</b>	<b>644.16</b>	<b>620.33</b>	<b>494.34</b>	<b>302.50</b>

<b>ROLLING-MILLS TOTAL <sup>(1)</sup></b>
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Investment

TABLE XVIII e  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany.....	12.64	9.72	4.97	6.95	9.11	50.28	67.32	73.56	66.39	103.27	102.84
North Rhine/Westphalia ..	132.60	134.62	73.83	61.99	106.35	210.92	212.64	154.15	165.09	136.00	85.77
Southern Germany .....	4.58	18.50	4.51	7.69	12.93	33.37	40.20	26.52	17.83	16.53	8.51
Saar .....	8.62	6.95	13.95	20.86	5.47	49.90	80.98	43.97	49.65	26.59	4.43
<i>Germany (FR) .....</i>	<i>158.44</i>	<i>169.79</i>	<i>97.26</i>	<i>97.49</i>	<i>133.86</i>	<i>344.47</i>	<i>401.14</i>	<i>298.20</i>	<i>298.96</i>	<i>282.39</i>	<i>201.55</i>
<i>Belgium .....</i>	<i>71.71</i>	<i>64.35</i>	<i>35.00</i>	<i>39.48</i>	<i>79.58</i>	<i>134.34</i>	<i>91.93</i>	<i>69.00</i>	<i>62.93</i>	<i>87.46</i>	<i>68.69</i>
Eastern France .....	47.95	54.49	49.28	76.34	76.84	76.07	50.14	43.71	47.16	40.59	16.28
Northern France .....	15.07	7.33	16.26	30.62	34.21	51.47	118.20	162.36	170.11	154.68	86.10
France: other areas .....	17.10	16.10	19.75	17.23	20.58	33.10	55.69	207.67	198.15	212.37	151.24
<i>France .....</i>	<i>80.12</i>	<i>77.92</i>	<i>85.29</i>	<i>124.19</i>	<i>131.63</i>	<i>160.64</i>	<i>224.03</i>	<i>413.74</i>	<i>415.42</i>	<i>407.64</i>	<i>253.62</i>
Italy: coastal areas .....	46.61	34.32	22.93	25.34	36.98	83.02	173.39	306.25	238.08	263.20	145.62
Italy: other areas.....	41.85	25.88	38.74	32.11	35.40	74.91	79.28	42.37	55.74	67.19	58.87
<i>Italy .....</i>	<i>88.46</i>	<i>60.20</i>	<i>61.67</i>	<i>57.45</i>	<i>72.38</i>	<i>157.93</i>	<i>252.67</i>	<i>348.62</i>	<i>293.82</i>	<i>330.39</i>	<i>204.49</i>
<i>Luxembourg .....</i>	<i>7.27</i>	<i>7.92</i>	<i>4.64</i>	<i>5.68</i>	<i>12.69</i>	<i>12.13</i>	<i>17.34</i>	<i>8.46</i>	<i>13.76</i>	<i>15.58</i>	<i>9.80</i>
<i>Netherlands .....</i>	<i>19.49</i>	<i>24.83</i>	<i>33.86</i>	<i>66.75</i>	<i>74.59</i>	<i>61.01</i>	<i>44.85</i>	<i>14.30</i>	<i>16.31</i>	<i>7.15</i>	<i>5.34</i>
<b>Total</b>	<b>425.49</b>	<b>405.01</b>	<b>317.72</b>	<b>391.04</b>	<b>504.73</b>	<b>870.52</b>	<b>1 031.96</b>	<b>1 152.32</b>	<b>1 101.20</b>	<b>1 130.61</b>	<b>743.49</b>

(1) Including ancillary and auxiliary plants.

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

**Investment**

TABLE XIX a  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	3.55	1.89	1.93	4.61	1.92	9.62	18.43	22.67	11.22	5.45	3.16
North Rhine/Westphalia .....	10.12	7.03	7.36	13.05	16.61	12.00	8.78	11.84	12.63	13.07	7.10
Southern Germany .....	1.10	0.79	0.77	0.34	4.48	4.62	7.91	3.84	3.35	2.95	0.45
Saar .....	1.23	0.63	0.42	0.71	1.16	1.94	1.73	1.96	1.71	1.54	0.29
<i>Germany (FR)</i> .....	<i>16.00</i>	<i>10.34</i>	<i>10.48</i>	<i>18.71</i>	<i>24.17</i>	<i>28.18</i>	<i>36.85</i>	<i>40.31</i>	<i>28.91</i>	<i>23.01</i>	<i>11.00</i>
<i>Belgium</i> .....	<i>13.62</i>	<i>13.97</i>	<i>7.46</i>	<i>2.29</i>	<i>3.02</i>	<i>3.05</i>	<i>4.53</i>	<i>4.46</i>	<i>4.68</i>	<i>2.57</i>	<i>0.76</i>
Eastern France .....	3.26	3.04	3.12	3.34	2.63	7.40	14.85	8.15	3.81	6.73	2.00
Northern France .....	1.47	0.41	0.23	0.14	0.20	1.13	1.05	5.83	0.12	5.80	2.77
France: other areas .....	0.65	0.78	0.99	1.21	1.46	0.62	8.34	23.11	22.13	35.91	29.22
<i>France</i> .....	<i>5.38</i>	<i>4.23</i>	<i>4.34</i>	<i>4.69</i>	<i>4.29</i>	<i>9.15</i>	<i>24.24</i>	<i>37.09</i>	<i>26.06</i>	<i>48.44</i>	<i>33.99</i>
Italy: coastal areas .....	16.65	5.20	0.94	0.38	—	0.08	7.98	18.77	14.91	24.91	13.83
Italy: other areas .....	1.37	1.68	2.76	1.18	3.59	3.59	6.27	9.06	8.45	8.80	12.41
<i>Italy</i> .....	<i>18.02</i>	<i>6.88</i>	<i>3.70</i>	<i>1.56</i>	<i>3.59</i>	<i>3.67</i>	<i>14.25</i>	<i>27.83</i>	<i>23.36</i>	<i>33.71</i>	<i>26.24</i>
<i>Luxembourg</i> .....	<i>0.50</i>	<i>1.50</i>	<i>0.47</i>	<i>0.60</i>	<i>0.06</i>	<i>0.03</i>	<i>0.47</i>	<i>0.53</i>	<i>0.92</i>	<i>0.93</i>	<i>0.54</i>
<i>Netherlands</i> .....	<i>2.20</i>	<i>6.12</i>	<i>7.02</i>	<i>5.52</i>	<i>5.72</i>	<i>7.71</i>	<i>8.09</i>	<i>9.09</i>	<i>8.27</i>	<i>6.23</i>	<i>4.40</i>
<b>Total</b>	<b>55.72</b>	<b>43.04</b>	<b>33.47</b>	<b>33.37</b>	<b>40.85</b>	<b>51.79</b>	<b>88.43</b>	<b>119.31</b>	<b>92.20</b>	<b>114.89</b>	<b>76.93</b>

