

EUROPEAN COAL AND STEEL COMMUNITY

COMMISSION

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

REPORT ON THE 1972 SURVEY

Position as at 1 January 1972

JULY 1972

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## I—GENERAL REMARKS

It is the annual practice of the Commission of the European Communities to conduct a survey of past and future investment by ECSC enterprises as at 1 January of the year concerned, and its effects on production potential. The annual survey covers all but a few very 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 about 2.2% for rolled products.

The figures from the previous surveys for the years 1954-65 are recapitulated in a Report issued in 1966 entitled "Investment in the Community Coalmining and Iron and Steel Industries: Recapitulative Report on the 1956-1965 Surveys". The statistical annexes to the Report on the 1972 survey therefore show only the figures from 1966 onwards.

**Annex I** to the Report sets forth the **basic definitions** adopted. In particular, it specifies that investment projects have been classified in three categories, according as they were on 1 January 1972, already completed or in progress (Category A), approved (Category B), or merely planned (Category C). For the extractive industries (coal and iron-ore mines) all three categories are used. Since however, in the case of the iron and steel industry, projects merely "planned" can as a rule be quite easily dropped or deferred if necessary, Category C is not covered in this report for coking plants and the steel industry.

**Annex II** to the Report gives a breakdown according to regions of past and future **investments** and trends in **production potential**.

Since 1 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. The balance-sheet and the receipts and expenditure of the ECSC will continue to be set out using this unit of account, especially in the Annual Financial Report. The exchange for the national currencies of member countries of the Community remain those as defined by the official parities, which have not so far been changed by the governments of the Member States.

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 1972, have been converted to a unit of account which, at that date at least, was better suited to statistical requirements. This unit 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 in the course of this report be referred to by the term "EUR" for convenience, is also 0.888671 g. of fine gold, but conversions subsequent to 18 December 1971 are in accordance with the new "central rates" adopted on that

date and recapitulated in annex I,I. Where a parity has been changed in the course of a given period, the figures for that period will have been converted on a *pro rata temporis* basis.

Although it reflects better than the other unit exchange rates actually obtaining, the new unit of account does not give a suitable appreciation of fluctuations over a period of time in the costs of capital equipment and wages arising in the course of its installation. The figures set out in this unit of account nevertheless make it possible to adduce certain observations of a general nature.

### (a) Capital expenditure

Capital expenditure in the coalmining industry was 143m units of account in 1971 and is estimated at 201m for 1972 (projects in progress, approved and merely planned). Expenditure for 1971 was, however, below the original estimates (193m) and, except for 1969 and 1970, remained below the level recorded each year during the sixties.

Capital expenditure in the iron and steel industry went up almost steadily from 1954 to 1963, during which period the total annual expenditure showed a threefold increase from 453m to 1 480m. On the other hand, from 1963 to 1967 capital expenditure gradually fell back to 730m: a 50% reduc-

TABLE I  
Capital Expenditure in the Community Industries, 1954-73

'000 000 units of account EUR

Sectors	Actual expenditure													Estimated expenditure (A+B+C) <sup>1</sup>	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973 <sup>2</sup>
Coal mines <sup>3</sup>	327	268	283	267	250	235	219	189	159	150	101	108	135	192	216
Briquette and lignite char plants	5	6	4	6	9	8	8	4	5	4	4	2	8	9	7
Iron-ore mines	39	43	52	47	28	24	25	17	16	21	20	21	30	30	18
Iron and steel industry	581	775	1 123	1 230	1 480	1 315	932	848	730	802	1 039	1 706	2 182	2 601	1 915
<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>2 355</b>	<b>2 832</b>	<b>2 156</b>
Pithead power-stations and other power generating plants	107	103	97	100	76	56	59	61	84	133	...	...	...	...	...

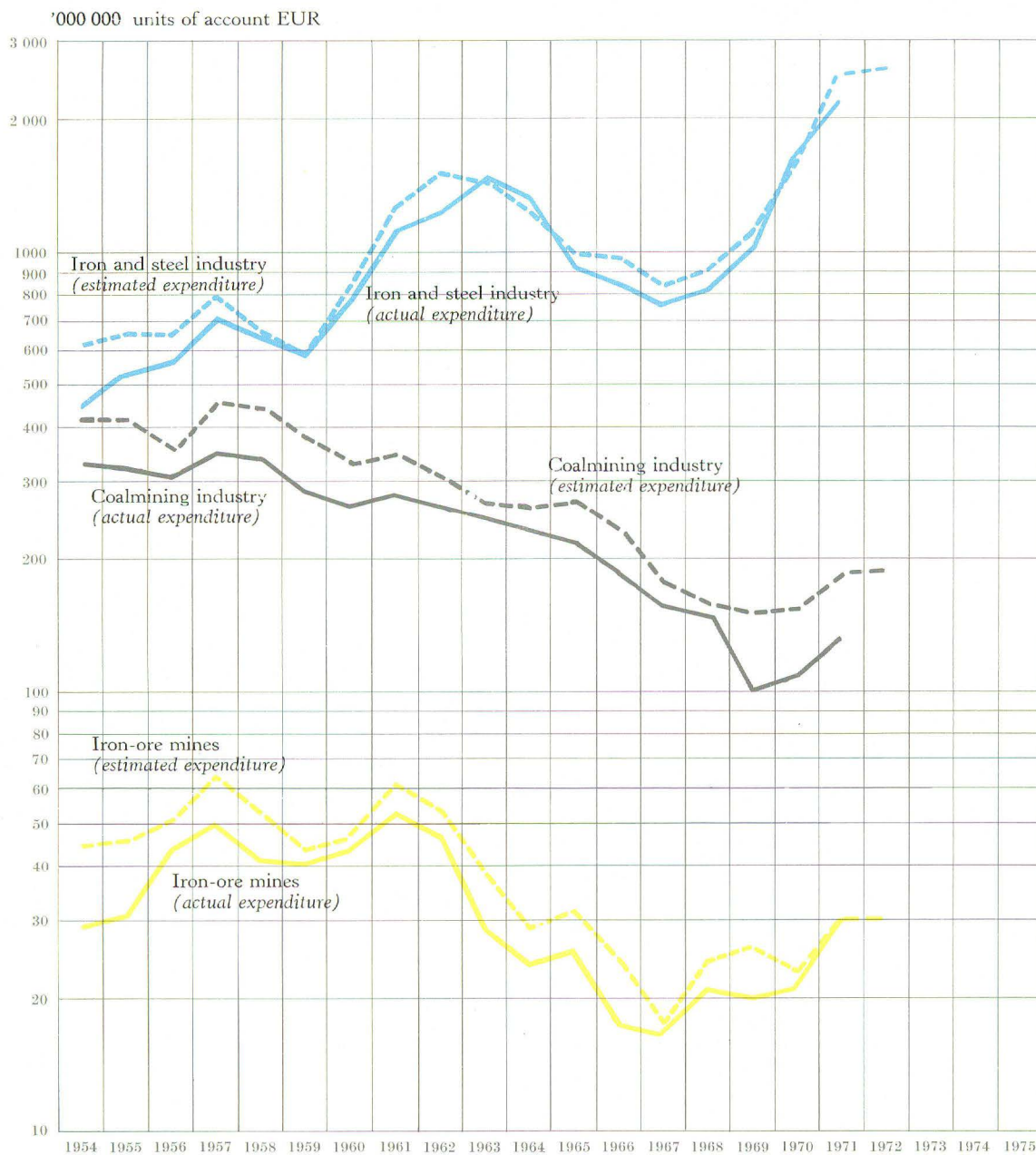
<sup>1</sup> The estimates for the iron and steel industry relate only to expenditure on projects already in progress (A) or approved (B) at 1 January 1972, not to those merely planned (C). For the extractive industries (coal and iron-ore mines), however, Category C projects are covered.

<sup>2</sup> On 1 January 1972, the enterprises were still unable to give a complete estimate of their actual expenditure in 1973. Accordingly, the estimates shown in all tables of this Report are less accurate for 1973 than for 1972.

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

FIGURE 1

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



tion in four years. Since then it has recovered, rising to 802m in 1968, to 1 039m in 1969, 1 706m in 1970 and 2 182m in 1971. This level will itself be exceeded in 1972 with 2 600m, the highest level so far recorded. The estimated figure for 1973 is close on 2 000m. Allowing for the incomplete nature of the statements submitted by enterprises for the subsequent two years even this figure may be exceeded.

To explain these figures, Annex I, Id gives a price index for capital goods from 1960 to 1970.

Since the first annual survey of investment in the coal and steel industries up to and including 1970, actual annual expenditure has been, on average, some 1 194m units of account. At 2 355m, the 1971 investment figure is appreciably above this average. Trends in the mining and iron and steel industries, however, showed considerable divergence. Indeed, capital expenditure in the coal and iron-ore mining industries in 1970 (143m and 30 m respectively) remained substantially below the annual averages. For the iron and steel industry, capital expenditure for 1971 (2 182m) is appreciably above the annual average (910m).

The figures for the years 1970 and 1971 do not altogether tally with those given in last year's Report, inasmuch as it is normally the case that

- (i) for 1970, the expenditure figures, returned before the balance-sheets were closed, are corrected when the next survey is drawn up;
- (ii) for 1971, actual expenditure differs to varying from the estimates submitted on 1 January. Indeed, the 1971 survey had suggested that capital expenditure in that year would total 193m units of account for the coalmining industry, 30m for the iron-ore mines and 2 500m for the iron and steel industry, but the figures for actual expenditure were 143m, 30m and 2 182m respectively. The estimates therefore proved to be 73% correct for coal, 100% for iron-ore and 87% for the steel industry as a whole (see Fig. 1).

Compared with the accuracy of the estimates for 1970 in the previous survey, there is a certain deterioration for the 1971 figures with regard to the coal industry (73% correct in 1971 compared with 77% correct for 1970). The discrepancy is more marked in the case of the iron and steel industry for which of course actual expenditure had been exceptionally high, more than 100% of the estimates in 1970.

TABLE 2  
General Trend in Investment in Recent Years

Sector	Projects effected													Expenditure scheduled for 1972
	1954-59 (annual average)	in 1960	in 1961	in 1962	in 1963	in 1964	in 1965	in 1966	in 1967	in 1968	in 1969	in 1970	in 1971	
Coal mines <sup>1</sup> .....	100	83	86	82	78	73	68	58	49	46	32	33	43	60
Iron-ore mines .....	100	110	133	121	72	62	64	44	41	54	51	54	77	77
Iron and steel industry ...	100	133	193	212	255	226	160	146	126	138	179	294	375	448
All ECSC industries .....	100	115	154	163	186	166	124	111	96	103	122	192	247	297

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

**(b) Production potential**

According to the estimates returned by the firms, annual coal extraction potential is expected to drop by some 27.5m tons between 1971 and 1972, thus declining from 174.5 to 147.0m tons. The reduction announced is, however, far less than that recorded (36m tons) during the four-year period preceding the date of the present survey.

Iron-ore production potential, which had shown a marked reduction from 1962 to 1968, and appeared to level off at around 80m tons per annum between 1968 and 1970 dropped to 75m in 1971. The enterprises hope to maintain it at this level between now and 1975.

Iron and steel production potential, after expanding by over 23.5m ingot tons from 1967 to 1971, will increase by 27.9m tons during the coming four-year period, totalling 163.4m tons by 1975.

TABLE 3

**Actual Production and Production Potential in the Community Industries**

Product	Actual Production			Production potential				
	1952 (‘000 000 metric tons)	Average cumu- lative annual movement (%)	1971 (‘000 000 metric tons)	1967 (‘000 000 metric tons)	Average cumu- lative annual movement (%)	1971 (‘000 000 metric tons)	Average cumu- lative annual movement (%)	1975 (‘000 000 metric tons)
Coal <sup>1</sup> .....	237.4	-2.1	158.6	210.5	-4.5	174.5	-4.1	147.0
Coke .....	61.2	+0.4	65.5	72.6	+0.2	73.3	+1.7	78.5
Iron ore .....	65.3	+0.3	68.4	84.3	-2.6	75.8	-0.1	75.5
Pig-iron .....	34.7	+4.2	75.7	82.3	+4.5	99.3	+5.6	123.7
Crude steel .....	41.8	+4.9	103.4	112.0	+4.9	135.5	+4.7	163.4

<sup>1</sup> Excluding "small mines" (See Annex I, II a).

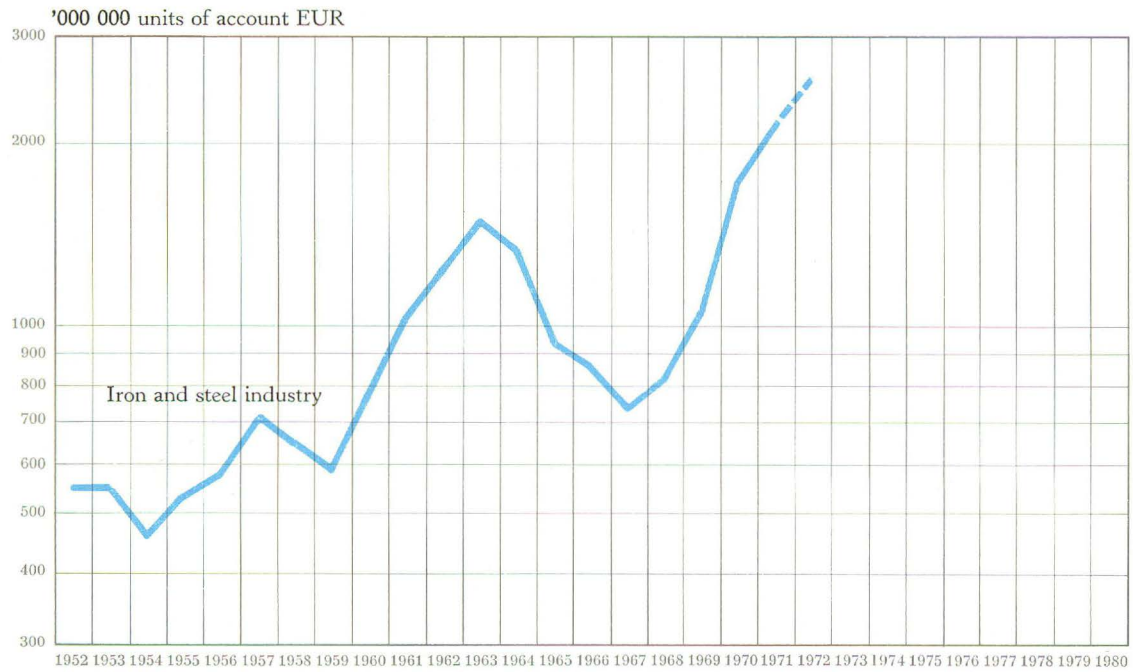
The utilization rate of production potential has remained practically stationary for some years in the mining industry (coal and iron ore), although in 1971 a rapid decline in production potential was recorded. The utilization rate, on the other hand, showed an appreciable drop in all other sectors: coke, pig-iron and steel as a result of flagging trends in the economy recorded in that year, when there was also a particularly sharp slowing down in the rate of increase in production potential for pig-iron and steel.

It should also be pointed out in this connection that, according to the definitions adopted, it is practically impossible for utilization rates ever to reach 100%: total potential declared by all the enterprises together is bound to be slightly above the maximum production actually achievable in the Community as a whole, due to unforeseeable incidents or circumstances which in the course of any one year make it impossible for some of the plants to attain 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

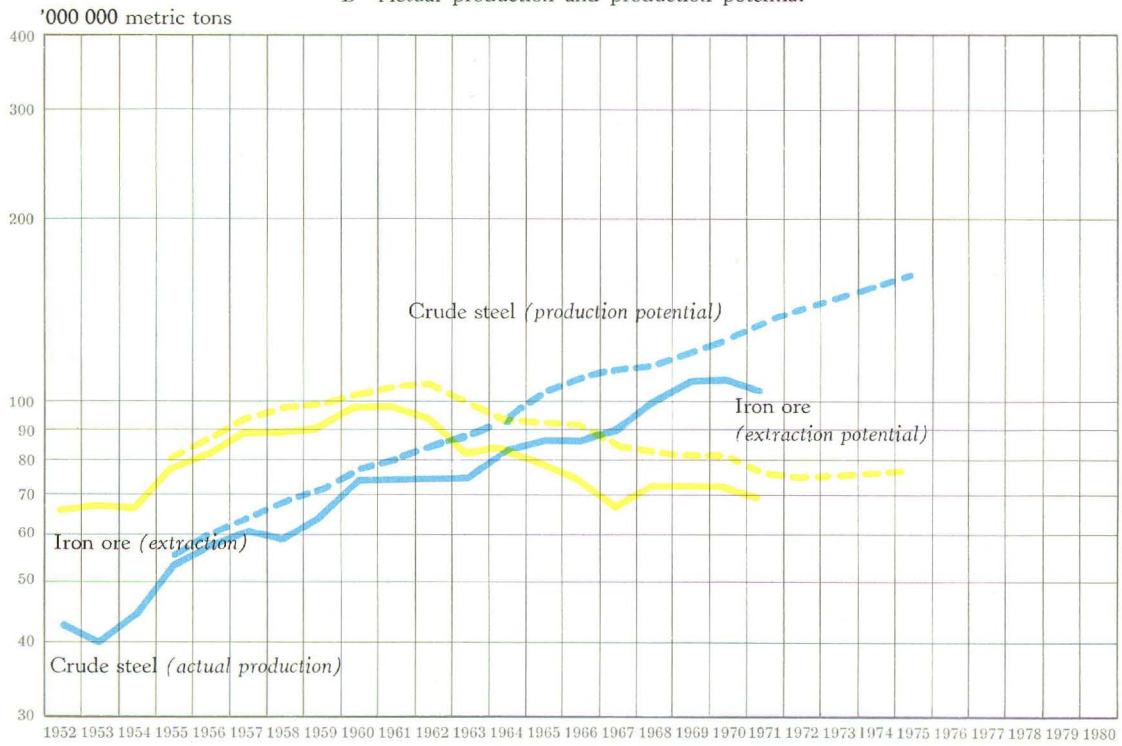
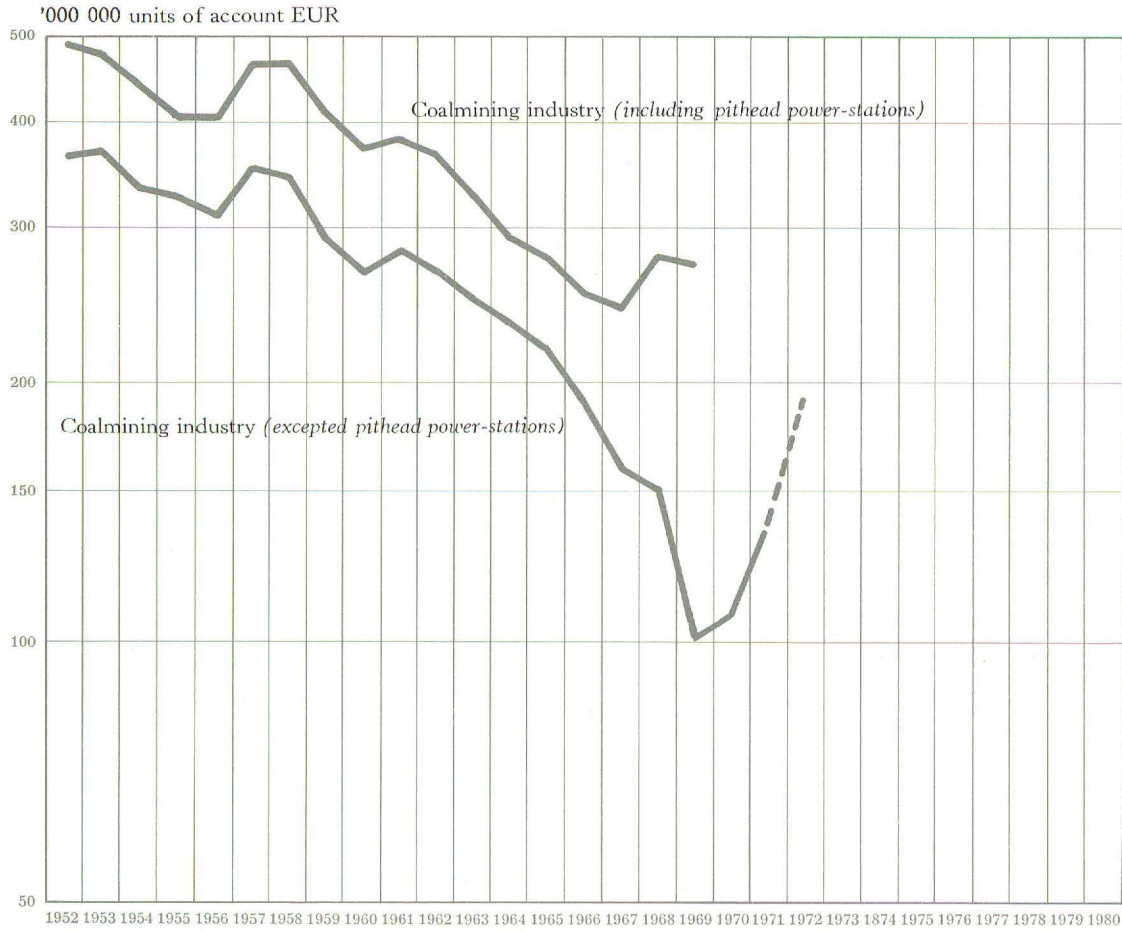




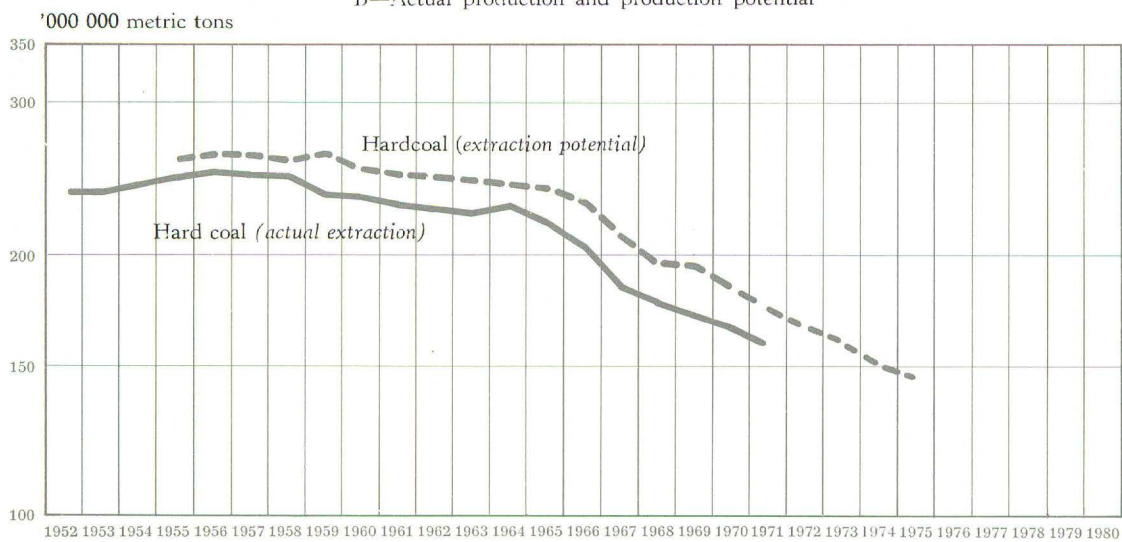
FIGURE 3

Investment in the Coalmining Industry

A—Capital expenditure



B—Actual production and production potential



Thus even during the best years (for example 1960), actual production in the iron and steel industry was never in excess of around 96% of the sum of individual production potential declared. It would even appear from the data in table 4, that this maximum rate has been on a declining trend, particularly during the last boom period, mainly for the reasons noted in the previous report.