**MISCELLANEOUS  
(IRON AND STEEL WORKS)**

Investment

TABLE XIX b  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	6.79	4.12	4.89	3.69	5.96	14.26	15.47	16.55	9.52	7.99	2.20
North Rhine/Westphalia .....	31.38	23.20	12.40	17.73	23.39	29.72	42.43	19.09	35.87	18.96	6.95
Southern Germany .....	1.14	2.01	2.08	1.44	0.76	4.41	5.16	3.11	2.83	1.82	0.74
Saar .....	10.40	9.34	6.48	4.60	4.76	14.49	19.11	13.92	14.05	8.73	5.63
<i>Germany (FR)</i> .....	<i>49.71</i>	<i>38.67</i>	<i>25.85</i>	<i>27.46</i>	<i>34.87</i>	<i>62.88</i>	<i>82.17</i>	<i>52.67</i>	<i>62.27</i>	<i>37.50</i>	<i>15.52</i>
<i>Belgium</i> .....	<i>9.96</i>	<i>10.94</i>	<i>8.48</i>	<i>5.37</i>	<i>7.25</i>	<i>7.79</i>	<i>17.97</i>	<i>14.00</i>	<i>15.17</i>	<i>15.29</i>	<i>6.27</i>
Eastern France .....	30.11	15.28	14.92	26.71	28.18	24.92	11.79	12.14	16.75	13.30	4.29
Northern France .....	3.49	4.32	5.13	4.43	6.60	20.51	44.54	54.48	53.02	46.58	25.31
France: other areas .....	1.95	3.04	2.04	1.89	2.95	6.23	32.38	66.58	79.17	116.75	84.37
<i>France</i> .....	<i>35.55</i>	<i>22.64</i>	<i>22.09</i>	<i>33.03</i>	<i>37.73</i>	<i>51.66</i>	<i>88.71</i>	<i>133.20</i>	<i>148.94</i>	<i>176.63</i>	<i>113.97</i>
Italy: coastal areas .....	58.29	54.46	22.14	11.07	11.32	23.52	74.85	142.65	162.74	186.44	121.57
Italy: other areas .....	4.41	3.83	6.36	4.22	8.42	15.66	11.96	14.72	16.74	18.97	12.65
<i>Italy</i> .....	<i>62.70</i>	<i>58.29</i>	<i>28.50</i>	<i>15.29</i>	<i>19.74</i>	<i>39.18</i>	<i>86.81</i>	<i>157.37</i>	<i>179.48</i>	<i>205.41</i>	<i>134.22</i>
<i>Luxembourg</i> .....	<i>1.26</i>	<i>1.73</i>	<i>1.20</i>	<i>2.03</i>	<i>2.92</i>	<i>3.34</i>	<i>4.24</i>	<i>7.30</i>	<i>7.13</i>	<i>9.02</i>	<i>1.94</i>
<i>Netherlands</i> .....	<i>6.79</i>	<i>13.15</i>	<i>18.55</i>	<i>22.02</i>	<i>15.08</i>	<i>18.82</i>	<i>22.94</i>	<i>20.36</i>	<i>24.82</i>	<i>16.28</i>	<i>9.73</i>
<b>Total</b>	<b>165.97</b>	<b>145.42</b>	<b>104.67</b>	<b>105.20</b>	<b>117.59</b>	<b>183.67</b>	<b>302.84</b>	<b>384.90</b>	<b>437.81</b>	<b>460.13</b>	<b>281.65</b>



GENERAL SERVICES  
(IRON AND STEEL  
WORKS) TOTAL

Investment

TABLE XIX c  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress, and approved)		
	1965	1966	1967	1968	1969	1970	1971	1972	on Jan. 1, 1972 for	on Jan. 1, 1973 for	
									1972	1973	1974
Northern Germany .....	10.34	6.01	6.82	8.30	7.88	23.88	33.90	39.22	20.74	13.44	5.36
North Rhine/Westphalia .....	41.50	30.23	19.76	30.78	40.00	41.72	51.21	30.93	48.50	32.03	14.05
Southern Germany .....	2.24	2.80	2.85	1.78	5.24	9.03	13.07	6.95	6.18	4.77	1.19
Saar .....	11.63	9.97	6.90	5.31	5.92	16.43	20.84	15.88	15.76	10.27	5.92
<i>Germany (FR)</i> .....	<i>65.71</i>	<i>49.01</i>	<i>36.33</i>	<i>46.17</i>	<i>59.04</i>	<i>91.06</i>	<i>119.02</i>	<i>92.98</i>	<i>91.18</i>	<i>60.51</i>	<i>26.52</i>
<i>Belgium</i> .....	<i>23.58</i>	<i>24.91</i>	<i>15.94</i>	<i>7.66</i>	<i>10.27</i>	<i>10.84</i>	<i>22.50</i>	<i>18.46</i>	<i>19.85</i>	<i>17.86</i>	<i>7.03</i>
Eastern France .....	33.37	18.32	18.04	30.05	30.81	32.32	26.64	20.29	20.56	20.03	6.29
Northern France .....	4.96	4.73	5.36	4.57	6.80	21.64	45.59	60.31	53.14	52.38	28.08
France: other areas .....	2.60	3.82	3.03	3.10	4.41	6.85	40.72	89.69	101.30	152.66	113.59
<i>France</i> .....	<i>40.93</i>	<i>26.87</i>	<i>26.43</i>	<i>37.72</i>	<i>42.02</i>	<i>60.81</i>	<i>112.95</i>	<i>170.29</i>	<i>175.00</i>	<i>225.07</i>	<i>147.96</i>
Italy: coastal areas .....	74.94	59.66	23.08	11.45	11.32	23.60	82.83	161.42	177.65	211.35	135.40
Italy: other areas .....	5.78	5.51	9.12	5.40	12.01	19.25	18.23	23.78	25.19	27.77	25.06
<i>Italy</i> .....	<i>80.72</i>	<i>65.17</i>	<i>32.20</i>	<i>16.85</i>	<i>23.33</i>	<i>42.85</i>	<i>101.06</i>	<i>185.20</i>	<i>202.84</i>	<i>239.12</i>	<i>160.46</i>
<i>Luxembourg</i> .....	<i>1.76</i>	<i>3.23</i>	<i>1.67</i>	<i>2.63</i>	<i>2.98</i>	<i>3.37</i>	<i>4.71</i>	<i>7.83</i>	<i>8.05</i>	<i>9.95</i>	<i>2.48</i>
<i>Netherlands</i> .....	<i>8.99</i>	<i>19.27</i>	<i>25.57</i>	<i>27.54</i>	<i>20.80</i>	<i>26.53</i>	<i>31.03</i>	<i>29.45</i>	<i>33.09</i>	<i>22.51</i>	<i>14.13</i>
<b>Total</b>	<b>221.69</b>	<b>188.46</b>	<b>138.14</b>	<b>138.57</b>	<b>158.44</b>	<b>235.46</b>	<b>391.27</b>	<b>504.21</b>	<b>530.01</b>	<b>575.02</b>	<b>358.58</b>

<b>PIG-IRON</b>
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<b>Production</b>
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**TABLE XXI**  
**Production and Production Potential by Areas**

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
5.6	Northern Germany .....	5.7	5.9	6.2	6.7	7.4	8.0	7.9	8.7	9.7	9.7	9.7
20.9	North Rhine/Westphalia ..	23.3	23.6	24.0	24.2	25.7	26.7	26.7	29.2	31.0	31.6	32.4
1.0	Southern Germany .....	1.8	1.7	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
4.5	Saar .....	5.0	5.1	5.1	5.4	5.7	5.8	6.8	6.6	6.9	7.2	7.2
32.0	Germany (FR) .....	35.8	36.3	36.7	37.6	40.1	41.8	42.7	45.8	48.9	49.8	50.6
11.9	Belgium .....	10.2	11.3	12.2	12.6	13.1	13.4	14.0	14.8	15.1	15.5	15.5
12.4	Eastern France .....	14.1	14.1	13.9	13.4	14.0	14.1	14.0	13.9	14.2	14.5	14.5
5.6	Northern France .....	4.1	4.2	4.7	5.6	6.3	6.7	6.8	8.2	9.5	10.2	10.2
1.0	France - other areas .....	1.1	1.0	0.8	0.9	0.9	1.1	1.2	1.2	2.3	3.9	4.2
19.0	France .....	19.3	19.3	19.4	19.9	21.2	21.9	22.0	23.3	26.0	28.6	28.9
9.2	Italy: coastal areas .....	7.3	8.1	8.1	8.9	10.0	11.3	11.9	13.3	15.2	16.2	16.8
0.2	Italy: other areas .....	0.5	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.5
9.4	Italy .....	7.8	8.6	8.7	9.6	10.7	11.9	12.5	13.9	15.9	16.9	17.3
4.7	Luxembourg .....	4.8	5.1	5.1	5.2	5.3	5.3	5.4	5.4	5.6	5.7	5.7
4.3	Netherlands .....	2.4	2.6	2.9	3.5	3.8	4.5	5.2	5.7	6.0	6.2	6.4
81.3	<b>Total</b>	80.3	83.2	85.0	88.4	94.1	98.8	101.8	108.9	117.5	122.7	124.4

<b>SINTER AND IRON SPONGE</b>
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<b>Production</b>
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**TABLE XX**  
**Production and Production Potential by Areas**

'000 000 metric tons

105.5	<b>Total</b>	85.7	90.0	93.5	97.0	103.1	114.3	125.3	129.7	137.5	145.9	147.2
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<b>BASIC BESSEMER STEEL</b>
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<b>Production</b>
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TABLE XXII a  
Production and Production Potential by Areas

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
—	Northern Germany .....	1.2	1.2	0.8	0.4	—	—	—	—	—	—	—
0.2	North Rhine/Westphalia ..	7.4	6.4	3.8	2.9	0.8	0.9	0.6	—	—	—	—
—	Southern Germany .....	1.0	1.0	1.0	1.0	—	—	—	—	—	—	—
2.4	Saar .....	3.8	3.9	3.9	3.7	3.6	3.7	3.6	2.3	1.7	1.2	1.4
2.6	Germany (FR) .....	13.4	12.5	9.5	8.0	4.4	4.6	4.2	2.3	1.7	1.2	1.4
3.2	Belgium .....	7.1	7.4	7.5	7.1	6.1	5.4	3.4	2.9	2.2	2.1	1.6
6.8	Eastern France .....	10.2	10.5	10.5	10.1	9.4	8.9	7.7	6.0	5.6	5.5	5.5
—	Northern France .....	1.4	1.2	1.3	1.2	0.8	—	—	—	—	—	—
0.4	France - other areas .....	0.6	0.5	0.4	0.3	0.4	0.4	0.5	0.4	0.5	0.5	0.5
7.2	France .....	12.2	12.2	12.2	11.6	10.6	9.3	8.2	6.4	6.1	6.0	6.0
3.0	Luxembourg .....	4.3	4.0	3.7	3.8	3.6	3.6	3.4	2.4	2.1	2.4	2.4
16.0	<b>Total</b>	<b>37.0</b>	<b>36.1</b>	<b>32.9</b>	<b>30.5</b>	<b>24.7</b>	<b>22.9</b>	<b>19.2</b>	<b>14.0</b>	<b>12.1</b>	<b>11.7</b>	<b>11.4</b>

OPEN-HEARTH STEEL
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Production
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TABLE XXII c  
Production and Production Potential by Areas

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
1.1	Northern Germany .....	3.4	3.6	3.2	2.3	2.3	2.5	1.6	1.6	1.5	1.5	1.5
6.2	North Rhine/Westphalia ..	14.2	12.2	11.4	10.7	10.0	9.7	7.7	7.7	7.7	7.4	6.3
0.5	Southern Germany .....	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5
0.5	Saar .....	1.1	1.1	1.1	0.9	0.9	0.9	0.6	0.6	0.7	0.7	0.4
8.3	Germany (FR) .....	19.5	17.7	16.4	14.6	13.8	13.6	10.4	10.4	10.4	10.1	8.7
0.2	Belgium .....	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
1.5	Eastern France .....	2.8	2.9	2.8	2.6	2.6	2.4	1.6	1.5	1.4	1.0	1.0
1.4	Northern France .....	2.4	2.2	1.9	1.9	1.9	1.8	1.8	1.6	1.4	1.3	1.3
0.4	France - other areas .....	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3.3	France .....	5.7	5.6	5.2	5.0	5.0	4.7	3.9	3.6	3.3	2.8	2.8
2.3	Italy: coastal areas .....	3.7	3.9	3.9	3.8	3.4	2.7	2.7	2.7	2.7	2.7	2.7
1.7	Italy: other areas .....	2.4	2.4	2.4	2.5	2.5	2.2	2.2	2.2	1.7	1.5	0.6
4.0	Italy .....	6.1	6.3	6.3	6.3	5.9	4.9	4.9	4.9	4.4	4.2	3.3
0.2	Netherlands .....	1.0	1.0	1.1	1.1	1.0	1.0	0.7	0.1	0.1	0.1	0.1
16.0	<b>Total</b>	32.8	31.1	29.4	27.4	26.1	24.6	20.3	19.4	18.5	17.5	15.2

**ELECTRIC-FURNACE  
STEEL**

**Production**

TABLE XXII d  
Production and Production Potential by Areas

*'000 000 metric tons*

Actual pro- duction  1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
0.5	Northern Germany .....	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.7	1.1	1.2	1.2
2.8	North Rhine/Westphalia ..	3.1	2.9	3.1	3.3	3.5	3.6	3.5	3.6	3.7	4.0	4.1
0.8	Southern Germany .....	0.2	0.3	0.3	0.4	0.7	0.7	0.8	1.0	1.0	1.0	1.0
0.4	Saar .....	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8
4.5	Germany (FR) .....	3.8	3.8	4.1	4.5	4.9	5.2	5.4	5.8	6.3	6.7	7.1
0.5	Belgium .....	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8
0.7	Eastern France .....	0.6	0.6	0.6	0.7	0.7	0.9	0.9	0.9	1.0	1.0	1.0
0.4	Northern France .....	0.3	0.3	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.8	0.9
1.4	France - other areas .....	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.9	2.2	2.4	2.5
2.5	France .....	2.3	2.4	2.5	2.7	2.8	2.9	3.1	3.3	3.7	4.2	4.4
0.5	Italy: coastal areas .....	0.6	0.7	0.6	0.8	0.5	0.6	0.7	0.8	1.0	1.0	1.0
7.6	Italy: other areas .....	5.9	6.1	7.0	7.1	7.7	8.1	8.9	9.3	10.0	11.0	11.5
8.1	Italy .....	6.5	6.8	7.6	7.9	8.2	8.7	9.6	10.1	11.0	12.0	12.5
0.1	Luxembourg .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.4	Netherlands .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
16.1	<b>Total</b>	13.6	14.0	15.1	16.1	16.9	17.9	19.2	20.4	22.3	24.2	25.3