Whatever the case may be, the utilization rates for production potential seem particularly low for 1971, especially as regards pig-iron and steel where the rate is barely 75% in each case. The decline from year to year (about 10 points in each case) is the heaviest ever recorded since the beginning of the surveys. The rates themselves are also the lowest ever recorded. Rates of a similar order have otherwise only ever been recorded once and that in 1966.

TABLE 4

## Community Ratios of Actual Production to Production Potential

Product	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
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
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
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
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	76.2
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 <sub>1</sub>	88.8 <sub>1</sub>	86.1 <sub>1</sub>	76.3

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

## II—THE COALMINING INDUSTRY

Capital expenditure in the coalmining industry, having fallen to its lowest level in 1969 and 1970 (around 106 and 110m units of account), recovered in 1971, rising to some 143m. This figure is nevertheless well below that typical of the early sixties, when annual expenditure, though already in decline, was between 250 and 300m, discounting expenditure on pithead power stations. The latter have been excluded from the survey since the structural changes of 1970 in the German collieries.

The increase from 1970 to 1971 was mainly attributable to the Ruhr collieries, which together account for about 60% of coalmining investment in the Community. These collieries, unlike those of the smaller coalfields, even expect an appreciable increase in capital expenditure in 1972 and 1973. However, in 1971 as already in 1970, expenditure remained about one third below that declared at the beginning of the year.

TABLE 5  
Capital Expenditure in the Coalmining Industry <sup>1</sup> 1954-73

'000 000 units of account EUR

Sector	Actual expenditure													Estimated expenditure (Categories A+B+C)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
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	93.7	132.4	150.0
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	36.0	52.4	61.2
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	6.0	2.6
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	1.0	1.5	1.8
<b>Total <sup>1</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>135.4</b>	<b>192.3</b>	<b>215.6</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	7.9	8.6	7.1
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> Excluding capital expenditure on pithead power stations and other generating plants.

<sup>2</sup> Less the French nationalized gas industry (Gaz de France) from 1957.

FIGURE 4

Capital Expenditure in the Coalmining Industry



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

**(a) Pits**

Capital expenditure on pits, after a continuous decline from 1961 to 1970 to a level of some 85m, recovered in 1971 slightly to 94m. This figure is, however, well below the level of some 200m typical of the early sixties.

Although, as in the previous survey the enterprises, particularly in the Ruhr, declare a slight increase in their capital expenditure for forthcoming years, actual expenditure in this coalfield in 1971 and 1970 remained well below the estimates for both pits and other sectors of operation.

Capital spending per ton extracted at the pits, remained on average at the same approximate level of 1.05 units of account between 1954 and 1959, declining to 0.50 in 1969 and 0.52 in 1970, recovering slightly to 0.59 in 1971.

TABLE 6

## Capital Expenditure on Pits 1954-71

'000 000 units of account EUR

Type of installation	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
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	9.8
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	38.3
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	4.0
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	52.1
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	11.4
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	19.5
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	10.7
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	41.6
<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>93.7</b>

The accelerated decline in coal extraction potential<sup>1</sup> which, according to the 1971 survey, was expected to become more marked during the 1970-74 period, is to a considerable extent confirmed by this year's survey. Between 1970 and 1971 production potential reduced from 174.5 to 165.9m tons. Between now and 1975 a new reduction of 27.5m tons is anticipated.

For example, for 1974, the last year covered by the previous survey, potential, estimated last year at some 161m tons, is now only expected to be around 150m.

An extrapolation of this trend might suggest that coal extraction potential in 1975 will prove to be lower than the present estimates of the producers.

<sup>1</sup> See Annex I, IIa.

The following Table shows the speeding up of the rate of decline in extraction potential forecast in the last few surveys.

TABLE 7  
Movement of Extraction Potential Declared

'000 000 metric tons net extraction

Survey dates	Extraction potential declared						
	1969	1970	1971	1972	1973	1974	1975
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 ....	...	...	...	165.9	159.7	150.4	147.0

Between now and 1975, extraction will have been completely abandoned in the Netherlands and extraction potential will suffer a marked decline in the Ruhr and in most of the French coalfields (Nord/Pas-de-Calais and Centre-Midi). The cut-back will be less marked in Belgium where extraction potential has in any case diminished by 50% over the past ten years. The Aachen, Saar and Lorraine collieries for their part expect to maintain their extraction potential at a level fairly close to that of 1971.

TABLE 8  
Movement of Extraction Potential by Coalfields <sup>1</sup>

'000 000 metric tons

Extraction		Extraction potential					
		actual		estimated			
1952	1971	1967	1971	1972	1973	1974	1975
237.4	158.6	210.5	174.5	165.9	159.7	150.4	147.0

<sup>1</sup> As in previous years, mines producing only small tonnages are excluded - Their combined production in 1971 amounted to about 0.3 m tons.

### (b) Coal-briquetting plants

Capital spending on coal-briquetting plants is in constant decline.

Annual briquetting potential is expected to continue its decline, reducing from 13 to 9m tons between 1971 and 1975, the utilization rate of which fell markedly in 1971.

### (c) Plants producing BKB

Capital spending on brown-coal briquette (BKB) plants show an increase over the figures of the previous survey. This increase, which might be partly due to rationalization efforts, is in contrast with the accelerated decline in production potential from 9.0 to 5.1m tons for the 1971-75 period which itself is partly to be explained by trends in deliveries to the household market.

### III—COKING PLANTS

Developments in the mine-owned and independent coking plants are increasingly linked with those in the steel industry. Under these circumstances it was felt to be more appropriate this year, for the sake of uniformity, to present the data referring to the various kinds of coking plant together in a separate section, and, in dealing with the estimates for capital expenditure and production potential, only to consider investment projects already under implementation or approved, as is the practice with regard to the steel industry.

#### (a) Capital expenditure

Capital spending on mine-owned **coking plants** declined gradually from an average of 57m units of account per annum in 1954-59 to 10m in 1969. Since then there has been a recovery. Expenditure rose to some 19m in 1970 and 36m in 1971. Even so, these figures do not account for much more than around 20% of the capital expenditure of the Community coking industry. As in the previous year, capital expenditure in the Ruhr—some 30 million—although well-below estimates, accounts for some 85% of the total. The estimates for 1972-73 reflect the intention of the Ruhr collieries to intensify their investment activity in the coking sector: the figures estimated for capital expenditure here are 43 and 30m respectively, thus exceeding the highest figures recorded since 1954. These figures do not include projects only planned (cf. Table 9). However, no investment is envisaged for a number of obsolescent coking plants which seem likely to close down in the near future. Capital spending in the other regions of the Community is expected to remain at the very low levels recorded in recent years.

Compared with the average recorded for 1954-59 (11m units of account) capital expenditure at coking plants classed as **independent coking plants** remains at an almost negligible level. In 1971 the figure was less than 5m and the estimates only forecast figures of the same order.

The increase in capital spending at the **steelworks coking plants**, which fell to less than 15m during the years 1966-68, has been appreciable since 1969. Starting with that year, capital spending, at 31m, had risen close to the 1963 peak. Since then the rapidly rising trend has continued, reaching 62m in 1970 and 131m in 1971. The increase may continue in 1972 (153m), though perhaps not in 1973. The bulk of these investments concern coastal works. As far as actual expenditure for 1971 and estimates for 1972 are concerned, the figures for the Italian seaboard (40 and 53m respectively), the Netherlands (20 and 28m), Belgium (32 and 17m respectively), the North of France (17 and 14m), the South of France (29m in 1972) are particularly high.

In the coking industry as a whole, the share of expenditure allotted to the construction of new plant increased considerably from 1967 onwards. In 1971, as in the two previous years, it accounted

TABLE 9

## Capital Expenditure at Mine-Owned, Independent and Steelworks Coking Plants 1954-73

'000 000 units of account EUR

Coking plants	Actual expenditure													Forecast expenditure			
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972		1973	
															Categ. A+B	Categ. A+B+C	Categ. A+B
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	36.0	47.5	52.4	35.0	61.2
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	5.5	6.0	1.5	2.6
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	131.4	153.0	153.1	121.7	139.4
<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>172.1</b>	<b>206.0</b>	<b>211.5</b>	<b>158.2</b>	<b>203.2</b>

for most of the total. Nevertheless, spending on new plant arises mainly at the steelworks coking plants, whereas in the mine-owned and independent coking plant it is largely a question of repairs and replacements.

TABLE 10

## Breakdown of Capital Spending at Mine-Owned, Independent and Steelworks Coking Plants 1954-71

'000 000 units of account EUR

Sector	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
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	126.4
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)	(115.4)
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)	(11.0)
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	0.1
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	17.0
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	28.6
<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>172.1</b>

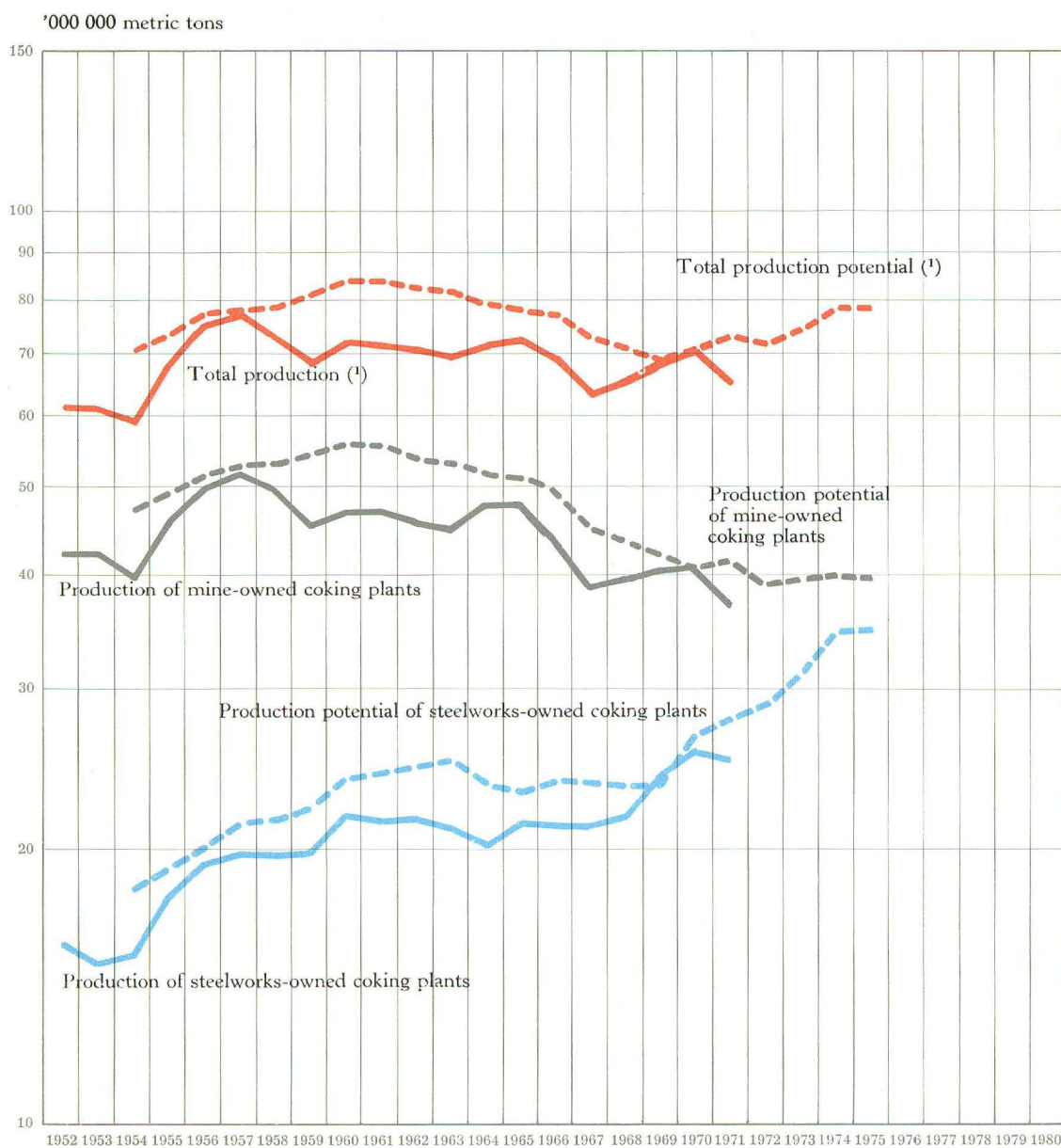
## (b) Production potential

Annual production potential at the mine-owned coking plants, which has been in constant decline since the Sixties, is expected to fall back from 41.4m tons in 1971 to 39.8m in 1975. It would seem that production potential can be maintained in the Ruhr. The decline would centre on the Saar, Nord/Pas-de-Calais, Lorraine and Centre-Midi coalfields.



FIGURE 5

Production and Production Potential of Coking Plants



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

A slight drop is also expected in production potential at the **independent coking plants** over the next four years: 3.7m tons in 1975 as compared with 4m today.

Production potential at **steelworks coking plants**, which remained below 25m tons over the 1967-68 period, is expected to increase by 7m tons altogether over the next four years. This increase would bring the figure from some 28m in 1971 to 35m tons in 1975. It would then account for 44% as compared with 38% of Community production potential. Nearly all of the capacity under construction is in the coastal regions.

Altogether, Community cokemaking capacity could increase during the 1971-75 period from 73.3 to 78.5m tons per year. The mean cumulative annual growth rate (+1.7%) would therefore be substantially below the rate declared for pig-iron (5.6%). Any estimate of the possible future balance between supply and demand of coke up to 1975 should not confine itself to a comparison of these rates but also take into account the anticipated reduction in the coke rate and the market trend for coke not intended for metallurgical use. Moreover, in order to appreciate the production potential figures for the period ending in 1975, it should be noted that also for social reasons a number of enterprises have based their forecasts on the continued operation of a number of plants which are reaching the end of their service lives and for which they will not authorize any new capital spending. Their closure might be dictated by technical necessity or by the emergence of modern capacity. Moreover, according to indications noted subsequent to the date of the survey, the execution of certain projects declared may be deferred.

TABLE 11

## Movement of Production Potential in Coking Plants

'000 000 metric tons

Coking plants	Production		Production potential									
			Actual		Forecast							
	1952	1971			1967	1971	1972		1973		1974	
			A+B	A+B+C			A+B	A+B+C	A+B	A+B+C	A+B	A+B+C
Mine-owned coking plants ..	42.2	37.0	45.0	41.4	39.1	39.1	39.6	39.6	40.0	40.2	39.8	39.9
Independent coking plants ..	3.2	3.3	3.9	4.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Steelworks coking plants ..	15.8	25.2	23.7	27.9	28.8	28.8	31.3	32.1	34.8	35.1	35.0	35.6
<b>Total</b>	<b>61.2</b>	<b>65.5</b>	<b>72.6</b>	<b>73.3</b>	<b>71.6</b>	<b>71.6</b>	<b>74.6</b>	<b>75.4</b>	<b>78.5</b>	<b>79.0</b>	<b>78.5</b>	<b>79.2</b>

The table below shows the assessment of the enterprises over the past few years of continuing trends in their coke production potential. The reductions highlighted by this survey in relation to the previous survey are in excess of 4 million tons/year for the periods covering both 1972 and 1973. This difference would seem remarkable in view of the considerable amount of funds involved in capital projects currently in progress.

TABLE 12  
Trends in Estimates of Coke Production Potential

'000 000 metric tons

Survey dates	Production potential						
	1969	1970	1971	1972	1973	1974	1975
1969 .....	69.2	69.6	70.5	68.8	...	...	...
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

## IV—THE IRON-ORE MINES

Capital spending in the Community iron-ore industry, having fallen steadily between 1962 and 1967, maintained a level at around 20m units of account per year from 1968 to 1970, rising again to close on 30m in 1971. According to producers' forecasts, expenditure will probably be maintained at this level in 1972. This will only involve sizeable amounts in Lorraine and, to a more limited extent, in Luxembourg.

TABLE 13  
Capital Expenditure in the Iron-Ore Industry 1954-73

'000 000 units of account EUR

Type of installation	Actual expenditure														Estimated expenditure (Categories A+B+C)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	
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	16.8	23.8	13.4	
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	5.9	2.0	1.2	
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	6.9	4.3	3.2	
<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>29.6</b>	<b>30.1</b>	<b>17.8</b>	

For 1972 and 1973, the amounts forecast include not only 25.9 and 7.1m units of account for projects already in progress and approved but also 4.2 and 10.7m for projects merely planned (Category C). The figures given in previous surveys also included expenditure on Category C projects.

Community potential reached its peak in 1962 at 105.5m tons crude ore. Over the next nine years, as a result of competition from overseas ores, it gradually fell to 75.8m tons: in Lorraine from 67.7 to 58.2m and in Luxembourg from 8.3 to 5.8m tons. The decline was particularly marked in the other orefields: Lower Saxony (12.5 to 6.2m) and the various minor orefields taken as a whole (17.0 to 5.6m). The enterprises, having reduced their extraction potential from 80.3 to 75.8m tons

in 1971, hope to maintain it at this level for the next few years at least. Over the period under study the Lorraine mines do not seem likely to increase significantly their share in the Community total which should remain at around 75%.

TABLE 14  
Movement of Crude-Ore Extraction Potential

*'000 000 metric tons*

Actual extraction		Extraction potential					
1952	1971	1967	1971	1972	1973	1974	1975
65.3	68.4	84.3	75.8	73.2	74.5	75.6	75.5

The following Table will show 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 the enterprises' returns. The reductions reflected in the present survey compared with the previous survey, are in excess of 7m tons in the estimates for 1972.

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
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

## V—THE IRON AND STEEL INDUSTRY

The spectacular upsurge during the 1960-63 period (during which capital expenditure virtually doubled to reach a figure close on 1 500m units of account) was followed by a downward trend which continued until 1967. This trend then reversed and expenditure in 1971 (2 182m), though below the estimates made at the beginning of the year, was three times that for 1967, and exceeded by some 30% the peak recorded in 1970. Current forecasts for 1972 expect a new high of 2 600m and, for 1973, indicate a figure (2 000m) which suggests that this high level will be sustained.

At Community level capital expenditure, which had already risen to an all-time record for practically every stage in production in 1970, increased still further in 1971. The rise was particularly marked in pig-iron, for which capital spending increased from 363 to 561m.