**LD, KALDO AND  
OTHER STEELS**

**Production**

*TABLE XXII e*  
**Production and Production Potential by Areas**

*'000 000 metric tons*

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
5.8	Northern Germany .....	1.8	1.9	3.3	5.3	6.6	6.5	7.2	7.8	9.1	9.1	9.1
20.0	North Rhine/Westphalia ..	8.7	11.4	14.1	16.9	20.6	24.6	25.5	27.0	27.6	28.9	32.5
—	Southern Germany .....	0.0	—	—	—	—	—	—	—	—	—	—
1.4	Saar .....	0.3	0.4	0.4	1.3	1.6	1.8	2.7	3.7	4.1	4.9	4.9
27.2	<i>Germany (FR)</i> .....	10.8	13.7	17.8	23.5	28.8	32.9	35.4	38.5	40.8	42.9	46.5
9.8	<i>Belgium</i> .....	2.9	3.9	5.4	6.5	7.8	9.1	11.0	12.0	13.1	13.8	14.3
3.9	Eastern France .....	1.1	1.1	1.1	1.4	2.3	2.6	4.2	4.8	5.1	5.2	5.3
4.9	Northern France .....	2.1	2.5	2.9	3.7	4.4	5.4	5.7	7.3	9.1	10.1	10.1
0.4	France - other areas .....	0.0	0.1	0.2	0.3	0.4	0.5	0.4	0.5	1.7	3.6	4.0
9.2	<i>France</i> .....	3.2	3.7	4.2	5.4	7.1	8.5	10.3	12.6	15.9	18.9	19.4
7.6	Italy: coastal areas .....	4.9	5.7	5.7	6.1	7.0	8.9	10.5	12.4	13.9	15.4	15.9
0.2	Italy: other areas .....	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.3
7.8	<i>Italy</i> .....	4.9	5.7	5.7	6.1	7.1	9.1	10.8	12.7	14.2	15.7	16.2
2.1	<i>Luxembourg</i> .....	0.7	1.6	1.9	2.0	2.2	2.3	2.4	3.3	3.8	3.8	3.8
5.0	<i>Netherlands</i> .....	2.1	2.2	2.4	3.4	3.9	4.9	5.7	6.5	6.9	7.2	7.4
61.1	<b>Total</b>	24.6	30.8	37.4	46.9	56.9	66.8	75.6	85.6	94.7	102.3	107.6

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

**Production**

*TABLE XXII b*  
**Production and Production Potential by Areas**

*'000 000 metric tons*

3.9	<b>Total</b>	—	—	—	—	2.0	3.6	5.4	6.7	8.1	8.4	8.4
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<b>STEEL - TOTAL</b>
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<b>Production</b>
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TABLE XXII f  
Production and Production Potential by Areas

'000 000 metric tons

Actual pro- duction  1972	Area	Production potential						Expected production potential				
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
7.4	Northern Germany .....	6.7	7.0	7.6	8.3	9.1	9.4	9.4	10.1	11.7	11.9	11.9
29.2	North Rhine/Westphalia ..	33.4	32.9	32.4	33.8	34.8	38.8	37.3	38.3	39.1	40.2	42.8
2.1	Southern Germany .....	2.0	2.1	2.0	2.1	2.4	2.5	2.6	2.8	2.8	2.8	2.8
5.0	Saar .....	5.4	5.7	5.8	6.4	6.8	7.2	7.7	7.7	8.1	8.5	8.7
43.7	Germany (FR) .....	47.5	47.7	47.8	50.6	53.1	57.9	57.0	58.9	61.7	63.4	66.2
14.5	Belgium .....	11.1	12.4	13.8	14.5	14.8	15.6	16.7	17.2	18.1	18.8	18.8
14.0	Eastern France .....	14.7	15.1	15.0	14.8	15.3	15.8	15.7	15.2	15.5	15.5	15.5
7.5	Northern France .....	6.2	6.2	6.5	7.3	7.9	8.4	8.9	10.3	11.8	13.0	13.1
2.6	France - other areas .....	2.5	2.6	2.6	2.6	2.9	3.0	3.1	3.3	5.0	7.0	7.5
24.1	France .....	23.4	23.9	24.1	24.7	26.1	27.2	27.7	28.8	32.3	35.5	36.1
10.3	Italy: coastal areas .....	9.2	10.3	10.2	10.7	11.0	12.2	13.9	15.9	17.5	19.0	19.5
9.5	Italy: other areas .....	8.3	8.5	9.4	9.6	10.3	10.5	11.4	11.8	12.1	12.8	12.5
19.8	Italy .....	17.5	18.8	19.6	20.3	21.3	22.7	25.3	27.7	29.6	31.8	32.0
5.4	Luxembourg .....	5.1	5.7	5.7	5.9	6.0	6.1	6.2	6.5	6.6	6.9	6.9
5.6	Netherlands .....	3.4	3.5	3.8	4.9	5.3	6.3	6.8	7.0	7.4	7.7	7.9
113.1	<b>Total</b>	<b>108.0</b>	<b>112.0</b>	<b>114.8</b>	<b>120.9</b>	<b>126.6</b>	<b>135.8</b>	<b>139.7</b>	<b>146.1</b>	<b>155.7</b>	<b>164.1</b>	<b>167.9</b>