TABLE 16  
Capital Expenditure in the Iron and Steel Industry 1954-73

\* 000 000 units of account EUR

Type of installation	Actual expenditure														Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	
<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	560.8	647.2	477.7	
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	244.5	322.7	255.9	
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	1 011.2	1 101.2	791.9	
<i>General services .....</i>	<i>103.8</i>	<i>157.3</i>	<i>209.1</i>	<i>247.1</i>	<i>319.7</i>	<i>300.0</i>	<i>221.7</i>	<i>188.5</i>	<i>138.1</i>	<i>138.6</i>	<i>158.4</i>	<i>235.5</i>	<i>365.7</i>	<i>530.0</i>	<i>389.8</i>	
<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>2 182.2</b>	<b>2 601.1</b>	<b>1 915.3</b>	

In 1971, the shares of the four plant categories—ironmaking, steelmaking, rolling and general services—in total expenditure were 26%, 11%, 46% and 17% respectively, as compared with 21%, 14%, 51%, and 14% in 1970.

According to the annexed Tables, in particular Table XV, the increase in capital spending from 1970 to 1971 is particularly marked in France and Italy, while Belgium shows a decline.

The present survey nevertheless reflects the slackening off in the business cycle noted since 1970. The acceleration in the growth of production potential, which emerged from the two previous surveys, was interrupted, as illustrated by Table 18.

Although there was an increase over capital spending in 1970, sums spent in 1971 (2 182m) remained 13% below the estimates.

This applies in particular to steelmaking plant and still more to rolling mills. Table 17 below shows the discrepancies between actual amounts spent and amounts estimated for the different stages in production.

TABLE 17  
Estimated Capital Expenditure in 1971 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 .....	565.1	560.8	99.1
Crude steel .....	274.0	244.6	89.3
Rolling mills .....	1 214.6	1 011.2	83.3
<b>Total iron and steel industry .....</b>	<b>2 500.2</b>	<b>2 182.2</b>	<b>87.3</b>

The agreement rates vary to an equally appreciable extent from one region to another. In some cases, actual amounts spent are in excess of estimates (North Germany, Rhineland-Westphalia, inland parts of Italy, Luxembourg, Netherlands). In other regions, there is little discrepancy between the estimates and amounts actually spent (South Germany, Saar, Belgium, Northern France, France: other regions). On the other hand, actual amounts spent were considerably below the estimates in the East and especially the South of France<sup>1</sup> and on the Italian seaboard.

Up to 1964, sinter potential had been increasing at a much greater rate than pig iron potential, which made it possible to double the amount of Community sinter charged in blast furnaces in less than 10 years. Since then the two rates have followed a largely parallel trend. This movement may be expected to continue over the next few years and make it possible to charge sinter at a rate of about 1 160 kg per ton of pig iron produced, ignoring imported sinter and pellets.

In the course of the next four years, processes for the **direct reduction** of iron-ore will still not yet play an important part in the Community. For the first time, in North Germany they have reached the industrial stage for the production of sponge iron for direct charging into electric furnaces.

<sup>1</sup> Up to 1971 the figures for the South of France were included under the heading "France : other regions".

FIGURE 6

Capital Expenditure in the Iron and Steel Industry

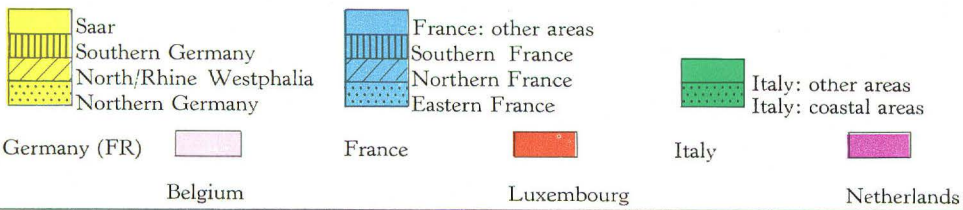
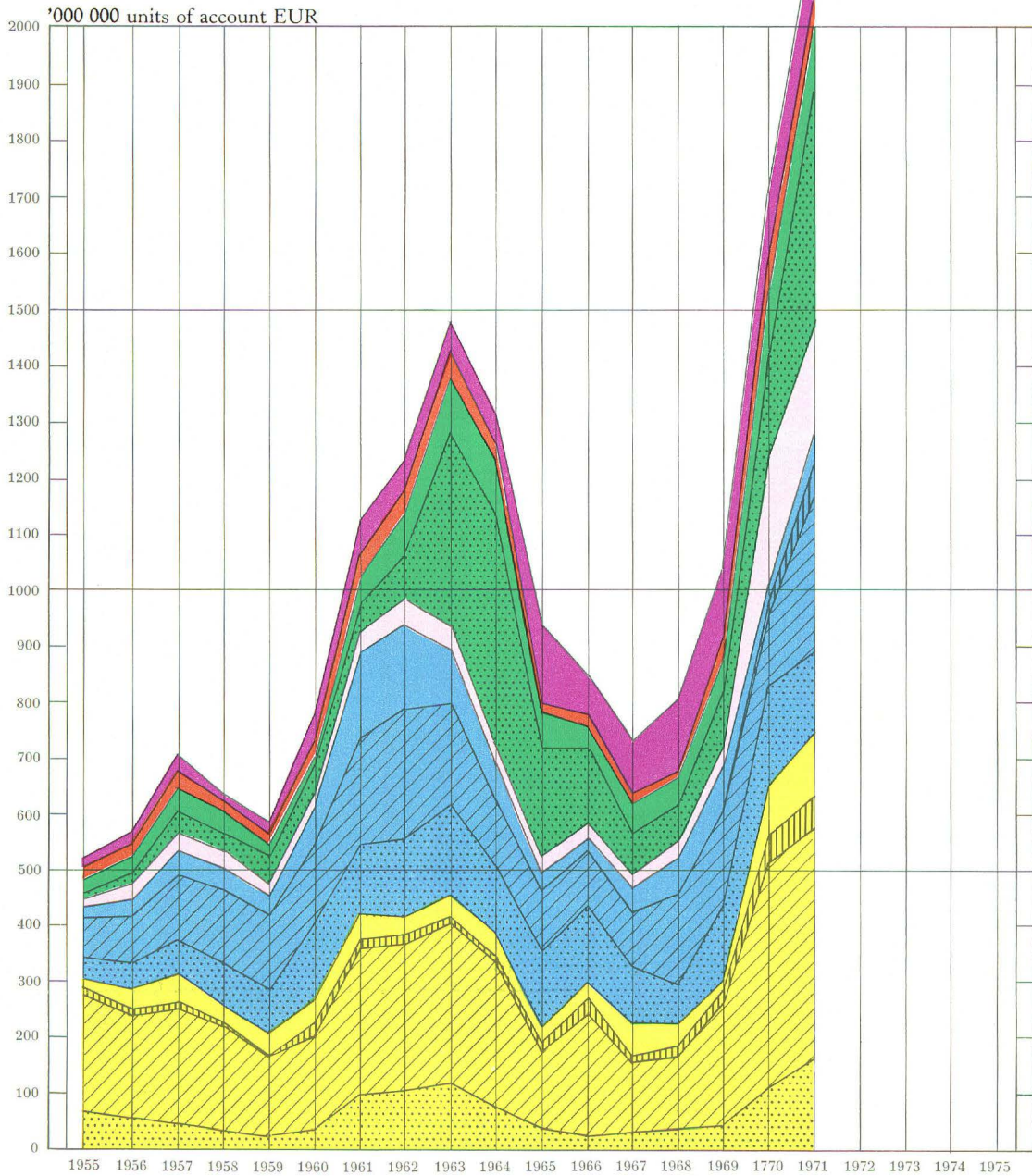
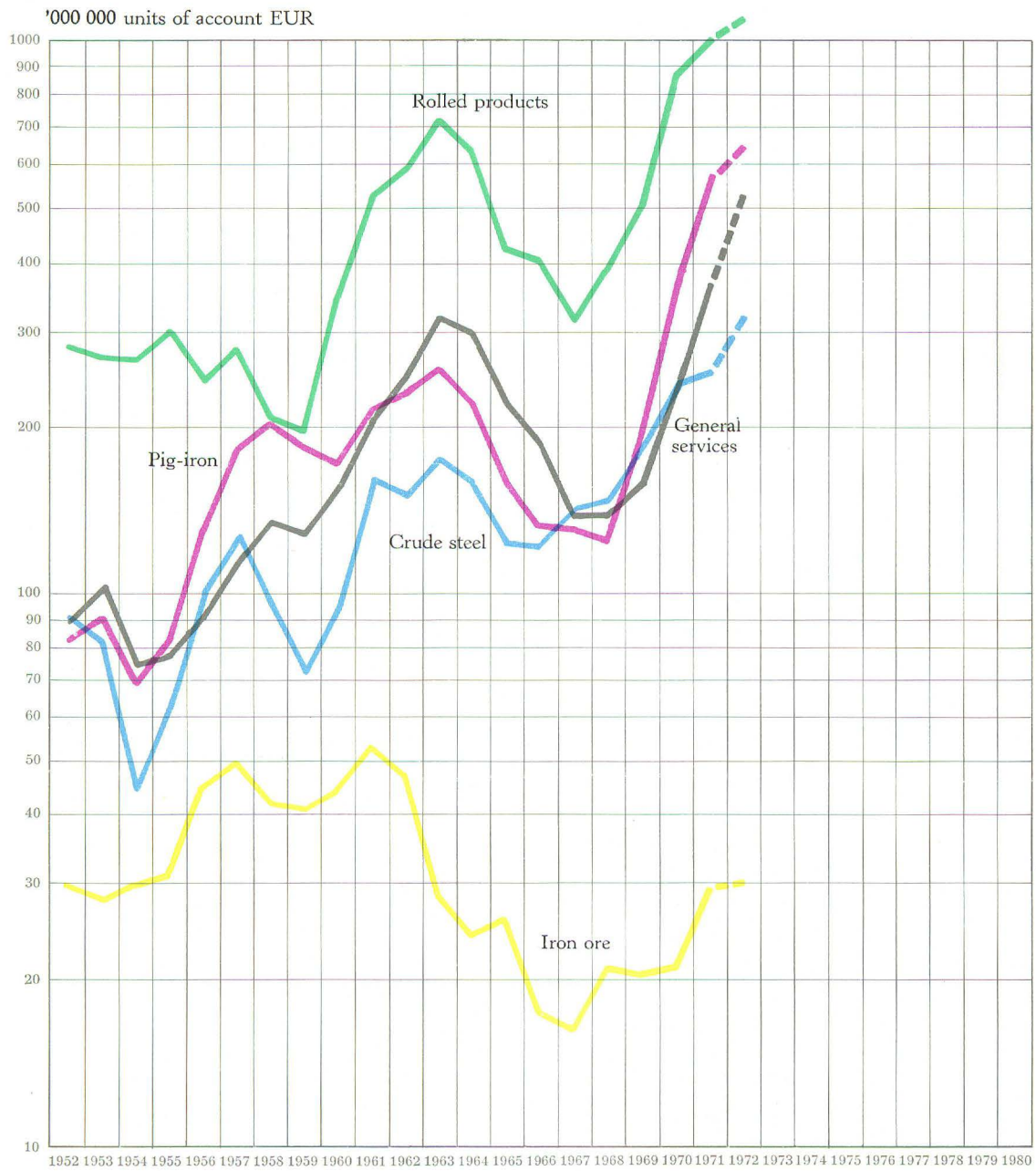




FIGURE 7

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



**Pig-iron** production potential, which increased by 5.5% in 1971, is expected to expand at a rate of 5.6% per year, increasing from 99.3 to 123.7m metric tons between 1971 and 1975.

TABLE 18

## Movement of Forecast Production Potential

'000 000 metric tons

	Date of survey	1969	1970	1971	1972	1973	1974	1975
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	...	...	99.3	102.9	113.5	120.4	123.7
Crude steel .....	1969	119.8	125.8	131.0	132.2	...	...	...
	1970	120.9	128.4	137.4	144.3	146.8	...	...
	1971	...	126.8	137.0	145.1	151.8	160.6	...
	1972	...	...	135.5	141.6	148.2	155.8	163.4
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	102.5	109.7	114.0	117.0	...
	1972	...	...	101.7	109.5	114.6	118.1	119.5

The following paragraphs analyse steel investments arranged according to major categories and their effect on the production potential of each sector.

**(a) Pig-iron production**

Expenditure on investments in **steelworks coking plants, burden preparation and blast furnaces** attained a level of 561m units of account in 1971, which was over 50% above the previous record of some 362m in 1970. The increase is expected to continue in 1972, with estimated expenditure totalling more than 3 times the average of the Sixties.

The increase in capital expenditure in steelworks coking plants, burden preparation and blast furnaces is common to practically all the countries of the Community. It is particularly high in Italy where expenditure more than doubled from 1970 to 1971.

TABLE 19  
Capital Expenditure on Pig-iron Production Plant 1954-73

'000 000 units of account EUR

Type of installation	Actual expenditure														Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	
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	131.4	153.0	121.7	
Burden preparation ....	42.7	73.7	93.3	110.9	123.2	85.0	52.0	45.0	43.8	44.3	68.3	141.6	152.8	186.0	128.1	
Blast furnaces .....	77.7	87.0	107.2	97.3	101.4	108.0	91.2	77.1	75.3	66.3	89.3	159.2	276.6	308.2	227.9	
<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>560.8</b>	<b>647.2</b>	<b>477.7</b>	

TABLE 20  
Movement of Pig-iron Production Potential

'000 000 metric tons

Product	Actual production		Production potential					
	1952	1971	1967	1971	1972	1973	1974	1975
Coke (steelworks-owned plant)	15.8	25.2	23.7	27.9	28.8	31.3	34.8	35.0
Sinter .....	15.6	94.7	90.0	114.3	127.2	136.2	142.0	143.5
Pig-iron .....	34.7	75.7	82.3	99.3	102.9	113.5	120.4	123.7

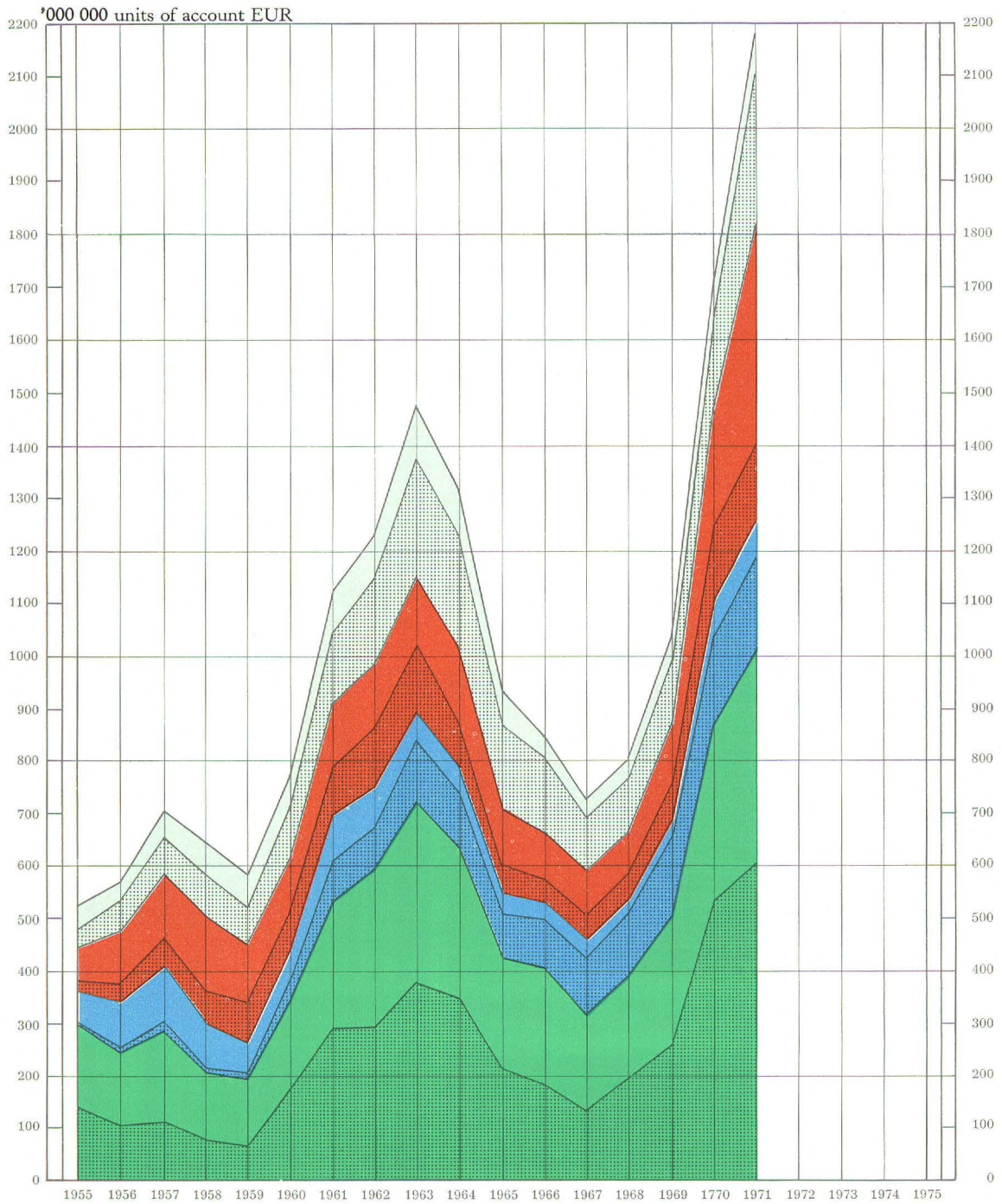
### (b) Steel production

The amount of expenditure devoted to investments in steelmaking plant in 1971 (244m units of account) was approximately equal to that recorded in 1970, which itself had exceeded the peak noted in 1969. It did, however, remain below the amount forecast in the previous survey. The upturn expected according to producers' declarations for 1972—from 244m to 323m—suggests that the enterprises did not abandon their projects but merely postponed their execution.

Expenditure on **basic Bessemer** steelmaking plant—6 million—is now of little significance. This survey for the first time lists expenditure devoted to the conversion of basic Bessemer plant to new processes of blowing oxygen through the converter bottom (OBM etc.), hitherto entered as capital expenditure on basic Bessemer plant, under a separate heading. This expenditure represented some 3 million in 1971.

FIGURE 8

Breakdown of Capital Expenditure in the Iron and Steel Industry



- Rolling mills (excepted flat-product mills)
- Flat-product mills
- Steelworks (excepted LD, Kaldo and other)
- LD, Kaldo and other steelworks
- Steelworks-owned coking plants and blast-furnaces total
- Burden preparation
- Power-generating plants and distribution networks
- General services (excepted power-generating plants and distribution networks)

Capital expenditure on **open hearth** steelmaking capacity, at more or less the same level as that for basic Bessemer capacity, continues the decline which set in 1962. Expenditure here is no more than about 15% of the levels recorded towards the beginning of the Sixties. The sum of both these expenditure categories, moreover, hardly accounts for more than 6% of the total capital expenditure on steelmaking capacity.

Expenditure on **electric steelmaking**, after uninterrupted growth for several years, had more than doubled from 1969 to 1970. At more than 50m in 1971, this expenditure remains approximately at its 1970 level. Producers' declarations announce new increases for 1972 and even for 1973. The total share of this expenditure and the total for steelmaking capacity, which was still 12% in 1969, was around 21% in both 1971 and 1970.

The main areas of concentration are North Germany, Rhineland-Westphalia and the inland areas of Italy. Fairly high amounts of expenditure are also expected to be allocated in other regions of the Community, especially Belgium and parts of France.

The rapid growth in **pure oxygen steelmaking** capacity (LD, Kaldo and similar)<sup>1</sup> continues, even though expenditure for 1971 (179m) remained below the estimates returned the previous year (211m). In any case it continued to account for around three quarters of capital expenditure on steelmaking plant in 1971.

The largest sums involved a certain number of coastal areas (Northern France, Italy), but also certain inland areas (Rhineland-Westphalia, Lorraine). Even higher amounts are forecast for 1971-72 in the same areas. Major projects are also declared for the southern French seaboard starting in 1972 and for Westphalia starting in 1973.

TABLE 21

## Capital Expenditure on Steelmaking Plant 1954-73

'000 000 units of account EUR

Production process	Actual expenditure														Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	
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	6.3	2.1	
OBM, etc. ....	.	.	.	.	.	.	.	.	.	.	.	5.7	3.1	5.2	3.3	
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	5.7	3.9	2.5	
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	50.6	64.5	64.6	
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	178.8	242.8	183.4	
<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>244.5</b>	<b>322.7</b>	<b>255.9</b>	

<sup>1</sup> Expenditure on the new bottom-blown oxygen processes (OBM, etc.), listed until 1971 under basic Bessemer steelmaking capacity, appear this year under a separate heading. This heading did, however, already exist for the corresponding production potential figures.

Owing in particular to heavy investment in basic oxygen steelmaking plant (LD, Kaldo and similar processes), Community crude steel production potential should rise from 135.5m tons in 1971 to 163.4m tons in 1975, representing an average cumulative annual growth rate of 4.7%.

TABLE 22  
Movement of Estimated Crude Steel Production Potential

\*000 000 metric ton

Survey dates	Production potential estimated						
	1969	1970	1971	1972	1973	1974	1975
1969 ....	119.8	125.8	131.0	132.2	...	...	...
1970 ....	120.9	128.4	137.4	144.3	146.8	...	...
1971 ....	...	126.8	137.0	145.1	151.8	160.6	...
1972 ....	...	...	135.5	141.6	148.2	155.8	163.4

Moreover, as may be seen from Figure 10, production potential actually recorded has generally exceeded that forecast 4 years ahead by the enterprises at each capital expenditure survey date. Only the figures recorded in 1964 have so far proved an exception to this rule.

Even taking the estimates returned by the enterprises at face value, growth in annual crude steelmaking potential, which was already 8.7m from 1970 to 1971, would work out at 27.9m tons over the next four years, as compared with 33.8m tons declared in the previous survey for the four-year period 1970-74. Annual basic oxygen steelmaking potential (LD, Kaldo and similar processes) alone which increased from 56.9 to 66.8m tons from 1970 to 1971, is expected to expand by 36.6m tons—substantially the same figure as that forecast in the previous survey for the 1970-74 period. Growth in potential by 1975 is expected to be 103.4m.

**Electric steelmaking potential**—17.6m tons in 1971, 23.0m tons in 1975—would thus increase by some 5.4m tons. This figure is in excess of that anticipated in the previous survey, i.e. 4m tons for the 1970-74 period.

On the other hand, **basic Bessemer steelmaking potential**, which has already fallen back from 25.1m tons in 1970 to 22.9m tons in 1971, will suffer a further reduction of 10.2m between now and 1975. The figure for that year is expected to be no higher than 12.6m, half of which would be located in Lorraine, the rest being shared between the Saar, Belgium and Luxembourg. The reduction declared for this process was already very rapid according to the 1970 and 1971 surveys, i.e. 3.9m according to the 1970 survey for the 1969-73 period and 6.1m in the 1971 survey for the 1970-74 period. This year's survey expects the rate of decline to accelerate. This major cutback is the combined result of the conversion of certain steelmaking plants in the Saar, Southern Germany, Belgium, Lorraine and Luxembourg, to new bottom-blown oxygen processes (OBM, etc.) and, to an even greater extent, to the closure of a number of other plants.

**Open-hearth steelmaking potential** which had already reduced from 26.0m tons in 1970 to 24.6m tons in 1971 will suffer a further reduction of 7.6m tons between now and 1975.



FIGURE 9

Actual Production and Production Potential of the Iron and Steel Industry

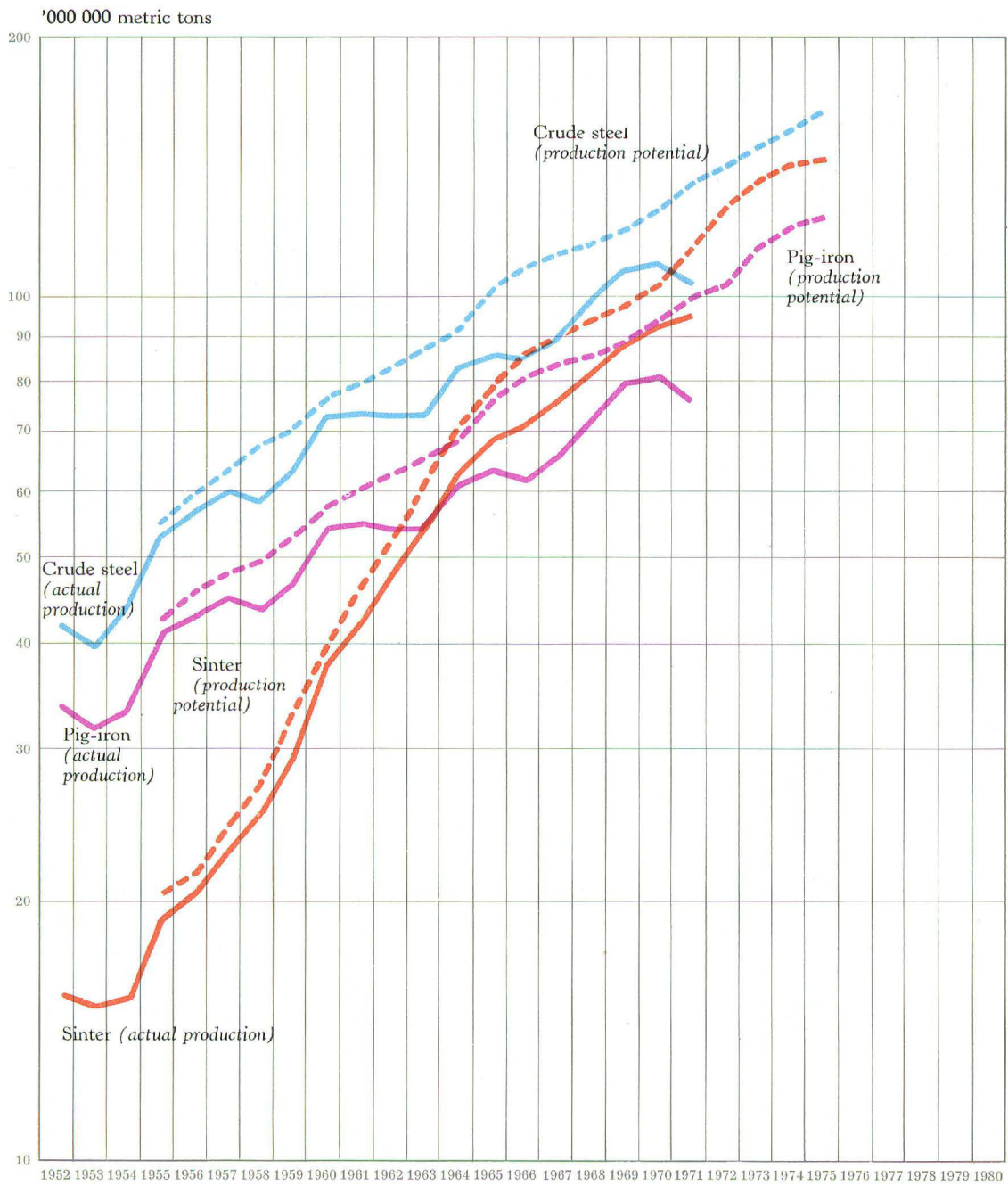
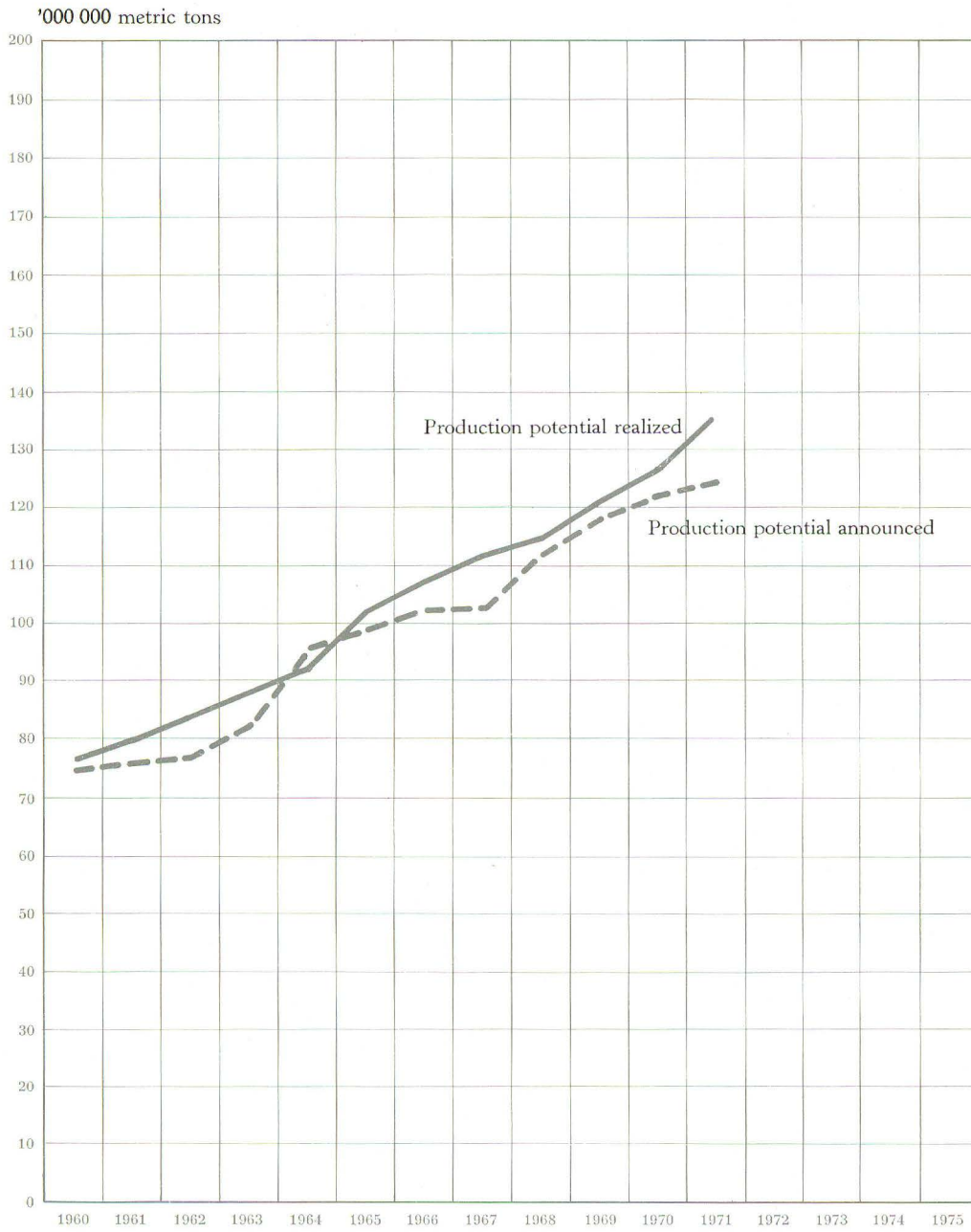


FIGURE 10

Community Crude Steel Production Potential Announced <sup>(1)</sup> and Realized



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



This new decline, forecast by this year's survey for the 1971-75 period, is substantially in excess of that declared for the 1970 survey covering the 1969-73 period (2.0m tons) and for the 1971 survey covering the 1970-74 period (4.2m tons). The open-hearth production potential figure estimated for 1975 (17m), which would probably represent a certain number of plants maintained as reserve capacity, is more than half accounted for by Germany—mainly Rhineland-Westphalia. The only other plants of any importance in service in that year will be those located in Eastern and Northern France, and on the Italian Seaboard.

TABLE 23

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

	'000 000 metric tons		
	basic Bessemer	open-hearth	Total
1968	3.2	1.7	4.9
1969	2.4	2.0	4.4
1960	5.4	1.4	6.8
1971	2.2	1.4	3.6
Total net (actual) decrease for the period 1967-71 . . . . .	13.2	6.5	19.7
Total net (forecast) decrease for the period 1971-75 . . .	10.3	7.6	17.9

Altogether, this year's estimates show, by comparison with those for the 1971 survey, a less rapid rate of expansion than that expected. The slowing down may be attributed rather to a faster rate of closure of steelmaking plant judged to be no longer competitive than to a less rapid rate of growth in potential for oxygen or electric furnace steel.

For the Community as a whole, LD, Kaldo, and similar plants are expected to account for more than 63% of overall capacity in 1975.

The forecasts of the enterprises show that most Community countries hope to produce in 1975 more than three quarters of their crude steel output by LD, Kaldo or similar processes (the percentages of actual production by these processes in 1971 are given in brackets): Netherlands 93% (80%), Italian seaboard 82% (70%), Northern France 79% (63%), North Germany 74% (77%), Ruhr 74% (65%), Belgium 71% (59%), Luxembourg 55% (36%). In the same year the percentages applying to the Lorraine and Saar steel industries should not exceed 36%. Moreover, steel production potential by bottom-blown oxygen processes (OBM, etc.) in 1975 will have attained 46% in Southern Germany, 15% in the Saar, 11% in Lorraine, 10% in Belgium, 9% in Luxembourg and 6% in Northern France. The regional differences alone should not, of course, be regarded as indicative of the greater or lesser competitiveness of the various steel-producing areas.

A cumulative annual average growth rate of 11.5% is expected for LD, Kaldo and similar steels in 1971-75 and a rate of decline of about 8.8% for open hearth and 13.8% for basic Bessemer, a against 4.3% and 6.7% respectively anticipated in 1971 for the period 1970-1974.

TABLE 24  
Movement of Estimated Crude Steel Production Potential According to Production Process

'000 000 metric ton

Production process	Date of survey	Production potential						
		1969	1970	1971	1972	1973	1974	1975
Basic Bessemer	1969	30.3	25.9	24.9	23.9	...	...	...
	1970	30.5	25.7	24.4	22.1	20.6	...	...
	1971	...	25.1	23.9	20.0	19.1	19.0	...
	1972	...	...	22.9	18.8	14.5	12.4	12.6
OBM and similar processes	1969	—	—	—	—	...	...	—
	1970	—	1.6	2.8	3.1	1.3	...	...
	1971	...	2.0	3.9	5.5	5.7	5.8	...
	1972	...	...	3.6	5.4	6.5	7.4	7.4
Open-hearth	1969	27.5	26.0	24.0	23.4	...	...	...
	1970	27.4	26.2	25.3	25.3	25.4	...	...
	1971	...	26.0	24.6	24.1	22.8	21.8	...
	1972	...	...	24.6	22.6	21.0	18.2	17.0
Electric-furnace	1969	15.7	16.1	16.3	16.3	...	..	...
	1970	16.1	17.0	17.6	18.1	18.2	...	...
	1971	...	16.8	17.7	18.8	19.4	20.7	...
	1972	...	...	17.6	18.7	19.8	21.5	23.0
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	66.9	76.7	84.8	93.3	...
	1972	...	...	66.8	76.1	86.4	96.3	103.4

TABLE 25  
Movement of Actual Crude Steel Production Potential According to Steelmaking Process

'000,000 metric ton

Production process	Production		Production potential					
	1952	1971	1967	1971	1972	1973	1974	1975
Basic Bessemer .....	23.0	18.4	36.1	22.9	18.8	14.5	12.4	12.6
OBM and similar processes	—	2.6	—	3.6	5.4	6.5	7.4	7.4
Open-hearth .....	15.2	17.3	31.1	24.6	22.6	21.0	18.2	17.0
Electric-furnace .....	3.3	14.4	14.0	17.6	18.7	19.8	21.5	23.0
LD, Kaldo, etc. ....	0.3	50.7	30.8	66.8	76.1	86.4	96.3	103.4
<b>Total</b>	<b>41.8</b>	<b>103.4</b>	<b>112.0</b>	<b>135.5</b>	<b>141.6</b>	<b>148.2</b>	<b>155.8</b>	<b>163.4</b>
Continuous casting .....	0.0	6.1	...	10.3	14.2	17.1	23.3	26.9

FIGURE 11

Actual Production and Production Potential of Crude Steel by Production Process

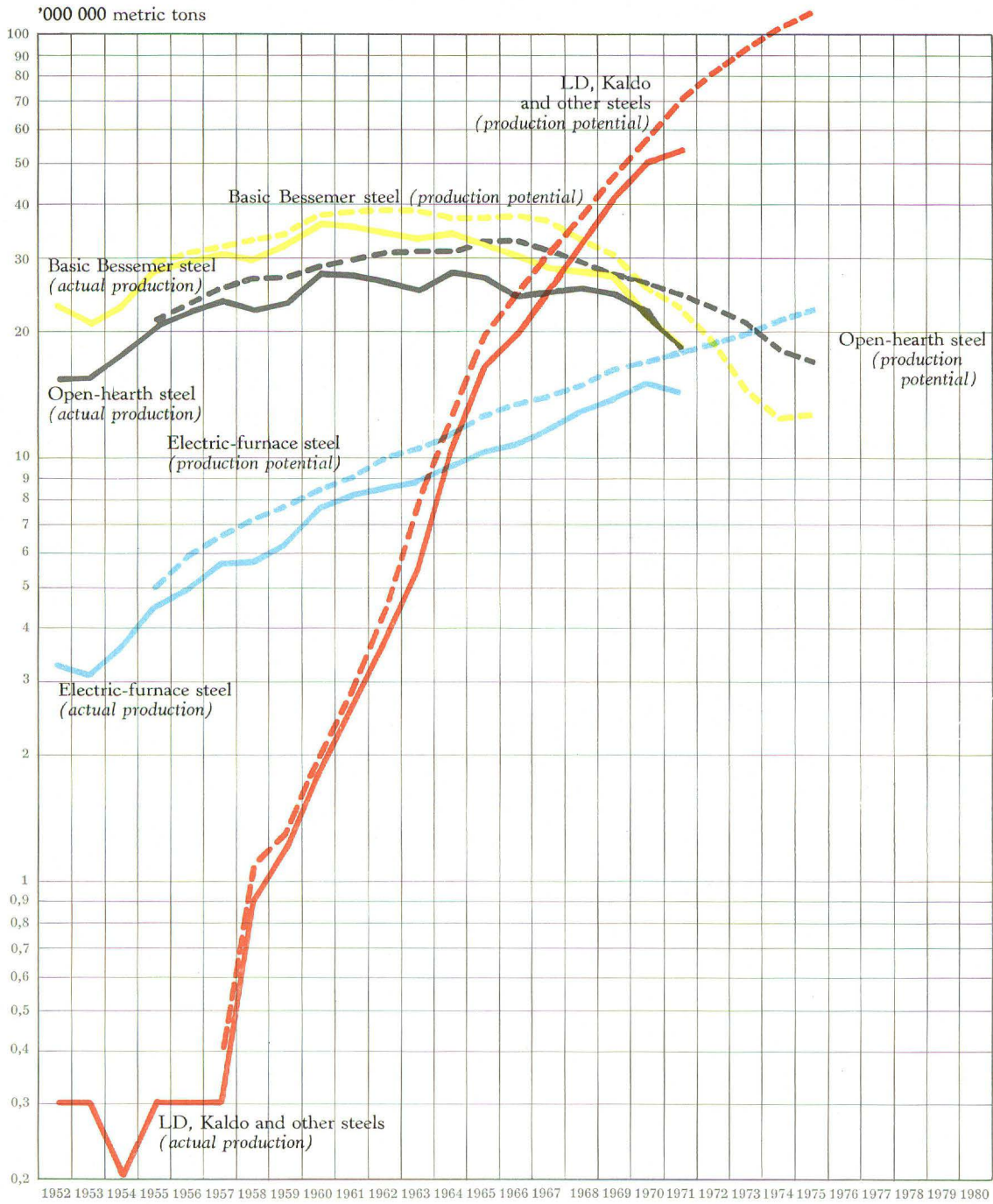


TABLE 26

Shares of the Different Steelmaking Processes in 1952, 1967, 1971 and 1975

%

Production process	Actual production		Production potential		
	1952	1971	1967	1971	1975 (Estimated share)
Basic Bessemer .....	55.0	17.8	32.2	16.9	7.7
OBM, etc. ....	—	2.5	—	2.6	4.5
Open-hearth .....	36.4	16.7	27.8	18.2	10.4
Electric-furnace .....	7.9	13.9	12.5	13.0	14.1
LD, Kaldo, etc. ....	0.7	49.1	27.5	49.3	63.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The cumulative average rate of growth of 4.7% for 1971-75 is above those forecast in the previous surveys for each of the four-year periods covered except for the last two (3.7% for 1965-69, 3.1% for 1966-70, 2.6% for 1967-71, 3.6% for 1968-72 as against 5.0% for 1969-73 and 6.1% for 1970-74).

TABLE 27

Average Annual Movement of the Different Steelmaking Processes

%

Production process	Average annual movement in actual production, 1952-71	Estimated average annual movement in completed or approved production potential	
		1967-71	1971-75
<b>Pig-iron (for comparison)</b>	+ 4.2	+ 4.5	+ 5.6
Basic Bessemer .....	— 1.2	—10.7	—13.8
OBM, etc. ....	...	...	+19.7
Open-hearth .....	+ 0.7	— 5.7	— 8.8
Electric-furnace .....	+ 8.4	+ 5.8	+ 6.8
LD, Kaldo, etc. ....	+48.8	+21.3	+11.5
<b>Total, crude steel</b>	<b>+ 4.9</b>	<b>+ 4.9</b>	<b>+ 4.7</b>

The new average rate of 4.7% conceals considerable regional differences: 13% for coastal works, compared with about 2% for works inland. Moreover, owing to the length of time required for the implementation of capital projects in the steel industry, this rate only partially takes into account a project already in progress for the construction of one new coastal steelworks, and the extension

of one other. The next survey will no doubt reflect more substantially the results of this expenditure spread over a long period. Thus we have confirmation of the observation already noted during the Sixties according to which the growth in production potential follows economic trends with a certain time lag.