## SECTIONS

## Production

TABLE XXIII a  
Production and Production Potential by Areas

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
1.6	Northern Germany .....	2.6	2.8	2.9	3.1	2.6	2.9	2.7	2.8	2.9	3.2	3.5
7.5	North Rhine/Westphalia ..	12.5	12.7	12.4	11.0	11.6	12.3	12.1	12.2	12.4	12.5	12.5
1.3	Southern Germany .....	1.0	1.1	1.1	1.3	1.3	1.7	1.8	2.0	2.0	2.0	2.0
2.4	Saar .....	3.7	3.6	3.6	3.4	3.6	3.4	3.2	3.6	4.1	4.4	4.4
12.8	Germany (FR) .....	19.8	20.2	20.0	18.8	19.1	20.3	19.8	20.6	21.4	22.1	22.4
4.8	Belgium .....	4.6	4.9	5.0	5.2	5.1	5.9	6.5	6.7	6.8	6.8	7.0
5.6	Eastern France .....	6.0	6.1	6.9	7.0	7.1	7.4	6.4	6.6	7.0	7.0	7.0
1.4	Northern France .....	1.8	1.6	1.6	1.6	1.6	1.7	1.6	1.7	1.7	1.9	2.0
1.4	France - other areas .....	1.2	1.2	1.3	1.4	1.6	1.6	1.7	1.9	2.2	2.4	2.6
8.4	France .....	9.0	8.9	9.8	10.0	10.3	10.7	9.7	10.2	10.9	11.3	11.6
1.6	Italy: coastal areas .....	1.5	1.9	2.3	2.5	2.2	2.6	2.7	2.7	2.7	2.9	3.0
5.6	Italy: other areas .....	4.7	5.3	6.0	5.9	6.5	6.4	7.3	7.6	7.9	8.1	8.1
7.2	Italy .....	6.2	7.2	8.3	8.4	8.7	9.0	10.0	10.3	10.6	11.0	11.1
2.6	Luxembourg .....	2.5	2.7	2.7	2.9	2.9	3.0	3.0	3.3	3.4	3.7	3.7
0.7	Netherlands .....	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0
36.5	<b>Total</b>	<b>42.8</b>	<b>44.6</b>	<b>46.6</b>	<b>46.1</b>	<b>47.0</b>	<b>49.8</b>	<b>50.0</b>	<b>52.1</b>	<b>54.1</b>	<b>55.9</b>	<b>56.8</b>



<b>FLAT PRODUCTS <sup>(1)</sup></b>
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<b>Production</b>
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TABLE XXIII b  
Production and Production Potential by Areas

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
2.3	Northern Germany .....	2.7	3.1	3.2	3.1	3.4	3.5	3.7	3.6	3.8	3.7	3.7
10.5	North Rhine/Westphalia ..	14.2	14.4	14.7	14.7	15.4	16.1	17.0	18.1	18.3	18.6	18.6
1.5	Southern Germany .....	1.8	1.9	1.9	1.9	1.9	1.9	2.4	3.0	3.0	3.0	3.0
0.9	Saar .....	1.4	1.4	1.5	1.8	1.4	1.5	2.3	2.2	2.2	2.3	2.3
15.2	Germany (FR) .....	20.1	20.8	21.3	21.5	22.1	23.0	25.4	26.9	27.3	27.6	27.6
5.0	Belgium .....	4.0	4.7	4.9	5.0	5.2	6.0	6.8	6.6	7.1	7.6	7.8
5.5	Eastern France .....	5.0	5.0	5.0	5.4	6.1	6.2	6.0	6.1	6.1	6.2	6.2
3.2	Northern France .....	2.7	2.8	3.0	3.4	3.7	3.9	3.8	4.1	4.9	5.5	5.6
0.6	France - other areas .....	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.9	1.2	1.2	1.2
9.3	France .....	8.2	8.3	8.5	9.4	10.4	10.6	10.5	11.1	12.2	12.9	13.0
3.3	Italy: coastal areas .....	2.4	2.9	3.3	3.4	3.6	4.2	5.0	5.8	6.7	7.4	7.4
3.2	Italy: other areas .....	3.0	3.3	3.4	3.4	3.6	3.7	4.3	4.3	4.3	4.5	4.5
6.5	Italy .....	5.4	6.2	6.7	6.8	7.2	7.9	9.3	10.1	11.0	11.9	11.9
1.4	Luxembourg .....	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.7	1.7
2.6	Netherlands .....	1.9	1.7	2.1	2.3	2.4	3.2	3.8	4.0	4.2	4.4	4.4
40.0	<b>Total</b>	<b>41.0</b>	<b>43.2</b>	<b>45.0</b>	<b>46.5</b>	<b>48.9</b>	<b>52.3</b>	<b>57.5</b>	<b>60.5</b>	<b>63.6</b>	<b>66.1</b>	<b>66.4</b>

(<sup>1</sup>) Except coils-finished products (see table XXV b).

<b>FINISHED ROLLED PRODUCTS - TOTAL <sup>(1)</sup></b>
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**Production**

TABLE XXIII c  
Production and Production Potential by Areas

<sup>1</sup>000 000 metric tons

Actual pro- duction 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
3.9	Northern Germany .....	5.3	5.9	6.1	6.2	6.0	6.4	6.4	6.4	6.7	6.9	7.2
18.0	North Rhine/Westphalia ..	26.7	27.1	27.1	25.7	27.0	28.4	29.1	30.3	30.7	31.1	31.1
2.8	Southern Germany .....	2.8	3.0	3.0	3.2	3.2	3.6	4.2	5.0	5.0	5.0	5.0
3.3	Saar .....	5.1	5.0	5.1	5.2	5.0	4.9	5.5	5.8	6.3	6.7	6.7
28.0	Germany (FR) .....	39.9	41.0	41.3	40.3	41.2	43.3	45.2	47.5	48.7	49.7	50.0
9.7	Belgium .....	8.6	9.6	9.9	10.2	10.3	11.9	13.3	13.3	13.9	14.4	14.8
11.1	Eastern France .....	11.0	11.1	11.9	12.4	13.2	13.5	12.4	12.7	13.1	13.2	13.2
4.6	Northern France .....	4.5	4.4	4.6	5.0	5.3	5.6	5.4	5.8	6.6	7.4	7.6
2.0	France - other areas .....	1.7	1.7	1.8	2.0	2.2	2.2	2.4	2.8	3.4	3.6	3.8
17.7	France .....	17.2	17.2	18.3	19.4	20.7	21.3	20.2	21.3	23.1	24.2	24.6
4.9	Italy: coastal areas .....	3.9	4.8	5.6	5.9	5.8	6.8	7.7	8.5	9.4	10.3	10.4
8.8	Italy: other areas .....	7.7	8.6	9.4	9.3	10.1	10.1	11.6	11.9	12.2	12.6	12.6
13.7	Italy .....	11.6	13.4	15.0	15.2	15.9	16.9	19.3	20.4	21.6	22.9	23.0
4.0	Luxembourg .....	3.9	4.2	4.2	4.4	4.5	4.6	4.7	5.1	5.2	5.4	5.4
3.3	Netherlands .....	2.6	2.4	2.9	3.1	3.3	4.1	4.8	5.0	5.2	5.4	5.4
76.5	<b>Total</b>	83.8	87.8	91.6	92.6	95.9	102.1	107.5	112.6	117.7	122.0	123.2

<sup>(1)</sup> Except coils-finished products (see table XXV b).