TABLE 28  
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
Period covered	1959-63	1960-64	1961-65	1962-66	1963-67	1964-68	1965-69	1966-70	1967-71	1968-72	1969-73	1970-74	1971-75
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	5.6
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	4.7

### (c) Production of semis and rolled products

Capital expenditure approved for rolling mill plant (semis and finished products), which had already increased from 505m to 871m in 1969-70, increased still further in 1971 to 1 011m. The latter figure is substantially below the estimates made in the previous survey (1 215m). This difference is mainly attributable to the postponement of part of the major investment programmes earmarked for the Southern French and Italian seaboards, so that the enterprises hope in 1973 to increase their total capital spending to the record level of 1 101m.

As far as **primary mill** plant is concerned, capital spending in 1971 for blooming and slabbing mills (89m) remained at broadly the same level as that recorded in 1969 and 1970. As far as 1972 is concerned, capital spending on these projects is expected to rise to 138m, the highest level so far recorded. It is worth pointing out that part of the expenditure approved for **heavy and medium mills**—45 and 43m in 1971 and 1972 respectively—also concern primary mills, especially billet mills.

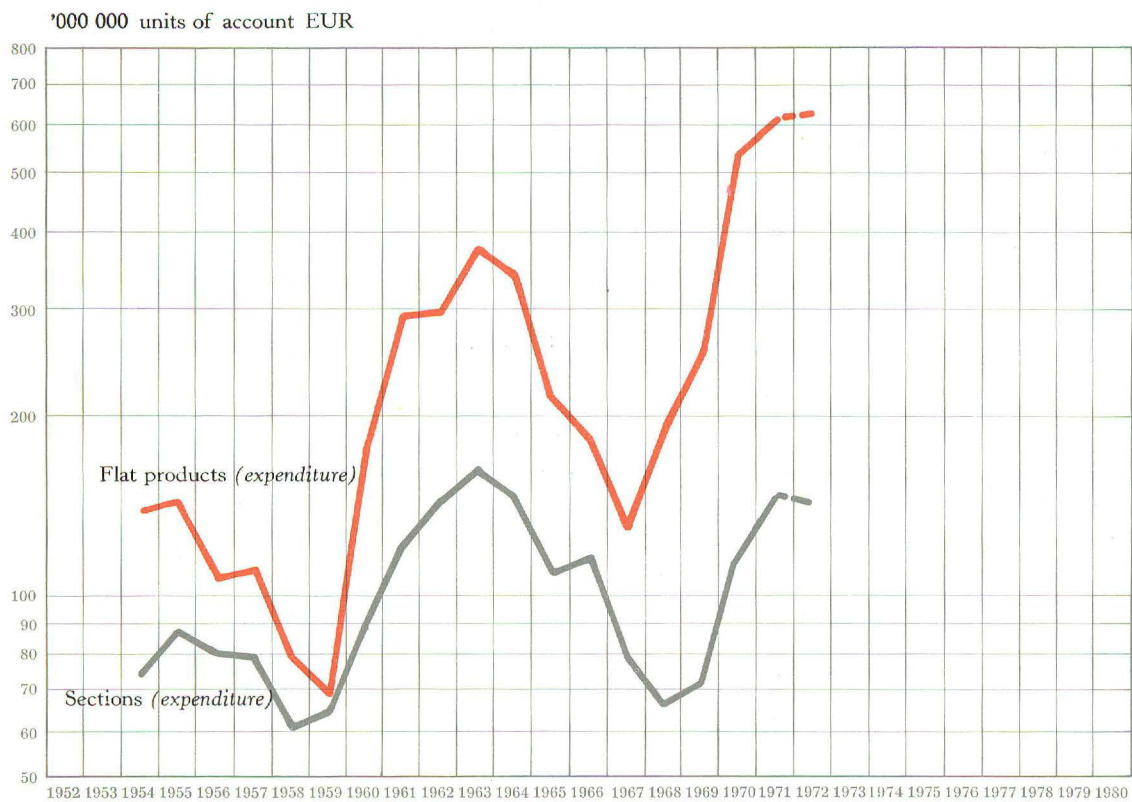
**Continuous casting** maintained a rapidly expanding trend. In 1971 capital spending (84m) was practically equal to the amount approved for blooming and slabbing mills. In 1972-73, however, the increase, although considerable, is expected to be less extensive than that for spending on conventional primary mills.

TABLE 29  
Movement of Continuous Casting Potential

	Production 1971	Production potential				
		1971	1972	1973	1974	1975
Continuous casting . . . . .	6.1	10.3	14.2	17.1	23.3	25.9

'000 000 metric tons

FIGURE 12  
 Sections and Flat Products  
 A—Capital expenditure



B—Actual production and production potential

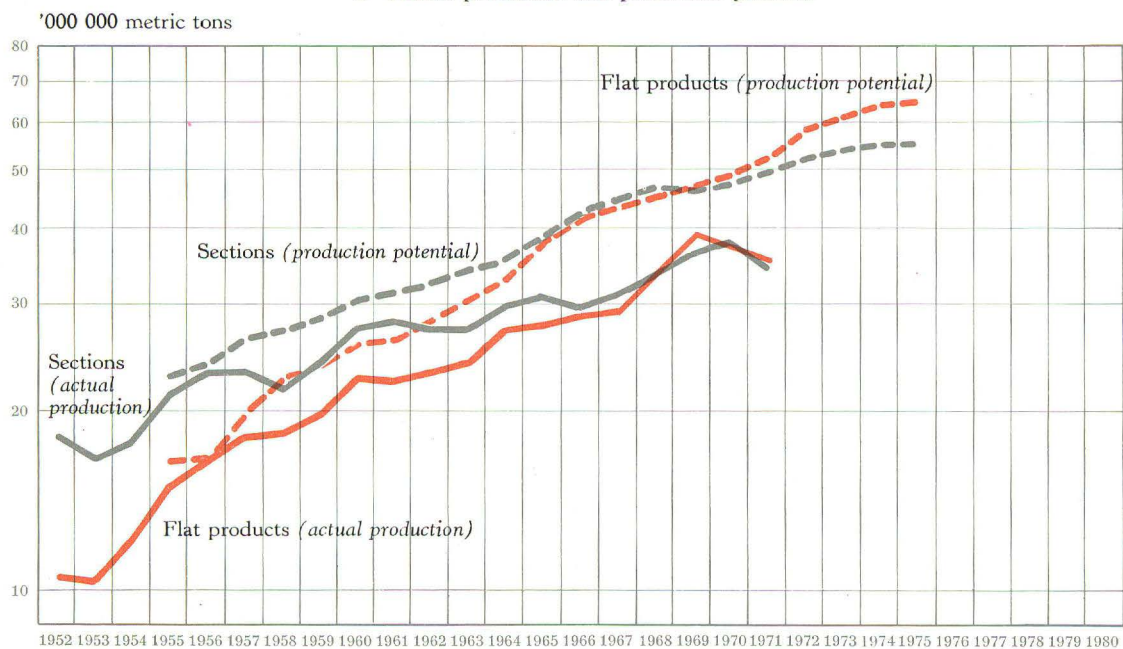




FIGURE 13

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

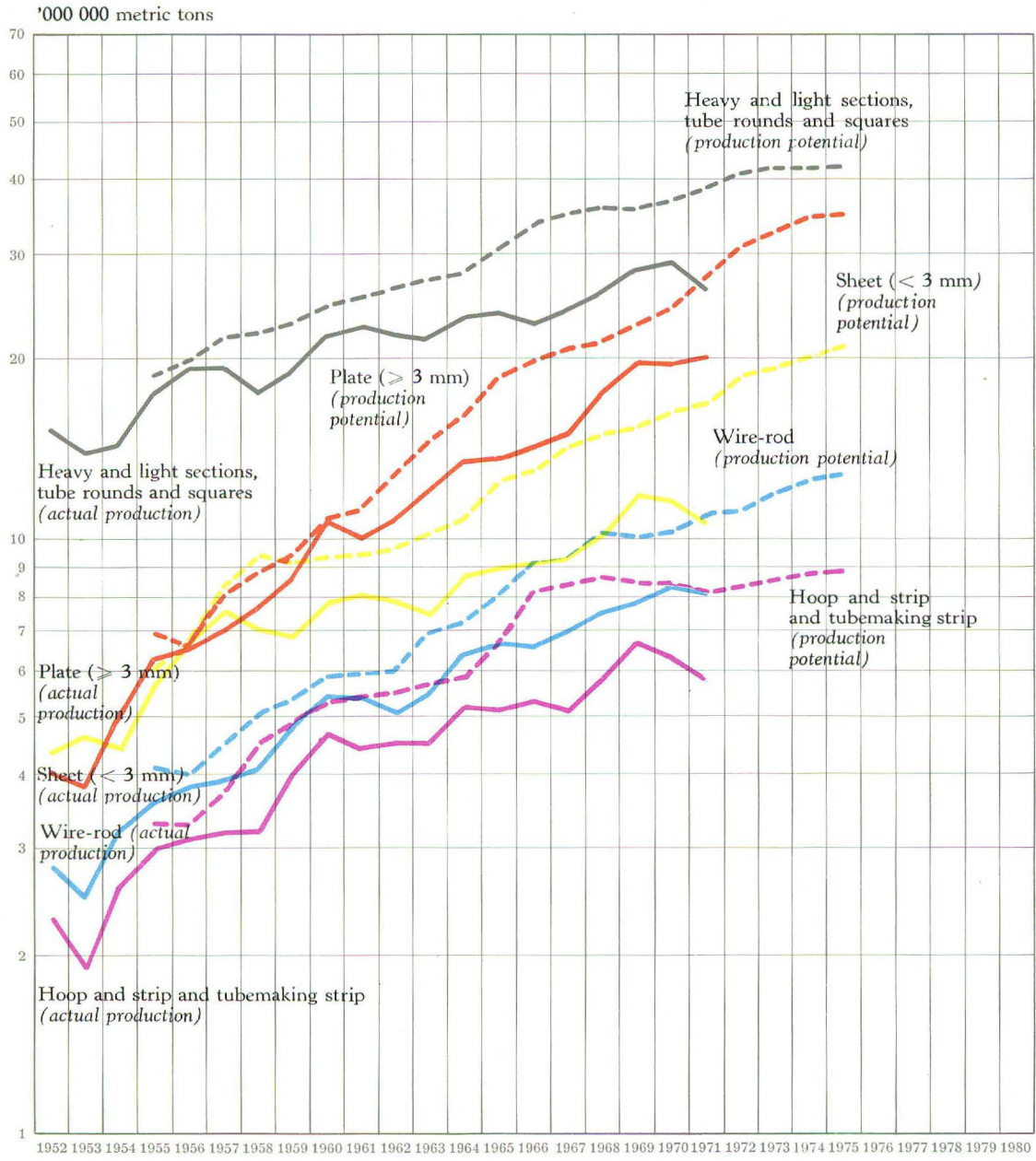


TABLE 30

## Capital Expenditure on Production Capacity for Semis and Rolled Products, 1954-73

'000 000 units of account EUR

Type of mill	Actual expenditure													Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
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	45.6	43.0	20.6
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	64.3	53.7	15.5
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	39.2	47.1	35.5
<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>149.1</i>	<i>143.8</i>	<i>71.6</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	6.7	4.9	1.7
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	147.9	120.6	82.3
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	0.6	2.8	0.1
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	0.8	2.1	1.4
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	197.2	250.9	206.5
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	254.5	238.9	156.2
<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>607.7</i>	<i>620.3</i>	<i>448.2</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	88.7	137.5	82.6
Continuous-casting plants ...	...	...	...	2.3	4.1	5.6	10.0	13.1	28.2	19.9	30.5	63.1	83.5	70.2	101.7
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	82.2	129.4	87.8
<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>1 011.2</b>	<b>1 011.2</b>	<b>791.9</b>

Broken down according to main types of rolling mill, the sums allocated in 1971 showed considerable increase over the previous years, both in long (149m) and flat (608m) products. It seems likely that this trend will continue, at least where flat products are concerned. The latter continued to absorb on their own more than half the overall total and more than four times the amount set aside for section mills.



Actual expenditure for the year was in fact below the estimates and this applies to both long and flat product mills. Agreement varies, however, from one region to another. Actual expenditure matched—or even exceeded in certain cases—the estimates in Germany, Belgium, Northern France, the inland parts of Italy, Luxembourg and the Netherlands. On the other hand, it fell far short of the estimates in the coastal regions of Italy and on the Southern French seaboard.

The rate of growth in production potential confirms the trend of the previous decade. It is faster for flat products, particularly coils, than for sections. In 1971 sections were hit more heavily by the slowing-down in economic trends. For the first time in the Community, production of flat products (36.4m), even excluding coils as finished products, appreciably exceeded that of sections (34.1m).

TABLE 31  
Average Annual Movement of the Different Types of Finished Products

Product	Actual production			Production potential				
	1952 (mill. tons)	Average cumulative annual movement (%)	1971 (mill. tons)	1967 (mill. tons)	Average cumulative annual movement (%)	1971 (mill. tons)	Average cumulative annual movement (%)	1975 (mill. tons)
Heavy and light sections, incl. tube rounds and squares . . . .	15.2	+ 2.9	26.0	35.3	+ 2.2	38.6	+2.1	42.0
Wire-rod . . . . .	2.8	+ 5.7	8.1	9.3	+ 4.5	11.1	+3.8	12.9
<i>Total, sections</i>	<i>18.0</i>	<i>+ 3.4</i>	<i>34.1</i>	<i>44.6</i>	<i>+ 2.7</i>	<i>49.7</i>	<i>+2.5</i>	<i>54.9</i>
Hoop and strip and tube strip	2.3	+ 5.0	5.8	8.4	— 0.8	8.1	+2.4	8.9
Plate of 3mm and over <sup>1</sup> . . .	4.3	+ 4.9	10.6	14.2	+ 4.5	16.9	+5.1	20.7
Hot-rolled sheet under 3mm <sup>1</sup> . . . . .	3.1	—10.1	0.5	1.5	—14.5	0.8	+5.7	1.0
Cold-reduced sheet under 3mm . . . . .	0.8	+18.3	19.5	19.1	+ 8.2	26.2	+6.7	34.0
<i>Total, flats <sup>1</sup></i>	<i>10.5</i>	<i>+ 6.8</i>	<i>36.4</i>	<i>43.2</i>	<i>+ 4.7</i>	<i>52.0</i>	<i>+5.5</i>	<i>64.6</i>
<b>Total, finished rolled products <sup>1</sup></b>	<b>28.5</b>	<b>+ 4.9</b>	<b>70.5</b>	<b>87.8</b>	<b>+ 3.7</b>	<b>101.7</b>	<b>+4.1</b>	<b>119.5</b>
(of which: products rolled in continuous and semi-continu- ous mills) . . . . .	(.)	(.)	(.)	(.)	(.)	(71.4)	(+5.4)	(88.2)

<sup>1</sup> Exclusive of coils rating as end products in respect of which the production potential would increase from 6.5 to 7.7m tons from 1971 to 1975.

The figures given above include both coils generally classified as semis and coils used as rolled by customers in the Community or exported to third countries, which are regarded as finished products. The proportion of one to the other varies according to the enterprise; even works similar in structure vary greatly in the extent to which they divide up their production between coils as semis and coils as finished products. But the separation into semis and finished products makes

FIGURE 14

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

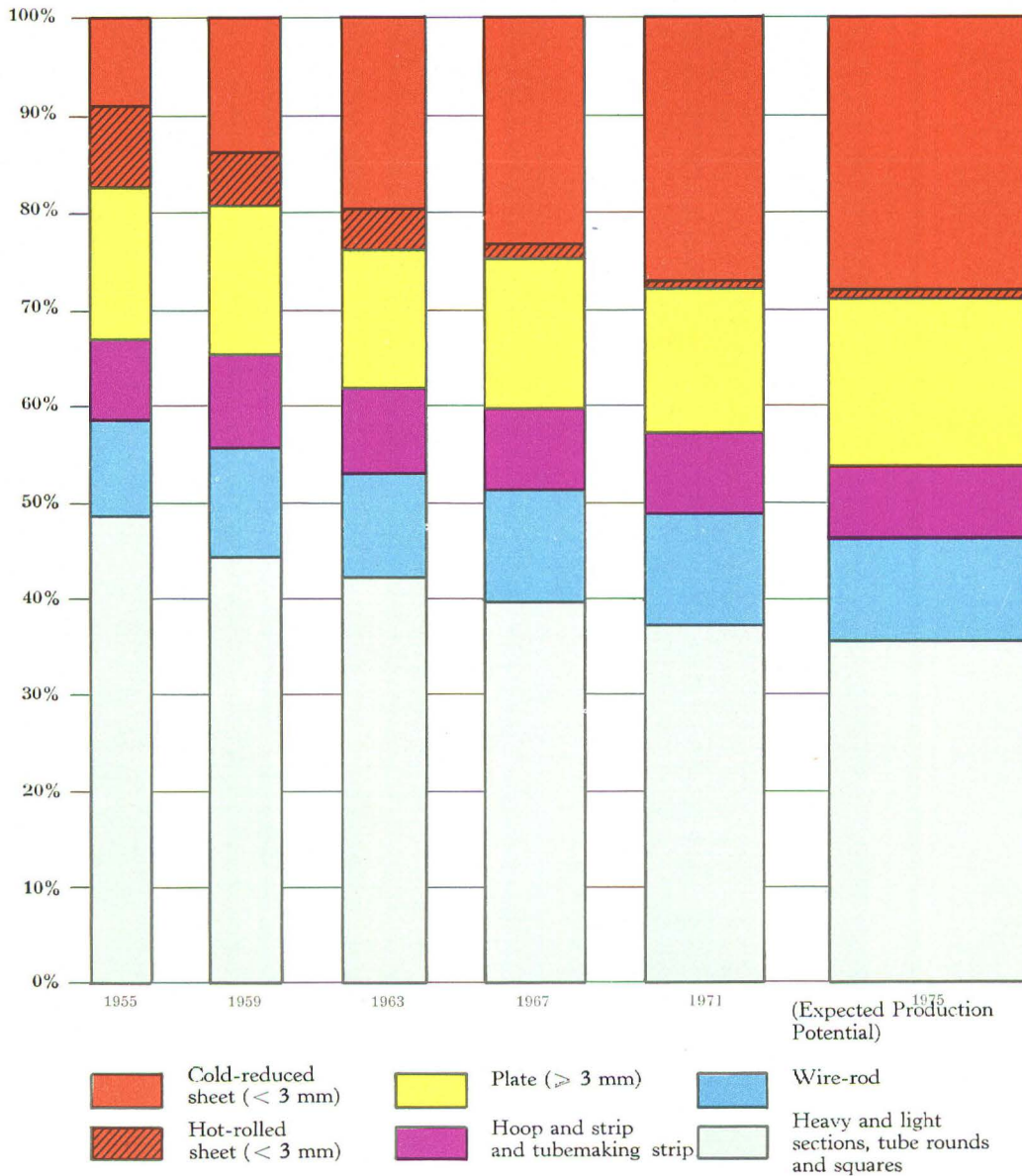
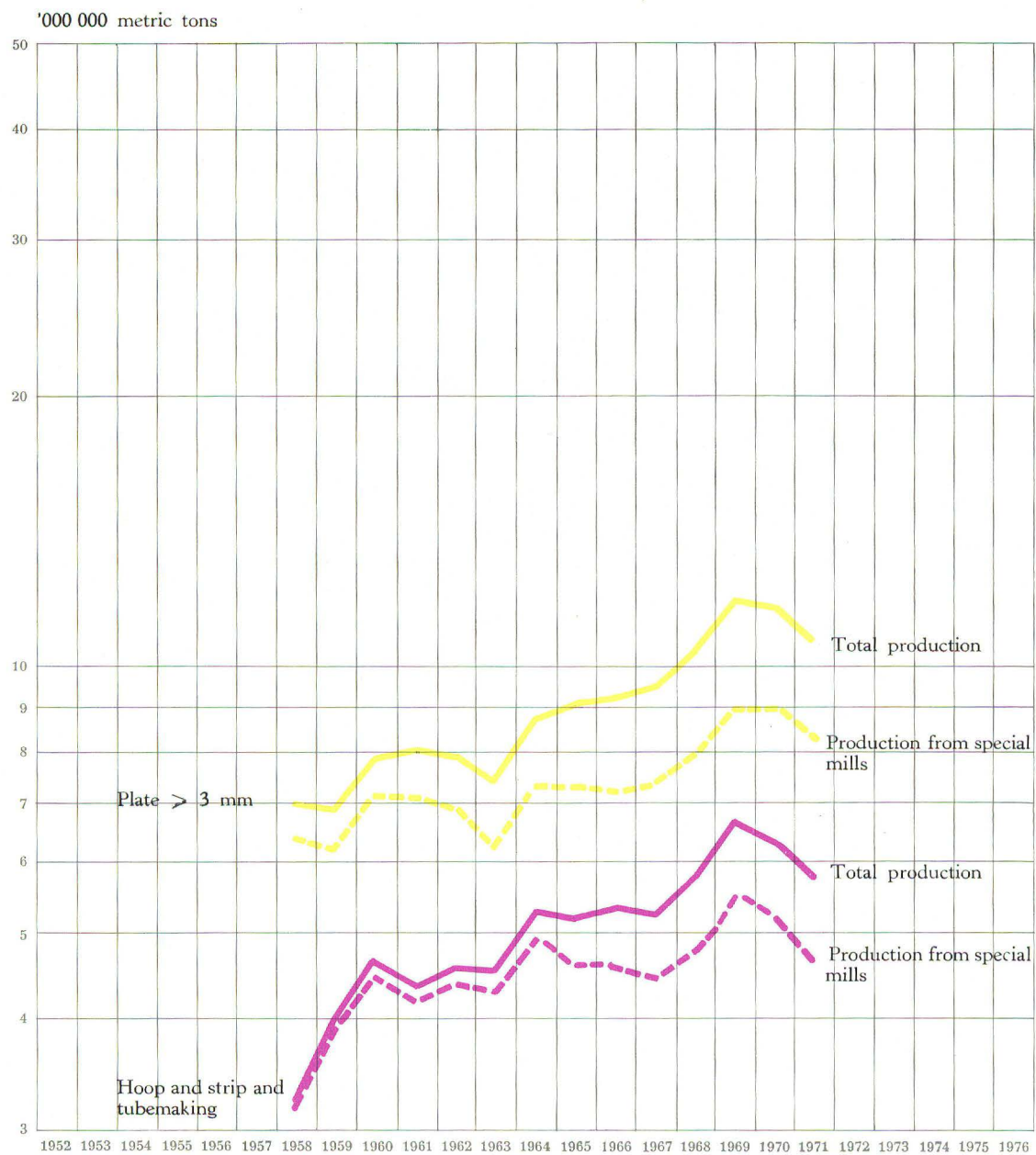


FIGURE 15

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



it difficult to give a survey of this material. In particular the data supplied by the firms on their future production potential for coils as finished products are influenced to a considerable extent by projected trends in raw material supply and sales of products and by the definition attributable to coils supplied as semis. The margin of uncertainty is considerable in works where major expansion projects are in progress or, even more so, in works which are under construction.

TABLE 32

## Annual Rate of Growth in Coils Production Potential

	Production potential				
	1967 ( <sup>'000 000</sup> tons)	Average cumulative annual movement (%)	1971 ( <sup>'000 000</sup> tons)	Average cumulative annual movement (%)	1975 ( <sup>'000 000</sup> tons)
Coils .....	27.1	+9.1	38.4	+9.2	54.6

TABLE 33

## 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
<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
from coils .....	0.6	0.6	0.7	1.0	1.0	1.1	1.4	1.7	1.9	1.9	2.3	2.9	2.7	2.3
Total	7.0	6.8	7.8	8.0	7.9	7.4	8.7	9.0	9.1	9.3	10.3	11.8	11.6	10.6
<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
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
Total	3.2	4.0	4.6	4.4	4.6	4.6	5.3	5.2	5.3	5.2	5.8	6.7	6.3	5.8

## (d) General services

Capital expenditure on general services—power generating plant and distribution networks, civil engineering, workshops, laboratories—had increased rapidly in the early Sixties up to 1964, when it accounted for 300m units of account or 24% of total investments in the steel industry. Since then its relative share had fallen in 1970 to less than 14%. The launching of projects for the creation of new integrated works on the Community seaboard, the infrastructure cost of which is, in absolute terms, extremely high, would increase the percentage from 17% in 1971 to close on 20% in 1972 and 1973.

TABLE 34

## Capital Expenditure on the General Services of the Iron and Steel Industry, 1954-73

'000 000 units of account EUR

Type of installation	Actual expenditure													Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
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	77.1	92.2	74.7
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	288.6	437.8	315.1
<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>365.7</b>	<b>530.0</b>	<b>389.8</b>

## VI—CONCLUSIONS

According to the estimates returned by the firms, annual **coal extraction potential**, which fell in 1970-71 from 183m to 174m tons, is expected to fall some 27m tons between now and 1975 to a level of 147m tons. This suggests a slowing down in the rate of decline which would only be 4% per annum as compared with an average of 4.5% for the period 1967 to 1971. However, as previous reports have shown, the forecasts returned by the collieries generally underestimate the actual closures: thus in regard to 1972 for example, the extraction potential declared at 1 January 1972, shows a cut-back of 9m tons on the estimates submitted a year earlier for the same year. In view of this and bearing in mind the decline in consumption and pressure from imported coal, it is quite possible that some firms may revise their programmes and intensify their cut-backs, in which case extraction potential would fall short of the 147m figure declared.

On the other hand, in the **coke-making** sector the recovery forecast by the 1970 survey has been confirmed. From 1970 to 1971, production potential rose from 71 to 73m tons. However, according to this year's survey, coking plant production potential is only expected to be 78m tons in 1975 instead of the 80m tons forecast for 1974 by the previous report.

The increase now forecast for 1971 and 1975 represents an average annual rate of growth of some 1.7%. This growth, in spite of a certain investment effort of the coal industry, will be mainly attributable to steel industry programmes, localized for the most part at coastal sites. Moreover, bearing in mind the age and degree of obsolescence of many batteries, in respect of which many enterprises are no longer approving new expenditure, it may happen that some capacities need to be closed sooner than anticipated by the producers. Consequently it is highly probable that production potential will not attain 78m tons in 1975, nor even perhaps the 77m tons forecast for 1975 by the General Objectives for Steel published last year.<sup>1</sup>

In the **iron-ore mines**, as anticipated by last year's report, capital spending recovered somewhat but remained at a modest level compared with that at the beginning of the Sixties. Nevertheless extraction potential, for which a certain stabilization was noted during the 1968-70 period, showed a new drop in 1971, declining from 80m tons in 1970 to 75m tons in 1971—approximately 22m tons in terms of Fe content. Extraction potential will remain at the same level between now and 1975, i.e. close to that anticipated for the same year by the General Objectives (assuming average trading conditions) which forecast demand for Community ores equivalent to some 21m tons Fe content.

Moreover, during recent years in the iron-ore mines as well as in the collieries, the actual decline in extraction potential has proved to be more rapid in most cases than the companies' returns had indicated, so that the possibility of a new drop cannot be discounted.

<sup>1</sup> See *Official Journal of the European Communities*, 29 September 1971.

The iron and steel enterprises, in their replies to the current survey, confirm the major trends announced in the previous report. Their capital spending, which in 1970 reached the record level of 1 700m units of account, rose to close on 2 200m in 1971 and is expected to increase further to 2 600m in 1972. Many regions of the Community have a share, admittedly unequal, in the increase in capital spending. The disparity is, however, most noticeable between the growth rate in production potential forecast for coastal steelworks on the one hand and inland steelworks on the other. Production potential between now and 1975 is expected to increase from 27 to 44m tons for coastal works and from 109 to 119m tons at inland sites.

For the Community as a whole, this year's survey nevertheless shows the effects of the mild recession which took place in 1971. The results of this are reflected in a certain slowing down in the rate of growth forecast for Community crude steel production potential. In 1974 the corresponding figure would be some 155m tons according to this year's survey returns, whereas last year the estimates totalled 160m. Nevertheless, crude steelmaking potential may be expected to attain 163m tons in 1975, thus just about covering the forecast of the General Objectives for that final year.

Of course the estimates for 1971 were only partially correct in some regions of the Community, especially where major programmes for the creation of new production complexes were concerned. In some cases the emergence of new production potential might be reflected somewhat later than had initially been expected.

Having regard to the low level of capital spending approved for basic Bessemer and open hearth steelmaking, the estimates returned for this survey may prove more accurate for these processes. This year's survey shows for basic Bessemer and open hearth plants considered to be uncompetitive a new acceleration in the decline forecast in previous years, since the production potential announced this year for 1974 does not exceed 12m tons for basic Bessemer and 18m tons for open hearth, as compared with 19m and 22m tons respectively forecast a year ago for 1974.

Various observations in the reverse direction, however, allow of the assessment that overall production potential actually recorded is not likely to be very far off the 163m ton level forecast by the General Objectives for 1975.

On the one hand, very considerable expenditure committed to projects in the ironmaking sector and the high rate of growth expected for blast furnace production potential indicate that existing or planned steelmaking plant is all likely to have its pig-iron requirements met in full. Also the survey shows an even faster rate of growth for oxygen and electric steelmaking plants than that forecast by the enterprises at a period close to the peak of the economic boom. It thus emerges that the structures of the steel industry are in a process of modernization which tallies with the trends outlined by the General Objectives. Steelmaking potential using pure oxygen and electric-furnace processes can be expected to account for more than 82% of the total in 1975.

The rates of growth for production potential in rolling mill capacity estimated for the 1971-75 period are: 2.5% for long products and 5.5% for flat products, compared with the 3.3% and 6.6% respectively announced in the previous survey for the 1970-74 period. This year's survey thus shows an accentuation in the different rates of growth for long product and flat product mills.

Overall, the results of the 1972 survey show that the forecasts for 1975 contained in the General Objectives for Steel are likely to be correct where supply is concerned.

The observations relating to the growth of crude steel production potential to a level of some 160m tons, as forecast by the General Objectives for Steel, between now and 1975 nevertheless

confirm the concern expressed in the annual reports on capital expenditure for 1969, 1970 and 1971 concerning the unprecedented increase in the investment tendencies of enterprises and drawing the conclusion that increased efforts must be made to adjust supply to demand. The General Objectives also pointed out that the enterprises should endeavour to stagger the commissioning of new capacity in order to avoid the eventuality of sudden increases in supply throwing the market out of balance. While technological progress must often require the replacement of capacity which is no longer competitive by much larger capacity, closer cooperation in investment decisions might help to facilitate the appropriate adjustments, possibly on a multi-national basis.



## 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 1972;*

B—*Projects approved but not yet in progress on 1 January 1972;*

C—*Other projects planned to be started between 1 January 1972 and 31 December 1974.*

*Since, in the case of the iron and steel industry projects merely "planned" can be dropped or deferred, if necessary, category C projects have been disregarded, except where the extractive industries (coal and iron ore) are concerned.*

#### (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 and onwards <sup>(8)</sup>
Germany (Fed. Rep.) . . . . .	DM	4.20	4.20	4.20	4.20	4.03 <sup>(1)</sup>	4.00	3.94 <sup>(7)</sup>	3.66	3.655	3.499
Belgium/Luxembourg . . . . .	BF/LF	50	50	50	50	50	50	50	50	49.96	48.657
France <sup>(1)</sup> . . . . .	FF <sup>(2)</sup>	350	377 <sup>(3)</sup>	420	4.937 <sup>(4)</sup>	4.937	4.937	5.178 <sup>(5)</sup>	5.554	5.554	5.554
Italy . . . . .	Lire	625	625	625	625	625	625	625	625	625.19	631.311
Netherlands . . . . .	Fl.	3.80	3.80	3.80	3.80	3.65 <sup>(6)</sup>	3.62	3.62	3.62	3.617	3.523

(1) And Saar up to 5 July 1959.

(2) NF as from 1 January 1959.

(3) 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 (4.20).

(4) Mean between official rate of exchange in force from 1 January to 3 March 1961 (420) and that in force from 4 March to 31 December 1961 (4.00).

(5) 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).

(6) Mean between official rate of exchange in force from 1 January to 10 August 1969 (4.937) and that in force from 11 August to 31 December 1969 (5.554).

(7) Mean between official rate of exchange in force from 1 January to 26 October 1969 (4.00) and that in force from 27 October to 31 December 1969 (3.66).

(8) 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
89.4	92.2	95.8	100.0	104.4	106.9	109.4	110.7	112.6	118.3	127.3

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 1971 of only about 0.3 million metric tons, out of 158.6 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-Hunsrück,  
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 1971. 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 1971. 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;
Southern France:	Régions Languedoc, Provence-Côte d'Azur;
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**

<sup>'000,000 units of account EUR</sup>

Area	Actual expenditure							Estimated expenditure		
	1965	1966	1967	1968	1969	1970	1971	on	on Jan. 1, 1972	
								Jan 1, 1971	for	for
							1971	1972	1973	
Ruhr .....	127.75	110.02	85.87	77.74	55.94	63.42	85.52	129.76	130.31	161.76
Aachen .....	5.37	6.09	4.05	6.98 <sup>(4)</sup>	5.69 <sup>(4)</sup>	5.77 <sup>(4)</sup>	8.68 <sup>(4)</sup>	9.81 <sup>(4)</sup>	8.24 <sup>(4)</sup>	7.23 <sup>(4)</sup>
Lower Saxony .....	2.68	1.65	0.89	1.18 <sup>(5)</sup>	2.24 <sup>(5)</sup>	3.13 <sup>(5)</sup>	4.28 <sup>(5)</sup>	4.74 <sup>(5)</sup>	5.89 <sup>(5)</sup>	6.78 <sup>(5)</sup>
Saar .....	14.61	8.72	9.66	9.21	4.22	6.32	6.92	11.49	11.64	13.57
Germany (FR) .....	150.41	126.48	100.47	95.11	68.09	78.64	105.40	155.53	156.08	189.34
Campine <sup>(2)</sup> .....	6.97	5.65	5.49	7.56	4.45	3.71	3.61	5.83	6.97	5.81
Southern Belgium <sup>(2)</sup> .....	8.09	5.23	5.89	6.01	3.95	3.86	3.72	5.26	4.65	3.86
Dutch Limburg <sup>(2)</sup> .....	7.39	4.34	2.21	1.90	0.50	2.35	3.23	0.88	2.05	0.17
Belgium and the Netherlands .....	22.72	16.27	14.41	16.56	10.43	10.26	10.76	13.83	14.15	10.46
Nord/Pas-de-Calais .....	16.07	15.55	16.65	15.78	7.40	7.04	7.66	5.76	8.63	5.17
Lorraine .....	17.05	13.96	12.52	10.92	6.65	6.80	6.07	5.76	7.79	7.14
Centre-Midi .....	6.94	7.99	6.70	5.82	3.39	2.04	1.91	1.84	1.78	1.69
Independent plants <sup>(3)</sup> .....	0.64	0.60	0.30	—	—	—	—	—	—	—
France .....	40.70	38.10	36.17	32.52	17.44	15.88	15.64	13.36	18.20	14.00
Italy .....	4.89	7.75	7.67	5.84	5.35	2.87	3.62	3.66	3.90	1.78
<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>135.42</b>	<b>186.38</b>	<b>192.33</b>	<b>215.58</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.

<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		
	1965	1966	1967	1968	1969	1970	1971	on	on Jan. 1, 1972	
								Jan 1, 1971	for	for
Ruhr .....	114.38	98.80	78.75	70.71	47.73	47.61	54.72	87.94	81.53	104.05
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>	6.92 <sup>(1)</sup>	6.99 <sup>(1)</sup>	5.75 <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>	4.33 <sup>(2)</sup>	5.81 <sup>(2)</sup>	7.72 <sup>(2)</sup>
Saar .....	13.62	8.54	9.33	5.23	3.64	5.55	6.59	10.05	10.93	11.95
Germany (FR) .....	135.93	113.20	91.32	82.14	58.89	61.08	71.20	109.24	105.26	128.47
Campine .....	4.51	4.71	5.49	7.56	4.45	3.71	3.61	5.83	6.97	5.81
Southern Belgium .....	7.55	5.06	5.72	5.83	3.77	3.81	3.59	4.93	4.57	3.85
Belgium .....	12.06	9.77	11.21	13.39	8.22	7.52	7.20	10.76	11.54	9.66
Netherlands (Limburg) .....	7.04	3.63	2.08	1.80	0.50	1.02	0.29	0.88	0.38	—
Nord/Pas-de-Calais .....	13.33	13.51	13.07	12.34	6.40	5.03	5.60	4.47	7.05	4.02
Lorraine .....	16.03	13.09	12.24	10.59	6.49	6.71	5.61	5.26	6.80	6.51
Centre-Midi .....	5.97	6.13	5.30	5.52	3.28	1.91	1.79	1.72	1.36	1.33
France .....	35.33	32.73	30.61	28.45	16.17	13.65	13.00	11.45	15.21	11.86
Italy .....	—	3.51	4.66	2.13	2.46	2.10	2.01	1.60	—	—
<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>93.70</b>	<b>133.93</b>	<b>132.39</b>	<b>149.99</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.



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

Investment

TABLE III  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure		
	1965	1966	1967	1968	1969	1970	1971	on Jan 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
<b>Mine-owned coking-plants</b>										
Ruhr .....	12.18	10.43	6.91	6.97 ( <sup>2</sup> )	8.05 ( <sup>2</sup> )	15.62 ( <sup>2</sup> )	30.67 ( <sup>2</sup> )	39.26 ( <sup>2</sup> )	47.84 ( <sup>2</sup> )	56.13 ( <sup>2</sup> )
Aachen .....	0.06	0.16	0.23	1.84 ( <sup>3</sup> )	0.34 ( <sup>3</sup> )	0.25 ( <sup>3</sup> )	2.52 ( <sup>3</sup> )	2.68 ( <sup>3</sup> )	1.13 ( <sup>3</sup> )	1.48 ( <sup>3</sup> )
Saar .....	0.99	0.18	0.33	3.98	0.58	0.77	0.33	1.44	0.71	1.62
Germany (FR) .....	13.23	10.77	7.47	12.79	8.97	16.64	33.52	43.38	49.68	59.23
Belgium and Netherlands ..	0.11	0.01	—	0.21	—	—	—	—	—	—
Nord/Pas-de-Calais .....	1.10	1.37	1.96	3.16	0.77	1.83	1.90	1.15	1.32	0.97
Lorraine .....	1.02	0.87	0.28	0.33	0.16	0.09	0.46	0.50	0.99	0.63
Centre-Midi .....	0.34	0.16	0.45	0.14	0.10	0.11	0.12	0.12	0.42	0.36
France .....	2.46	2.40	2.69	3.63	1.03	2.03	2.48	1.77	2.73	1.96
<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>36.00</b>	<b>45.15</b>	<b>52.41</b>	<b>61.19</b>
<b>Independent coking-plants</b>										
Belgium and Netherlands ..	0.16	1.04	0.82	0.88	1.53	1.67	3.09	1.86	2.15	0.79
Italy .....	4.89	4.24	3.01	3.71	2.89	0.77	1.61	2.06	3.90	1.78
<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>3.92</b>	<b>6.05</b>	<b>2.57</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>40.70</b>	<b>49.07</b>	<b>58.46</b>	<b>63.76</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.

<b>HARD-COAL BRIQUETTING-PLANTS</b>
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## Investment

TABLE IV  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure		
	1965	1966	1967	1968	1969	1970	1971	on	on Jan. 1, 1972	
								Jan 1, 1971 for	1971	for
Ruhr .....	1.19	0.79	0.21	0.06	0.16	0.19	0.13	2.56	0.94	1.58
Aachen .....	0.04	1.67	1.46	0.07	0.05	0.68	0.45	0.21	0.12	—
Lower Saxony .....	0.02	0.05	0.01	0.05	0.02	0.05	0.10	0.14	0.08	0.06
Germany (FR) .....	1.25	2.51	1.68	0.18	0.23	0.92	0.68	2.91	1.14	1.64
Campine .....	2.46	0.94	—	—	—	—	—	—	—	—
Southern Belgium .....	0.54	0.17	0.17	0.18	0.18	0.05	0.13	0.33	0.08	0.01
Belgium .....	3.00	1.11	0.17	0.18	0.18	0.05	0.13	0.33	0.08	0.01
Netherlands (Limburg) .....	0.35	0.71	0.13	0.10	—	—	0.05	—	—	—
Nord/Pas-de-Calais .....	1.64	0.67	1.62	0.28	0.23	0.18	0.16	0.14	0.26	0.18
Centre-Midi .....	0.63	1.70	0.95	0.16	0.01	0.02	—	—	—	—
Independent plants .....	0.64	0.60	0.30	—	—	—	—	—	—	—
France .....	2.91	2.97	2.87	0.44	0.24	0.20	0.16	0.14	0.26	0.18
<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>1.02</b>	<b>3.38</b>	<b>1.48</b>	<b>1.83</b>

(1) Without the expenses of the Ruhr part of EBV.

(2) Includes the expenses of the Ruhr part of EBV.

<b>HARD COAL</b>
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Extraction
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**TABLE VI**  
Extraction and Extraction Potential by Coalfields

*'000,000 metric tons*

Actual extraction 1971	Coalfield	Extraction potential						Expected extraction potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
90.7	Ruhr .....	121.7	108.8	100.7	104.3	101.4	98.8	94.4	92.0	88.4	88.7
6.6	Aachen .....	8.4	8.4	8.2	7.5	6.9	7.1	7.3	7.2	7.5	7.5
2.8	Lower Saxony .....	2.0	2.3	2.3	2.7	2.8	2.8	2.7	2.7	2.7	2.7
10.7	Saar .....	14.3	13.9	12.2	14.1	14.2	12.2	12.6	12.4	12.4	12.4
110.8	Germany (FR) .....	146.4	133.4	123.4	128.6	125.3	120.9	117.0	114.3	111.0	111.3
7.3	Campine .....	10.0	9.0	9.4	9.4	9.1	9.1	9.1	9.1	7.6	7.6
3.7	Southern Belgium .....	10.0	9.4	6.8	5.7	4.9	4.4	4.1	3.8	3.5	3.5
11.0	Belgium .....	20.0	18.4	16.2	15.1	14.0	13.5	13.2	12.9	11.1	11.1
3.6	Netherlands (Limburg) ...	11.4	9.3	8.6	5.8	5.0	4.5	3.5	2.3	1.0	—
14.5	Nord/Pas-de-Calais .....	25.7	24.1	22.2	19.9	17.3	15.4	13.5	12.5	11.4	9.8
11.5	Lorraine .....	15.5	15.2	15.2	14.7	13.4	12.7	12.0	11.8	11.5	11.2
7.0	Centre/Midi .....	9.9	9.4	9.2	8.4	7.6	7.2	6.7	5.9	4.4	3.6
33.0	France .....	51.1	48.7	46.6	43.0	38.3	35.3	32.2	30.2	27.3	24.6
0.2	Italy .....	0.7	0.7	0.4	0.4	0.4	0.3	—	—	—	—
158.6	Total	229.6	210.5	195.2	192.9	183.0	174.5	165.9	159.7	150.4	147.0

N.B.: The above table does not take into account the extraction of some mines of small capacity (292000 metric tons in 1971 of which 258000 metric tons from the "small" German mines, which do not figure in the official production statistics).