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

**Production**

*TABLE XXIV a*  
**Production and Production Potential by Areas**

*'000 000 metric tons*

Actual pro- duction 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
1.3	Northern Germany .....	2.4	2.6	2.6	2.8	2.3	2.6	2.3	2.3	2.3	2.6	2.9
5.0	North Rhine/Westphalia ..	9.5	9.7	9.2	8.0	8.4	8.9	8.6	8.7	8.8	8.8	8.8
0.9	Southern Germany .....	0.9	1.0	1.0	1.1	1.1	1.4	1.4	1.6	1.6	1.6	1.6
1.8	Saar .....	3.1	3.0	2.9	2.8	2.9	2.7	2.5	2.7	2.9	3.0	3.0
9.0	<i>Germany (FR)</i> .....	15.9	16.3	15.7	14.7	14.7	15.6	14.8	15.3	15.6	16.0	16.3
4.0	<i>Belgium</i> .....	3.4	3.7	3.8	4.1	4.1	4.9	5.6	5.8	5.9	5.9	5.9
3.6	Eastern France .....	4.2	4.4	4.9	4.9	4.9	5.2	4.2	4.3	4.4	4.3	4.4
1.2	Northern France .....	1.5	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.6	1.7
1.0	France - other areas .....	0.9	0.9	1.0	1.1	1.3	1.2	1.3	1.4	1.6	1.6	1.7
5.8	<i>France</i> .....	6.6	6.6	7.2	7.3	7.5	7.8	6.8	7.1	7.4	7.5	7.8
1.4	Italy: coastal areas .....	1.3	1.6	2.0	2.2	1.9	2.3	2.4	2.4	2.4	2.6	2.7
4.8	Italy: other areas .....	3.9	4.4	4.9	4.9	5.5	5.3	6.0	6.2	6.4	6.6	6.6
6.2	<i>Italy</i> .....	5.2	6.0	6.9	7.1	7.4	7.6	8.4	8.6	8.8	9.2	9.3
2.2	<i>Luxembourg</i> .....	2.2	2.4	2.3	2.4	2.4	2.5	2.5	2.8	2.9	3.2	3.2
0.3	<i>Netherlands</i> .....	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5
27.5	<b>Total</b>	33.6	35.3	36.3	36.0	36.6	38.9	38.7	40.1	41.1	42.3	43.0

## WIRE-ROD

## Production

TABLE XXIV b  
Production and Production Potential by Areas

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
0.3	Northern Germany .....	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.6
2.5	North Rhine/Westphalia ..	3.0	3.0	3.2	3.0	3.2	3.4	3.5	3.5	3.6	3.7	3.7
0.4	Southern Germany .....	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4
0.6	Saar .....	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.9	1.2	1.4	1.4
3.8	Germany (FR) .....	3.9	3.9	4.3	4.1	4.4	4.7	5.0	5.3	5.8	6.1	6.1
0.8	Belgium .....	1.2	1.2	1.2	1.1	1.0	1.0	0.9	0.9	0.9	0.9	1.1
2.0	Eastern France .....	1.8	1.7	2.0	2.1	2.2	2.2	2.2	2.3	2.6	2.7	2.6
0.2	Northern France .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.4	France - other areas .....	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.8	0.9
2.6	France .....	2.4	2.3	2.6	2.7	2.8	2.9	2.9	3.1	3.5	3.8	3.8
0.2	Italy: coastal areas .....	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.8	Italy: other areas .....	0.8	0.9	1.1	1.0	1.0	1.1	1.3	1.4	1.5	1.5	1.5
1.0	Italy .....	1.0	1.2	1.4	1.3	1.3	1.4	1.6	1.7	1.8	1.8	1.8
0.4	Luxembourg .....	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.4	Netherlands .....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
9.0	<b>Total</b>	9.2	9.3	10.3	10.1	10.4	10.9	11.3	12.0	13.0	13.6	13.8

**HOOP AND STRIP  
AND TUBE MAKING STRIP**

**Production**

TABLE XXIV c  
Production and Production Potential by Areas

'000 000 metric tons

Actual pro- duction 1972	Area	Production potential						Expected production potential				
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
0.1	Northern Germany .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2.4	North Rhine/Westphalia ..	4.0	3.8	3.9	3.7	3.6	3.6	3.3	3.3	3.3	3.3	3.3
0.0	Southern Germany .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
0.2	Saar .....	0.4	0.4	0.4	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3
2.7	Germany (FR) .....	4.5	4.3	4.4	4.4	4.1	4.1	3.7	3.7	3.7	3.8	3.8
0.3	Belgium .....	0.6	0.6	0.6	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.3
1.3	Eastern France .....	1.2	1.2	1.1	1.2	1.2	1.2	1.4	1.5	1.5	1.5	1.5
0.1	Northern France .....	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.0	France - other areas .....	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—	—
1.4	France .....	1.2	1.2	1.1	1.3	1.3	1.3	1.5	1.6	1.6	1.6	1.6
0.5	Italy: coastal areas .....	0.5	0.7	0.8	0.8	0.9	0.8	0.9	0.9	0.9	1.0	1.0
0.5	Italy: other areas .....	0.5	0.6	0.7	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8
1.0	Italy .....	1.0	1.3	1.5	1.3	1.4	1.3	1.5	1.5	1.6	1.8	1.8
0.9	Luxembourg .....	0.8	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.1
0.2	Netherlands .....	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.5
6.5	<b>Total</b>	8.2	8.4	8.7	8.5	8.4	8.6	8.6	8.7	8.8	9.1	9.1

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

**Production**

TABLE XXIV d  
Production and Production Potential by Areas

'000 000 metric tons

Actual production 1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
0.7	Northern Germany .....	1.2	1.3	1.3	1.2	1.3	1.3	1.3	1.1	1.2	1.2	1.2
4.1	North Rhine/Westphalia ..	5.5	5.9	6.0	6.0	6.7	6.9	6.9	7.0	7.1	7.3	7.3
—	Southern Germany .....	0.1	0.1	0.1	0.1	0.1	0.0	0.0	—	—	—	—
0.6	Saar .....	1.0	1.0	1.1	1.2	1.1	1.1	2.0	1.9	1.9	1.9	1.9
5.4	Germany (FR) .....	7.8	8.3	8.5	8.5	9.2	9.3	10.2	10.0	10.2	10.4	10.4
1.6	Belgium .....	1.2	1.4	1.5	1.5	1.6	1.8	1.8	1.7	1.8	2.0	2.1
0.9	Eastern France .....	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1
0.9	Northern France .....	0.7	0.8	0.9	1.1	1.2	1.3	1.2	1.3	1.4	1.4	1.4
0.2	France - other areas .....	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
2.0	France .....	1.8	2.0	2.1	2.4	2.5	2.6	2.6	2.6	2.7	2.7	2.7
1.3	Italy: coastal areas .....	0.9	1.2	1.4	1.5	1.5	1.5	1.8	2.4	2.9	3.4	3.4
0.5	Italy: other areas .....	0.5	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
1.8	Italy .....	1.4	1.8	2.1	2.2	2.2	2.3	2.6	3.2	3.7	4.2	4.2
0.2	Luxembourg .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.4	Netherlands .....	0.5	0.4	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8	0.8
<b>11.4</b>	<b>Total</b>	<b>13.0</b>	<b>14.2</b>	<b>15.0</b>	<b>15.4</b>	<b>16.3</b>	<b>16.8</b>	<b>18.3</b>	<b>18.6</b>	<b>19.5</b>	<b>20.4</b>	<b>20.5</b>

<sup>(1)</sup> Except coils-finished products (see table XXV b).