<b>COKE</b>
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Production

TABLE VII a  
Production and Production Potential by Areas

'000,000 metric tons

Actual production ( <sup>1</sup> ) 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	<b>Mine-owned coking-plants</b>										
26.2	Ruhr .....	34.4	30.5	28.8	28.2	27.5	28.1	26.6	27.5	28.6	28.6
2.0	Aachen .....	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
1.4	Saar. ....	1.3	1.3	1.8	1.8	1.9	2.0	1.6	1.5	1.5	1.5
29.6	Germany (FR) .....	37.6	33.7	32.6	32.0	31.5	32.2	30.3	31.1	32.2	32.2
—	Belgium and the Netherlands	3.4	2.4	2.1	1.0	0.1	—	—	—	—	—
4.2	Nord/Pas-de-Calais .....	5.2	5.2	5.1	5.3	5.3	5.5	5.1	5.0	5.0	4.8
2.5	Lorraine .....	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.4	2.4
0.7	Centre/Midi .....	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.4	0.4
7.4	France .....	8.9	8.9	8.8	9.0	9.0	9.2	8.8	8.5	7.8	7.6
37.0	<b>Total</b>	49.9	45.0	43.5	42.0	40.6	41.4	39.1	39.6	40.0	39.8
	<b>Independent coking-plants</b>										
1.1	Belgium and the Netherlands	1.4	1.4	1.4	1.2	1.0	1.5	1.2	1.2	1.2	1.2
2.2	Italy .....	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3.3	<b>Total</b>	3.9	3.9	3.9	3.7	3.5	4.0	3.7	3.7	3.7	3.7
	<b>Steelworks-owned coking-plant</b>										
8.0	Germany (FR) .....	8.4	8.1	7.9	7.6	8.3	8.7	8.9	8.7	9.5	9.5
7.5	Belgium and the Netherlands	6.6	6.7	6.8	6.9	8.3	8.3	8.8	10.3	9.9	10.1
4.9	France .....	4.5	4.6	4.4	4.7	5.3	5.4	4.9	5.4	7.1	7.1
4.8	Italy .....	4.3	4.3	4.3	4.3	4.7	5.5	6.2	6.9	8.3	8.3
25.2	<b>Total</b>	23.8	23.7	23.4	23.5	26.6	27.9	28.8	31.3	34.8	35.0
65.5	<b>Grand Total</b>	77.6	72.6	70.8	69.2	70.7	73.3	71.6	74.6	78.5	78.5

(<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.

<b>COKING-PLANTS</b>
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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	
	'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
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
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
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
<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>
	'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
	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

<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	
a) Coke-oven gas delivered .....	'000,000 stand. cub. m.	29 481	28 602	28 697	30 795	30 860	30 413
b) Gas output .....	stand. cub. metres per ton of wet-charged coal	399	341	341	343	337	351
c) Coke-oven gas delivered to outside enterprises or for consumption other than d) .....	'000,000 stand. cub. m.	19 925	19 666	19 281	20 535	20 089	20 053
	% of a) .....	(67.6)	(68.7)	(67.2)	(66.7)	(65.1)	(65.9)
d) Consumption for heating ovens:							
1. Coke-oven gas .....	'000,000 stand. cub. m.	9 556	8 936	9 416	10 260	10 771	10 360
	% of 4) .....	(70.8)	(71.3)	(74.1)	(77.9)	(80.5)	(82.8)
2. Producer gas .....	'000,000 stand. cub. m.	702	552	424	193	63	116
	% of 4) .....	(5.2)	(4.4)	(3.3)	(1.5)	(0.5)	(0.9)
3. Blast-furnace and other gases .....	'000,000 stand. cub. m.	3 237	3 050	2 874	2 716	2 549	2 034
	% of 4) .....	(24.0)	(24.3)	(22.6)	(20.6)	(19.0)	(16.3)
4. Total consumption of gas for heating ovens .....	'000,000 stand. cub. m.	13 495	12 538	12 714	13 169	13 383	12 510
		(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

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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**Production**

**TABLE IX**  
**Production and Production Potential by Areas**

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
1.5	Ruhr .....	4.6	4.4	3.8	3.2	2.8	2.7	2.5	1.9	1.0	1.1
0.8	Aachen .....	0.8	0.9	1.0	1.1	1.0	1.1	1.2	1.2	1.2	1.2
0.4	Lower Saxony .....	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
2.7	Germany (FR) .....	6.0	5.9	5.4	4.9	4.5	4.5	4.4	3.8	2.9	3.0
—	Campine .....	0.2	0.2	0.2	0.1	—	—	—	—	—	—
0.6	Southern Belgium .....	2.3	1.8	1.8	1.6	1.5	1.2	1.2	1.1	1.1	0.9
0.6	Belgium .....	2.5	2.0	2.0	1.7	1.5	1.2	1.2	1.1	1.1	0.9
0.6	Netherlands (Limburg) ...	1.7	1.7	1.7	1.6	1.5	1.3	0.8	0.7	0.6	—
2.1	Nord/Pas-de-Calais .....	4.1	4.1	3.8	3.6	3.3	3.3	3.3	3.3	3.3	3.3
0.9	Centre-Midi .....	2.0	1.9	1.8	1.7	1.5	1.3	1.1	1.1	1.1	0.8
0.7	Independent plants .....	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0
3.7	France .....	7.6	7.5	7.1	6.8	6.3	6.1	5.4	5.4	5.4	5.1
7.6	<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>11.0</b>	<b>10.0</b>	<b>9.0</b>





<b>IRON-ORE INDUSTRY</b>
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**Investment**

**TABLE XIII**  
**Capital Expenditure by Orefields**

'000,000 units of account EUR

Orefield	Actual expenditure							Estimated expenditure		
								on Jan. 1, 1971 for	on Jan. 1, 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Salzgitter, Ilsede, Harzvorland	4.03	1.09	0.52	0.73	1.18	1.94	2.46	0.85	2.19	0.77
Osnabrück, Weser-Wiehen- gebirge .....	0.11	0.17	0.01	0.08	0.25	1.50	3.44	0.92	0.74	—
Siegerland-Wied .....	0.16	0.17	0.20	0.08	0.04	0.01	1.12	0.05	1.18	—
Central and Southern Germ. }										
Other German fields .....	1.50	0.65	0.37	0.78	1.13	0.68	0.65	1.91	2.20	2.21
Germany (FR) .....	5.80	2.08	1.10	1.67	2.60	4.13	7.67	3.73	6.31	2.98
Belgium .....	—	—	0.02	—	—	—	—	—	—	—
Eastern France .....	16.07	12.51	12.88	16.16	14.29	12.72	14.65	17.68	19.22	12.26
Western France .....	1.96	1.12	1.06	1.87	1.04	1.21	1.12	1.04	1.17	0.81
France: Centre/Midi .....	0.11	0.03	0.03	0.04	0.05	0.18	0.18	0.19	0.20	0.30
France .....	18.14	13.66	13.97	18.07	15.38	14.11	15.95	18.91	20.59	13.37
Italy .....	0.68	0.67	0.28	0.14	0.87	0.56	0.82	3.43	0.79	0.95
Luxembourg .....	0.97	0.91	0.61	0.80	1.47	2.45	5.13	4.25	2.41	0.47
<b>Total</b>	<b>25.59</b>	<b>17.32</b>	<b>15.98</b>	<b>20.68</b>	<b>20.32</b>	<b>21.25</b>	<b>29.57</b>	<b>30.32</b>	<b>30.10</b>	<b>17.77</b>

<b>IRON-ORE INDUSTRY</b>
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Extraction

TABLE XIV  
Extraction and Extraction Potential by Orefields

'000,000 metric ton

Actual extraction 1971	Orefield	Extraction potential						Expected extraction potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
5.4	{ Salzgitter, Ilsede, Harzvorland ..... Osnabrück, Weser-Wiehengebirge }	8.6	7.5	7.2	6.4	6.2	6.2	6.5	6.6	6.7	6.7
0.2	{ Siegerland-Wied ..... Central and Southern Germany .....	0.7	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.8	Other German fields ....	2.1	2.0	1.6	1.6	0.9	0.8	0.6	0.6	0.5	0.5
6.4	Germany (FR) .....	11.4	10.0	9.2	8.3	7.4	7.3	7.4	7.5	7.5	7.5
—	Belgium .....	0.2	0.2	0.1	0.1	—	—	—	—	—	—
53.5	Eastern France .....	64.5	60.6	59.4	59.3	61.0	58.2	56.9	57.5	57.5	57.4
2.8	Western France .....	4.7	4.7	4.4	3.7	3.1	3.1	3.1	3.1	3.1	3.1
0.1	Centre/Midi .....	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
56.4	France .....	69.4	65.4	63.9	63.1	64.2	61.4	60.1	60.7	60.7	60.6
1.0	Italy .....	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
4.5	Luxembourg .....	8.0	7.3	7.3	7.3	7.3	5.8	4.4	5.0	6.1	6.1
68.4	Total	90.5	84.3	81.9	80.2	80.3	75.8	73.2	74.5	75.6	75.5

<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, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	35.60	21.66	30.02	35.84	43.28	120.19	162.10	145.09	135.82	118.11
North Rhine/Westphalia .....	238.20	220.84	128.27	131.90	220.42	403.85	416.97	366.59	370.82	278.19
Southern Germany .....	9.06	22.78	9.35	15.12	21.15	49.13	53.07	58.32	27.76	17.96
Saar .....	28.70	29.05	55.93	41.71	21.75	76.63	110.34	119.00	76.08	36.31
Germany (FR) .....	311.56	294.33	223.57	224.57	306.60	649.80	742.48	689.00	610.48	450.57
Belgium .....	142.35	142.87	100.17	74.45	132.66	233.25	191.44	216.39	166.23	54.84
Eastern France .....	111.45	99.91	99.36	161.03	165.76	181.80	143.35	179.12	134.83	83.45
Northern France .....	30.93	22.42	42.97	66.15	79.30	128.84	285.72	288.98	344.23	268.76
Southern France .....	•	•	•	•	•	4.12	58.77	•	379.90	338.67
France: other areas .....	27.53	25.23	28.08	25.94	34.00	47.15	52.82	257.79	65.55	33.47
France .....	169.91	147.56	170.41	253.12	279.06	361.91	540.66	725.89	924.51	724.35
Italy: coastal areas .....	193.98	131.50	69.11	64.90	102.42	189.32	412.66	599.97	638.97	511.73
Italy: other areas .....	52.29	35.09	56.53	46.53	57.21	108.10	113.67	104.35	106.21	110.77
Italy .....	246.27	166.59	125.64	111.43	159.63	297.42	526.33	704.32	745.18	622.50
Luxembourg .....	24.83	28.37	15.80	13.55	34.13	49.01	45.92	45.54	47.38	21.24
Netherlands .....	37.32	68.35	94.61	124.95	126.57	114.79	135.39	119.05	107.36	41.76
<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>2 182.22</b>	<b>2 500.19</b>	<b>2 601.14</b>	<b>1 915.26</b>

STEELWORKS-OWNED COKING-PLANTS
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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, or approved)		
								on Jan. 1, 1971 for	on Jan. 1, 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Northern Germany .....	0.26	0.10	0.03	0.08	0.28	5.29	6.16	5.44	2.33	0.47
North Rhine/Westphalia .....	0.10	0.50	0.31	1.11	1.41	7.23	15.21	11.02	2.70	8.86
Southern Germany .....	0.03	0.02	0.06	—	—	—	—	—	—	—
Saar .....	0.12	0.10	0.88	0.42	0.32	0.28	0.23	0.86	0.51	0.63
Germany (FR) .....	0.51	0.72	1.28	1.61	2.01	12.80	21.60	17.32	5.54	9.96
Belgium .....	1.91	2.18	1.27	0.44	0.89	15.13	32.43	40.18	16.55	2.54
Eastern France .....	0.17	0.40	0.28	0.32	0.29	0.34	0.53	5.61	5.90	24.59
Northern France .....	0.45	0.21	3.96	9.51	16.40	10.93	16.56	14.50	14.40	14.40
Southern France .....	•	•	•	•	•	—	—	•	28.80	20.88
France: other areas .....	0.10	0.02	0.08	0.06	0.03	0.75	0.57	1.26	0.61	0.09
France .....	0.72	0.63	4.32	9.89	16.72	12.02	17.66	21.37	49.71	59.96
Italy: coastal areas .....	12.49	5.47	1.72	1.03	11.23	19.37	39.73	42.62	53.10	36.43
Italy: other areas .....	—	—	—	—	—	—	—	—	—	—
Italy .....	12.49	5.47	1.72	1.03	11.23	19.37	39.73	42.62	53.10	36.43
Luxembourg .....	—	—	—	—	—	—	—	—	—	—
Netherlands .....	1.61	1.37	2.88	0.73	0.24	2.46	19.94	17.08	28.11	12.84
<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>131.36</b>	<b>138.57</b>	<b>153.01</b>	<b>121.73</b>

<b>BURDEN-PREPARATION</b>
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## Investment

TABLE XVI b  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	1.16	0.35	0.16	1.22	2.09	5.37	4.49	4.51	4.17	0.97
North Rhine/Westphalia .....	3.16	1.95	2.56	2.44	8.26	44.97	41.45	21.75	20.69	17.65
Southern Germany .....	0.24	0.06	0.16	0.01	0.02	0.16	0.11	0.15	0.13	—
Saar .....	1.56	3.63	16.32	1.58	1.19	1.94	0.63	1.16	0.54	—
<i>Germany (FR)</i> .....	<i>6.12</i>	<i>5.99</i>	<i>19.20</i>	<i>5.25</i>	<i>11.56</i>	<i>52.44</i>	<i>46.68</i>	<i>27.57</i>	<i>25.53</i>	<i>18.62</i>
<i>Belgium</i> .....	<i>5.11</i>	<i>11.41</i>	<i>6.89</i>	<i>3.65</i>	<i>5.23</i>	<i>13.57</i>	<i>18.41</i>	<i>20.69</i>	<i>11.74</i>	<i>1.80</i>
Eastern France .....	13.51	11.79	9.70	17.09	9.15	22.10	12.28	17.20	19.49	11.65
Northern France .....	5.00	5.20	2.50	5.10	7.70	13.54	29.51	28.40	22.36	10.26
Southern France .....	•	•	•	•	•	—	0.69	•	29.89	25.03
France: other areas .....	0.54	0.11	0.40	0.88	0.17	0.07	0.10	8.26	0.14	0.02
<i>France</i> .....	<i>19.05</i>	<i>17.10</i>	<i>12.60</i>	<i>23.07</i>	<i>17.02</i>	<i>35.71</i>	<i>42.58</i>	<i>53.86</i>	<i>71.88</i>	<i>49.96</i>
Italy: coastal areas .....	19.91	9.61	3.47	6.04	3.78	9.95	31.72	27.37	58.53	46.23
Italy: other areas .....	0.05	0.02	0.06	0.10	0.23	0.04	0.03	0.40	—	—
<i>Italy</i> .....	<i>19.96</i>	<i>9.63</i>	<i>3.53</i>	<i>6.14</i>	<i>4.01</i>	<i>9.99</i>	<i>31.75</i>	<i>27.77</i>	<i>58.53</i>	<i>46.23</i>
<i>Luxembourg</i> .....	<i>0.62</i>	<i>0.43</i>	<i>0.28</i>	<i>0.85</i>	<i>8.61</i>	<i>20.13</i>	<i>11.18</i>	<i>9.99</i>	<i>14.40</i>	<i>13.40</i>
<i>Netherlands</i> .....	<i>1.08</i>	<i>0.49</i>	<i>1.30</i>	<i>5.33</i>	<i>21.84</i>	<i>9.78</i>	<i>2.17</i>	<i>2.47</i>	<i>3.86</i>	<i>1.02</i>
<b>Total</b>	<b>51.94</b>	<b>45.05</b>	<b>43.80</b>	<b>44.29</b>	<b>68.27</b>	<b>141.62</b>	<b>152.77</b>	<b>142.35</b>	<b>185.94</b>	<b>128.03</b>

## BLAST-FURNACES

## Investment

TABLE XVI c  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
								on Jan. 1, 1971 for	on Jan. 1, 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Northern Germany .....	7.73	4.19	5.35	3.66	6.89	21.78	36.74	30.46	29.92	23.64
North Rhine/Westphalia .....	28.63	16.31	8.19	12.82	16.18	51.88	82.79	71.21	98.20	81.07
Southern Germany .....	0.59	0.49	0.66	0.80	1.10	1.43	1.52	1.52	0.94	0.04
Saar .....	4.34	1.96	1.75	2.62	4.85	5.71	7.52	7.62	1.41	—
Germany (FR) .....	41.29	22.95	15.95	19.90	29.02	80.80	128.57	110.81	130.47	104.75
Belgium .....	11.26	16.22	12.89	9.01	10.71	19.77	23.18	20.63	32.42	8.33
Eastern France .....	9.82	7.31	10.93	10.65	11.02	7.51	15.69	21.57	15.51	6.60
Northern France .....	2.31	2.50	11.26	11.38	9.34	9.02	32.29	40.58	43.39	39.07
Southern France .....	•	•	•	•	•	—	2.15	•	35.65	30.07
France: other areas .....	0.56	0.22	0.28	0.44	1.44	1.79	1.19	12.19	0.72	1.07
France .....	12.69	10.03	22.47	22.47	21.80	18.32	51.32	74.34	95.27	76.81
Italy: coastal areas .....	18.14	12.81	9.90	11.24	16.20	23.26	45.25	51.42	32.14	32.12
Italy: other areas .....	0.25	0.27	0.56	0.16	0.34	0.30	0.25	0.53	0.51	—
Italy .....	18.39	13.08	10.46	11.40	16.54	23.56	45.50	51.95	32.65	32.12
Luxembourg .....	4.27	2.11	0.53	2.66	8.00	7.99	3.27	1.65	0.22	0.10
Netherlands .....	3.29	12.67	13.02	0.91	3.28	8.72	24.80	24.85	17.19	5.81
<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>276.64</b>	<b>284.23</b>	<b>308.22</b>	<b>227.92</b>

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

Investment

TABLE XVI d  
Capital Expenditure by Areas

' 000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	9.15	4.64	5.54	4.96	9.26	32.44	47.39	40.41	36.42	25.08
North Rhine/Westphalia .....	31.89	18.76	11.06	16.37	25.85	104.08	139.45	103.98	121.59	107.58
Southern Germany .....	0.86	0.57	0.88	0.81	1.12	1.59	1.63	1.67	1.07	0.04
Saar .....	6.02	5.69	18.95	4.62	6.36	7.93	8.38	9.64	2.46	0.63
Germany (FR) .....	47.92	29.66	36.43	26.76	42.59	146.04	196.85	155.70	161.54	133.33
Belgium .....	18.28	29.81	21.05	13.10	16.83	48.47	74.02	81.50	60.71	12.67
Eastern France .....	23.50	19.50	20.91	28.06	20.46	29.95	28.50	44.38	40.90	42.84
Northern France .....	7.76	7.91	17.72	25.99	33.44	33.49	78.36	83.48	80.15	63.73
Southern France .....	•	•	•	•	•	—	2.84	•	94.34	75.98
France: other areas .....	1.20	0.35	0.76	1.38	1.64	2.61	1.86	21.71	1.47	1.18
France .....	32.46	27.76	39.39	55.43	55.54	66.05	111.56	149.57	216.86	183.73
Italy: coastal areas .....	50.54	27.89	15.09	18.31	31.21	52.58	116.70	121.41	143.77	114.78
Italy: other areas .....	0.30	0.29	0.62	0.26	0.57	0.34	0.28	0.93	0.51	—
Italy .....	50.84	28.18	15.71	18.57	31.78	52.92	116.98	122.34	144.28	114.78
Luxembourg .....	4.89	2.54	0.81	3.51	16.61	28.12	14.45	11.64	14.62	13.50
Netherlands .....	5.98	14.53	17.20	6.97	25.36	20.96	46.91	44.40	49.16	19.67
<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>560.77</b>	<b>565.15</b>	<b>647.17</b>	<b>477.68</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, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	0.60	0.52	0.07	0.14	—	—	—	—	—	—
North Rhine/Westphalia .....	1.32	0.69	6.20	—	0.02	—	—	0.09	—	—
Southern Germany .....	0.52	0.16	0.88	0.78	1.17	—	—	0.27	—	—
Saar .....	1.61	1.37	0.96	0.34	0.52	0.49	0.52	0.63	0.06	—
Germany (FR) .....	4.05	2.74	8.11	1.26	1.71	0.49	0.52	0.99	0.06	—
Belgium .....	2.37	1.80	0.89	1.17	1.16	1.80	2.53	2.93	2.95	1.50
Eastern France .....	2.32	3.33	2.88	2.80	3.98	2.98	2.62	2.47	2.53	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	0.18	0.09	—
France .....	2.63	3.61	2.92	2.83	4.03	3.08	2.80	2.65	2.62	0.51
Luxembourg .....	1.11	2.08	0.95	0.09	0.04	0.29	0.41	0.98	0.65	0.09
Total	10.16	10.23	12.87	5.35	6.94	5.66	6.26	7.55	6.28	2.10