**HOT-ROLLED SHEET**  
**< 3 mm <sup>(1)</sup>**

**Production**

TABLE XXIV e  
**Production and Production Potential by Areas**

<sup>1</sup>000 000 metric tons

Actual production 1972	Area	Production potential						Expected production potential				
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
0.0	Northern Germany .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	North Rhine/Westphalia ..	0.6	0.4	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
—	Southern Germany .....	0.2	0.2	0.1	0.1	0.1	—	—	—	—	—	—
—	Saar .....	0.0	—	—	—	—	—	—	—	—	—	—
0.1	Germany (FR) .....	0.8	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.1	Belgium .....	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
0.1	Eastern France .....	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
0.1	Northern France .....	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.0	France - other areas .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.2	France .....	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
0.0	Italy: coastal areas .....	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
—	Italy: other areas .....	0.1	0.1	0.0	0.0	0.0	0.0	—	—	—	—	—
0.0	Italy .....	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
—	Luxembourg .....	0.0	0.0	0.0	—	—	—	—	—	—	—	—
0.0	Netherlands .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	<b>Total</b>	1.8	1.5	1.2	1.0	1.0	0.8	1.0	1.0	1.0	1.1	1.1

<sup>(1)</sup> Except coils-finished products (see table XXV b).

<b>COLD-REDUCED SHEET &lt; 3 mm</b>
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**Production**

*TABLE XXIV f*  
**Production and Production Potential by Areas**

*'000 000 metric tons*

Actual pro- duction  1972	Area	Production potential							Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
1.5	Northern Germany .....	1.4	1.7	1.8	1.8	2.0	2.1	2.3	2.4	2.5	2.4	2.4
4.0	North Rhine/Westphalia ..	4.1	4.3	4.5	4.8	4.9	5.4	6.6	7.6	7.7	7.9	7.9
1.5	Southern Germany .....	1.5	1.6	1.7	1.7	1.7	1.9	2.4	3.0	3.0	2.9	2.9
—	Saar .....	—	—	—	—	—	—	—	—	—	—	—
7.0	<i>Germany (FR)</i> .....	7.0	7.6	8.0	8.3	8.6	9.4	11.3	13.0	13.2	13.2	13.2
3.0	<i>Belgium</i> .....	2.0	2.5	2.6	2.9	2.9	3.6	4.4	4.4	4.8	5.1	5.2
3.2	Eastern France .....	2.5	2.5	2.7	2.9	3.5	3.6	3.3	3.4	3.4	3.5	3.5
2.1	Northern France .....	1.9	1.9	1.9	2.1	2.3	2.4	2.4	2.6	3.3	3.9	4.0
0.4	France - other areas .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.9	0.9	0.9
5.7	<i>France</i> .....	4.7	4.7	4.9	5.4	6.2	6.4	6.1	6.6	7.6	8.3	8.4
1.5	Italy: coastal areas .....	0.8	0.8	0.9	0.9	1.0	1.7	2.0	2.2	2.6	2.6	2.6
2.2	Italy: other areas .....	1.9	2.0	2.0	2.2	2.4	2.4	2.9	2.9	2.8	2.9	2.9
3.7	<i>Italy</i> .....	2.7	2.8	2.9	3.1	3.4	4.1	4.9	5.1	5.4	5.5	5.5
0.3	<i>Luxembourg</i> .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3
2.0	<i>Netherlands</i> .....	1.3	1.2	1.4	1.6	1.8	2.3	2.6	2.7	2.9	3.1	3.1
21.7	<b>Total</b>	18.0	19.1	20.1	21.6	23.2	26.1	29.6	32.2	34.3	35.5	35.7



<b>HOT WIDE-STRIP MILLS</b>
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**Investment**

(already included in the capital expenditure for the flat-product mills: Table XVIII d)

TABLE XXV a  
Capital Expenditure by Areas

'000 000 units of account Eur

Area	Actual expenditure								Estimated expenditure (projects in progress and approved)		
									on Jan. 1, 1972 for	on Jan. 1, 1973 for	
	1965	1966	1967	1968	1969	1970	1971	1972	1972	1973	1974
Northern Germany .....	2.62	1.56	0.33	1.66	3.36	22.39	32.46	31.28	30.95	39.39	41.20
North Rhine/Westphalia .....	33.56	37.21	10.81	9.46	10.59	43.73	52.16	34.10	31.04	16.55	3.61
Southern Germany .....	—	—	—	—	—	—	—	—	—	—	—
Saar .....	—	—	—	—	—	—	—	—	—	—	—
Germany (FR) .....	36.18	38.77	11.14	11.12	13.95	66.12	84.62	65.38	61.99	55.94	44.81
Belgium .....	22.90	25.78	16.90	11.60	10.89	16.88	15.91	16.57	8.98	12.44	9.32
Eastern France .....	—	1.09	2.17	3.04	2.75	6.27	3.59	0.96	3.03	0.57	0.24
Northern France .....	4.50	1.70	7.10	11.80	4.20	4.08	25.87	36.87	33.58	21.21	5.60
France: other areas .....	0.06	—	—	—	—	—	11.32	85.60	77.60	50.41	43.75
France .....	4.56	2.79	9.27	14.84	6.95	10.35	40.78	123.43	114.21	72.19	49.59
Italy: coastal areas .....	6.70	0.61	0.04	0.73	1.53	7.33	43.75	103.08	58.93	67.34	34.11
Italy: other areas .....	14.53	4.09	3.34	1.59	0.68	4.29	7.37	1.95	2.20	1.73	0.44
Italy .....	21.23	4.70	3.38	2.32	2.21	11.62	51.12	105.03	61.13	69.07	34.55
Luxembourg .....	0.55	0.50	0.16	—	—	0.02	0.02	—	—	0.01	—
Netherlands .....	1.15	6.31	22.34	50.70	30.00	6.29	4.38	3.86	4.63	1.18	1.30
<b>Total</b>	<b>86.57</b>	<b>78.85</b>	<b>63.19</b>	<b>90.58</b>	<b>64.00</b>	<b>111.28</b>	<b>196.83</b>	<b>314.27</b>	<b>250.94</b>	<b>210.83</b>	<b>139.57</b>

COILS <sup>(1)</sup>

## Production

TABLE XXV b  
Production and Production Potential by Areas

'000 000 metric tons

Actual production		Area	Production potential							Expected production potential			
Total	of which: coils- (finished products)		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
1972													
3.3	0.9	Northern Germany .....	2.8	2.9	3.0	3.2	3.2	4.3	4.9	5.5	6.1	6.1	6.1
8.9	1.8	North Rhine/Westphalia ..	6.3	7.5	8.2	9.1	8.7	10.7	11.4	12.3	12.6	12.6	12.6
—	—	Southern Germany .....	—	—	—	—	—	—	—	—	—	—	—
—	—	Saar .....	—	—	—	—	—	—	—	—	—	—	—
12.2	2.7	Germany (FR) .....	9.1	10.4	11.2	12.3	11.9	15.0	16.3	17.8	18.7	18.7	18.7
5.6	0.9	Belgium .....	2.8	4.0	4.3	4.9	5.2	5.5	6.2	6.3	6.8	7.4	7.6
3.1	0.1	Eastern France .....	2.6	2.7	2.7	2.9	3.0	3.0	3.2	3.2	3.2	3.3	3.3
3.7	0.3	Northern France .....	2.8	2.7	3.0	3.5	4.0	3.9	4.4	5.5	6.1	6.5	6.5
—	—	France: other areas .....	0.1	—	—	—	—	—	—	0.1	1.4	2.5	2.8
6.8	0.4	France .....	5.5	5.4	5.7	6.4	7.0	6.9	7.6	8.8	10.7	12.3	12.6
4.4	1.1	Italy: coastal areas .....	3.4	4.1	4.1	4.2	4.5	5.3	5.6	7.1	8.3	10.3	10.3
0.8	0.0	Italy: other areas .....	0.8	1.1	1.1	1.1	1.1	0.9	0.9	1.0	0.9	1.0	0.9
5.2	1.1	Italy .....	4.2	5.2	5.2	5.3	5.6	6.2	6.5	8.1	9.2	11.3	11.2
0.5	—	Luxembourg .....	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4.0	0.7	Netherlands .....	1.6	1.6	1.7	2.1	3.3	4.3	4.8	4.9	5.0	5.1	5.2
34.3	5.8	<b>Total</b>	23.6	27.1	28.6	31.5	33.5	38.4	41.9	46.4	50.9	55.3	55.8

(1) Treaty products obtained by transformation of hot-rolled coils are included in the tables XXIII b and c, XXIV c, d, e and f.

TABLE XXX a  
Utilization Rate of Production Potential — Community

Products	Production 1972 ( <sup>1</sup> 000 000 metric tons)	Production potential 1972 ( <sup>1</sup> 000 000 metric tons)	Utilization rate (in %)
<i>Pig-iron</i> .....	81.3	101.8	80
Basic Bessemer steel .....	16.0	19.2	83
OBM, LWS steel, etc. ....	3.9	5.4	72
Open-hearth steel .....	16.0	20.3	79
Electric-furnace steel .....	16.1	19.2	84
LD, Kaldo and other steels .....	61.1	75.6	81
<b>Crude steel — Total</b>	<b>113.1</b>	<b>139.7</b>	<b>81</b>
<i>Coils</i> .....	34.2	41.9	82
Heavy sections .....	9.6	13.3	72
Light sections .....	17.9	25.4	70
Wire-rod .....	9.0	11.3	80
Hoop and strip and tubemaking strip .....	6.5	8.6	76
Hot-rolled sheet $\geq$ 3 mm <sup>(1)</sup> .....	11.4	18.3	62
Hot-rolled sheet < 3 mm <sup>(1)</sup> .....	0.4	1.0	40
Cold-reduced sheet < 3 mm .....	21.7	29.6	73
<b>Finished rolled products — Total <sup>(1)</sup></b>	<b>76.5</b>	<b>107.5</b>	<b>71</b>

<sup>(1)</sup> Except coils-finished products.

PIG-IRON
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TABLE XXXb  
Utilization Rate of Production Potential by Country

Country	Production 1972 ( <sup>000 000</sup> metric tons)	Production potential 1972 ( <sup>000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	32.0	42.7	75
Belgium .....	11.9	14.0	85
France .....	19.0	22.0	86
Italy .....	9.4	12.5	75
Luxembourg .....	4.7	5.4	87
Netherlands .....	4.3	5.2	83
<b>Total</b>	<b>81.3</b>	<b>101.8</b>	<b>80</b>

STEEL — TOTAL
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TABLE XXX c  
Utilization Rate of Production Potential by Country

Country	Production 1972 ( <sup>'000 000</sup> metric tons)	Production potential 1972 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	43.7	57.0	77
Belgium .....	14.5	16.7	87
France .....	24.1	27.7	87
Italy .....	19.8	25.3	78
Luxembourg .....	5.4	6.2	87
Netherlands .....	5.6	6.8	82
<b>Total</b>	<b>113.1</b>	<b>139.7</b>	<b>81</b>

## COILS

TABLE XXX d  
Utilization Rate of Production Potential by Country

Country	Production 1972 ( <sup>000 000</sup> metric tons)	Production potential 1972 ( <sup>000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	12.2	16.3	75
Belgium .....	5.6	6.2	90
France .....	6.8	7.6	89
Italy .....	5.2	6.5	80
Luxembourg .....	0.5	0.5	100
Netherlands .....	4.0	4.8	83
<b>Total</b>	<b>34.3</b>	<b>41.9</b>	<b>82</b>

SECTIONS
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TABLE XXX e  
Utilization Rate of Production Potential by Country

Country	Production 1972 ( <sup>0</sup> 000 000 metric tons)	Production potential 1972 ( <sup>0</sup> 000 000 metric tons)	Utilization rate (in %)
Germany (FR) .....	12.8	19.8	65
Belgium .....	4.8	6.5	74
France .....	8.4	9.7	86
Italy .....	7.2	10.0	72
Luxembourg .....	2.6	3.0	87
Netherlands .....	0.7	1.0	70
<b>Total</b>	<b>36.5</b>	<b>50.0</b>	<b>73</b>

FLAT PRODUCTS <sup>(1)</sup>
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TABLE XXXf  
Utilization Rate of Production Potential by Country

Country	Production 1972 ( <sup>000 000</sup> metric tons)	Production potential 1972 ( <sup>000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	15.2	25.4	60
Belgium .....	5.0	6.8	73
France .....	9.3	10.5	88
Italy .....	6.5	9.3	70
Luxembourg .....	1.4	1.7	82
Netherlands .....	2.6	3.8	68
<b>Total</b>	<b>40.0</b>	<b>57.5</b>	<b>70</b>

<sup>(1)</sup> Except coils-finished products.



<b>COLD-REDUCED SHEET</b> <b>&lt; 3 mm</b>
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TABLE XXX g  
Utilization Rate of Production Potential by Country

Country	Production 1972 ( <sup>000 000</sup> metric tons)	Production potential 1972 ( <sup>000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	7.0	11.3	62
Belgium .....	3.0	4.4	68
France .....	5.7	6.1	93
Italy .....	3.7	4.9	75
Luxembourg .....	0.3	0.3	100
Netherlands .....	2.0	2.6	77
<b>Total</b>	<b>21.7</b>	<b>29.6</b>	<b>73</b>

<b>FINISHED ROLLED PRODUCTS — TOTAL <sup>(1)</sup></b>
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TABLE XXX b  
Utilization Rate of Production Potential by Country

Country	Production 1972 ( <sup>000 000</sup> metric tons)	Production potential 1972 ( <sup>000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	28.0	45.2	62
Belgium .....	9.7	13.3	73
France .....	17.7	20.2	88
Italy .....	13.7	19.3	71
Luxembourg .....	4.0	4.7	85
Netherlands .....	3.3	4.8	69
<b>Total</b>	<b>76.5</b>	<b>107.5</b>	<b>71</b>

<sup>(1)</sup> Except coils-finished products.