<b>BOTTOM-BLOWN STEELS</b> <b>(OBM, LWS, ETC.)</b>
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Investment

TABLE XVII b  
Capital Expenditure by Areas

*'000,000 units of account EUR*

Area	Actual expenditure		Estimated expenditure (projects in progress, or approved)	
			on 1.1.1972 for	
	1970	1971	1972	1973
Southern Germany .....	0.65	0.38	0.61	—
Saar .....	0.01	1.09	3.03	3.16
Germany (FR) .....	0.66	1.47	3.64	3.16
Belgium .....	0.06	0.53	1.28	0.07
Eastern France .....	3.81	0.92	0.19	0.03
Northern France .....	0.67	0.16	0.07	0.07
France .....	4.48	1.08	0.26	0.10
<b>Total</b>	<b>5.20</b>	<b>3.08</b>	<b>5.18</b>	<b>3.33</b>

OPEN-HEARTH STEELWORKS
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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, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	2.19	0.59	0.13	0.26	0.65	0.16	1.29	1.58	0.68	—
North Rhine/Westphalia .....	4.80	3.37	1.54	1.32	0.98	1.43	1.38	2.13	0.88	0.01
Southern Germany .....	0.35	0.37	0.13	0.05	0.02	0.75	0.18	0.35	0.11	0.54
Saar .....	0.46	0.32	0.32	1.35	0.55	0.26	0.12	0.03	0.04	—
Germany (FR) .....	7.80	4.65	2.12	2.98	2.20	2.60	2.97	4.09	1.71	0.55
Belgium .....	0.21	0.05	0.03	0.01	—	0.02	0.02	—	0.04	—
Eastern France .....	1.03	0.86	0.37	0.72	0.60	0.43	0.65	0.46	0.82	0.28
Northern France .....	0.20	0.67	0.21	0.28	0.76	1.00	1.06	1.09	0.74	0.58
France: other areas .....	0.07	0.03	0.06	0.04	0.14	0.31	0.59	0.57	0.16	—
France .....	1.30	1.56	0.64	1.04	1.50	1.74	2.30	2.12	1.72	0.86
Italy: coastal areas .....	2.32	0.41	0.24	0.13	0.41	0.03	0.03	0.99	0.34	1.10
Italy: other areas .....	0.90	1.35	0.85	1.94	0.59	0.58	0.39	0.52	0.07	—
Italy .....	3.22	1.76	1.09	2.07	1.00	0.61	0.42	1.51	0.41	1.10
The Netherlands .....	0.52	0.63	-0.02	0.56	0.19	0.10	0.03	0.10	0.02	—
<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>5.74</b>	<b>7.82</b>	<b>3.90</b>	<b>2.51</b>

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

TABLE XVII d  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	0.05	—	0.06	—	0.08	5.56	11.58	1.90	2.05	3.05
North Rhine/Westphalia .....	2.51	1.21	1.68	1.77	3.98	9.81	6.55	3.64	15.05	8.72
Southern Germany .....	0.51	0.38	0.10	4.01	0.67	3.74	2.68	1.90	1.96	0.52
Saar .....	—	1.49	4.66	0.13	0.38	—	0.51	0.74	0.37	—
<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>21.32</i>	<i>8.18</i>	<i>19.43</i>	<i>12.29</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>0.65</i>	<i>0.82</i>	<i>3.47</i>	<i>6.91</i>
Eastern France .....	0.77	0.05	0.04	0.07	0.56	1.12	2.25	3.13	4.01	3.21
Northern France .....	0.34	0.38	0.82	0.09	1.12	7.43	4.54	6.68	5.50	1.35
Southern France .....	•	•	•	•	•	4.12	0.80	•	1.80	0.90
France: other areas .....	6.30	3.58	2.53	2.39	5.92	2.92	4.68	11.87	4.57	2.38
<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>12.27</i>	<i>21.68</i>	<i>15.88</i>	<i>7.84</i>
Italy: coastal areas .....	1.41	0.85	0.25	0.67	0.73	1.40	3.15	2.06	1.19	0.21
Italy: other areas .....	3.46	2.06	6.47	6.82	6.23	10.65	12.16	14.23	24.35	37.34
<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>15.31</i>	<i>16.29</i>	<i>25.54</i>	<i>37.55</i>
<i>Luxembourg</i> .....	<i>0.01</i>	<i>0.01</i>	—	—	—	<i>0.34</i>	<i>0.42</i>	<i>0.42</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>0.65</i>	<i>0.52</i>	<i>0.19</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>50.62</b>	<b>47.91</b>	<b>64.55</b>	<b>64.59</b>

LD, KALDO AND OTHER STEELWORKS
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## Investment

TABLE XVII e  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
								on Jan. 1, 1971 for	on Jan. 1, 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Northern Germany .....	0.63	0.18	12.43	15.23	16.30	7.87	4.97	10.21	9.54	5.10
North Rhine/Westphalia .....	23.58	31.96	14.20	19.67	43.24	35.89	16.66	15.11	19.71	45.41
Southern Germany .....	—	—	—	—	—	—	—	—	—	—
Saar .....	0.36	3.26	10.19	9.10	2.55	1.61	2.49	6.41	4.71	5.23
Germany (FR) .....	24.57	35.40	36.82	44.00	62.09	45.37	24.12	31.73	33.96	55.74
Belgium .....	25.86	21.72	27.09	12.40	22.85	30.67	11.83	18.04	15.00	4.54
Eastern France .....	2.51	3.36	7.84	22.99	32.51	35.12	32.74	41.93	18.66	4.59
Northern France .....	2.40	1.20	2.60	4.60	2.97	13.14	38.84	33.10	34.52	17.10
Southern France .....	•	•	•	•	•	•	0.96	•	43.03	32.95
France: other areas .....	0.15	1.27	1.91	1.77	1.26	1.26	0.81	15.00	0.54	0.11
France .....	5.06	5.83	12.35	29.36	36.74	49.52	73.35	90.03	96.75	54.75
Italy: coastal areas .....	18.16	8.37	7.52	9.00	21.77	28.69	46.22	55.96	77.94	63.72
Italy: other areas .....	—	—	0.73	—	2.41	2.37	0.33	0.34	0.35	0.32
Italy .....	18.16	8.37	8.25	9.00	24.18	31.06	46.55	56.30	78.29	64.04
Luxembourg .....	9.79	12.59	7.73	1.64	1.81	4.76	9.15	8.77	10.26	0.94
Netherlands .....	1.59	8.90	17.95	23.13	5.54	5.82	13.84	5.82	8.59	3.38
<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>178.83</b>	<b>210.69</b>	<b>242.85</b>	<b>183.39</b>

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

TABLE XVII f  
Capital Expenditure by Areas

\*000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	3.47	1.29	12.69	15.63	17.03	13.59	17.84	13.69	12.27	8.15
North Rhine/Westphalia ....	32.21	37.23	23.62	22.76	48.22	47.13	24.59	20.97	35.64	54.14
Southern Germany .....	1.38	0.91	1.11	4.84	1.86	5.14	3.24	2.52	2.68	1.06
Saar .....	2.43	6.44	16.13	10.92	4.00	2.37	4.73	7.81	8.21	8.39
Germany (FR) .....	39.49	45.87	53.55	54.15	71.11	68.23	50.40	44.99	58.80	71.74
Belgium .....	28.78	23.80	28.18	14.21	25.98	39.80	15.56	21.79	22.74	13.02
Eastern France .....	6.63	7.60	11.13	26.58	37.65	43.46	39.18	47.99	26.21	8.62
Northern France .....	3.14	2.45	3.63	4.97	4.85	22.24	44.60	40.87	40.83	19.10
Southern France .....	•	•	•	•	•	4.12	1.76	•	44.83	33.85
France: other areas .....	6.63	4.96	4.54	4.23	7.37	4.59	6.26	27.62	5.36	2.49
France .....	16.40	15.01	19.30	35.78	49.87	74.41	91.80	116.48	117.23	64.06
Italy: coastal areas .....	21.89	9.63	8.01	9.80	22.91	30.12	49.40	59.01	79.47	65.03
Italy: other areas .....	4.36	3.41	8.05	8.76	9.23	13.60	12.88	15.09	24.77	37.66
Italy .....	26.25	13.04	16.06	18.56	32.14	43.72	62.28	74.10	104.24	102.69
Luxembourg .....	10.91	14.68	8.68	1.73	1.85	5.39	9.98	10.17	10.95	1.03
Netherlands .....	2.86	9.72	17.98	23.69	5.82	6.29	14.52	6.44	8.80	3.38
<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>244.54</b>	<b>273.97</b>	<b>322.76</b>	<b>255.92</b>

<b>BLOOMING AND SLABBING MILLS</b>
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Investment

TABLE XVIII a  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	1.53	1.25	1.20	1.57	1.52	6.09	3.74	5.27	5.49	6.16
North Rhine/Westphalia ....	6.59	13.11	8.15	9.42	11.66	13.04	22.09	21.71	9.12	2.94
Southern Germany .....	0.56	3.48	0.45	0.13	0.47	0.33	0.21	0.35	0.21	0.07
Saar .....	4.14	0.82	0.47	0.24	1.51	0.84	0.16	0.25	0.11	—
Germany (FR) .....	12.82	18.66	10.27	11.36	15.16	20.30	26.20	27.58	14.93	9.17
Belgium .....	10.95	10.29	7.89	3.89	3.72	6.20	8.43	8.06	2.51	0.65
Eastern France .....	2.57	4.66	18.10	44.85	35.79	23.31	12.08	19.81	15.50	5.80
Northern France .....	1.80	0.90	2.50	5.80	2.40	0.58	0.20	0.30	0.16	—
Southern France .....	•	•	•	•	•	—	3.12	•	34.39	28.09
France: other areas .....	0.25	0.32	0.32	0.33	0.29	0.77	1.38	24.43	0.87	1.36
France .....	4.62	5.88	20.92	50.98	38.48	24.66	16.78	44.54	50.92	35.25
Italy: coastal areas .....	8.96	5.33	5.62	2.60	7.57	9.55	18.49	53.34	50.91	32.10
Italy: other areas .....	3.51	1.68	2.70	2.19	1.51	0.80	0.82	2.16	4.74	4.16
Italy .....	12.47	7.01	8.32	4.79	9.08	10.35	19.31	55.50	55.65	36.26
Luxembourg .....	0.06	0.16	0.15	0.78	2.42	9.33	14.43	15.28	10.87	0.30
The Netherlands .....	3.22	1.43	4.95	11.17	22.53	8.43	3.51	3.11	2.60	0.93
<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>88.66</b>	<b>154.07</b>	<b>137.48</b>	<b>82.56</b>

CONTINUOUS CASTING PLANTS
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## Investment

TABLE XVIII b  
Capital Expenditure by Areas

'000,000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	—	—	—	—	—	3.84	6.36	2.62	10.42	20.38
North Rhine/Westphalia .....	9.55	9.56	12.58	4.73	15.55	18.12	20.46	18.04	7.89	20.38
Southern Germany .....	0.02	0.20	0.05	1.19	4.31	2.92	2.48	2.54	0.07	—
Saar .....	0.15	1.88	8.34	6.46	0.54	2.28	1.95	1.50	—	—
Germany (FR) .....	9.72	11.64	20.97	12.38	20.40	27.16	31.25	24.70	18.38	40.76
Belgium .....	—	—	—	—	—	—	1.04	2.10	4.62	1.50
Eastern France .....	0.03	—	—	—	0.02	—	0.42	0.43	0.02	—
Northern France .....	—	—	0.67	1.22	5.00	15.38	33.41	30.58	28.16	18.45
Southern France .....	•	•	•	•	•	—	—	•	2.70	13.50
France: other areas .....	—	—	—	0.95	0.62	0.14	0.10	0.01	—	—
France .....	0.03	—	0.67	2.17	5.64	15.52	33.93	31.02	30.88	31.95
Italy: coastal areas .....	—	0.41	0.01	—	1.41	12.17	14.25	20.52	11.47	19.82
Italy: other areas .....	0.26	1.07	6.61	5.34	3.07	8.25	3.03	2.81	4.90	7.68
Italy .....	0.26	1.48	6.62	5.34	4.48	20.42	17.28	23.33	16.37	27.50
Luxembourg .....	—	—	—	—	—	—	—	—	—	—
Netherlands .....	—	—	—	—	—	—	—	—	—	—
<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>83.50</b>	<b>81.15</b>	<b>70.25</b>	<b>101.71</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, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	3.79	2.86	0.87	0.48	1.26	11.44	16.38	12.93	7.29	1.07
North Rhine/Westphalia .....	22.45	16.07	18.08	11.71	10.45	16.29	18.67	18.57	17.57	3.08
Southern Germany .....	0.93	2.35	0.33	4.27	2.15	8.81	12.52	10.38	7.75	2.67
Saar .....	1.60	2.42	2.38	11.74	0.94	4.84	22.47	38.74	39.09	18.37
Germany (FR) .....	28.77	23.70	21.66	28.20	14.80	41.38	70.04	80.62	71.70	25.19
Belgium .....	4.93	3.62	2.70	5.17	18.42	32.09	20.98	19.08	16.43	6.06
Eastern France .....	25.88	41.10	21.31	14.49	11.68	16.75	15.21	16.07	12.77	12.97
Northern France .....	1.35	1.47	1.80	2.62	1.78	2.15	2.52	5.11	5.28	0.82
Southern France .....	•	•	•	•	•	—	6.47	•	—	—
France: other areas .....	8.39	6.12	3.83	2.75	2.09	2.91	4.43	21.73	13.86	11.40
France .....	35.62	48.69	26.94	19.86	15.55	21.81	28.63	42.91	31.91	25.19
Italy: coastal areas .....	20.57	22.49	11.54	4.54	2.10	1.92	3.95	3.10	3.69	2.76
Italy: other areas .....	6.33	9.23	12.29	7.25	10.64	14.68	22.84	17.58	18.74	11.91
Italy .....	26.90	31.72	23.83	11.79	12.74	16.60	26.79	20.68	22.43	14.67
Luxembourg .....	5.42	2.58	0.38	0.86	9.40	2.31	2.11	1.38	1.16	0.51
Netherlands .....	7.83	5.97	3.33	0.51	1.43	0.95	0.59	0.62	0.12	—
<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>149.14</b>	<b>165.29</b>	<b>143.75</b>	<b>71.62</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, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	7.01	5.07	2.10	2.85	5.48	26.87	35.55	47.93	40.87	43.00
North Rhine/Westphalia .....	77.51	84.90	31.33	32.88	56.52	134.98	123.99	126.19	91.08	46.23
Southern Germany .....	2.40	4.17	2.24	0.70	2.40	11.70	17.18	10.92	8.50	3.82
Saar .....	0.48	0.43	0.42	0.42	1.01	39.61	51.41	40.37	9.39	—
Germany (FR) .....	87.40	94.57	36.09	36.85	65.41	213.16	228.13	225.41	149.84	93.05
Belgium .....	51.87	47.76	22.04	25.46	47.87	90.96	51.43	52.39	32.59	6.78
Eastern France .....	13.93	4.40	6.86	13.13	25.10	32.02	16.77	18.15	12.60	4.62
Northern France .....	10.68	4.67	10.42	19.67	19.42	30.02	70.93	73.89	118.86	107.05
Southern France .....	•	•	•	•	•	—	11.32	•	77.60	66.62
France: other areas .....	6.04	5.41	8.17	9.13	14.09	19.66	21.00	72.31	30.91	13.22
France .....	30.65	14.48	25.45	41.93	58.61	81.70	120.02	164.35	239.97	191.51
Italy: coastal areas .....	10.65	3.35	4.57	17.07	19.50	52.64	124.36	212.03	161.14	128.63
Italy: other areas .....	29.87	12.41	14.38	14.12	17.72	45.99	43.95	40.26	22.16	23.60
Italy .....	40.53	15.76	18.95	31.19	37.22	98.63	168.31	252.29	183.30	152.23
Luxembourg .....	1.56	3.31	3.81	3.49	0.85	0.33	0.36	0.67	1.19	0.52
Netherlands .....	7.03	10.12	24.52	54.90	50.29	51.30	39.45	28.36	13.44	4.06
<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>607.70</b>	<b>723.47</b>	<b>620.33</b>	<b>448.15</b>

<b>ROLLING-MILLS TOTAL <sup>(1)</sup></b>
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<b>Investment</b>
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TABLE XVIII e  
Capital Expenditure by Areas

<sup>'000,000 units of account EUR</sup>

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
								on Jan. 1, 1971 for	on Jan. 1, 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Northern Germany .....	12.64	9.72	4.97	6.95	9.11	50.28	64.42	71.29	66.39	72.89
North Rhine/Westphalia . . .	132.60	134.62	73.83	61.99	106.35	210.92	203.84	199.80	165.09	90.52
Southern Germany .....	4.58	18.50	4.51	7.69	12.93	33.37	34.58	28.78	17.83	14.06
Saar .....	8.62	6.95	13.95	20.86	5.47	49.90	77.64	81.31	49.65	19.62
Germany (FR) .....	158.44	169.79	97.26	97.49	133.86	344.47	380.48	381.18	298.96	197.09
Belgium .....	71.71	64.35	35.00	39.48	79.58	134.34	86.79	91.20	62.93	16.65
Eastern France .....	47.95	54.49	49.28	76.34	76.84	76.07	50.95	60.31	47.16	25.57
Northern France .....	15.07	7.33	16.26	30.62	34.21	51.47	118.50	120.70	170.11	139.93
Southern France .....	•	•	•	•	•	—	21.30	•	146.20	131.98
France: other areas .....	17.10	16.10	19.75	17.23	20.58	33.10	36.68	139.75	51.95	27.92
France .....	80.12	77.92	85.29	124.19	131.63	160.64	227.43	320.76	415.42	325.40
Italy: coastal areas .....	46.61	34.32	22.93	25.34	36.98	83.02	175.27	301.83	238.08	193.92
Italy: other areas .....	41.85	25.88	38.74	32.11	35.40	74.91	80.64	69.34	55.74	52.06
Italy .....	88.46	60.20	61.67	57.45	72.38	157.93	255.91	371.17	293.82	245.98
Luxembourg .....	7.27	7.92	4.64	5.68	12.69	12.13	16.91	17.86	13.76	1.70
Netherlands .....	19.49	24.83	33.86	66.75	74.59	61.01	43.71	32.42	16.31	5.01
<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>1 011.23</b>	<b>1 214.59</b>	<b>1 101.20</b>	<b>791.83</b>

(<sup>1</sup>) 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, or approved)		
	1965	1966	1967	1968	1969	1970	1971	on Jan. 1, 1971 for	on Jan. 1, 1972 for	
								1971	1972	1973
Northern Germany .....	3.55	1.89	1.93	4.61	1.92	9.62	17.64	6.64	11.22	8.48
North Rhine/Westphalia .....	10.12	7.03	7.36	13.05	16.61	12.00	8.39	10.66	12.63	12.42
Southern Germany .....	1.10	0.79	0.77	0.34	4.48	4.62	8.41	11.38	3.35	1.48
Saar .....	1.23	0.63	0.42	0.71	1.16	1.94	1.60	1.95	1.71	0.49
<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>36.04</i>	<i>30.63</i>	<i>28.91</i>	<i>22.87</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>4.39</i>	<i>4.91</i>	<i>4.68</i>	<i>1.72</i>
Eastern France .....	3.26	3.04	3.12	3.34	2.63	7.40	4.76	5.28	3.81	1.47
Northern France .....	1.47	0.41	0.23	0.14	0.20	1.13	0.22	2.15	0.12	0.09
Southern France .....	•	•	•	•	•	—	7.35	•	20.71	14.40
France: other areas .....	0.65	0.78	0.99	1.21	1.46	0.62	0.99	1.23	1.42	0.60
<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>13.32</i>	<i>8.66</i>	<i>26.06</i>	<i>16.56</i>
Italy: coastal areas .....	16.65	5.20	0.94	0.38	—	0.08	8.08	4.15	14.91	19.01
Italy: other areas .....	1.37	1.68	2.76	1.18	3.59	3.59	6.92	2.16	8.45	9.72
<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>15.00</i>	<i>6.31</i>	<i>23.36</i>	<i>28.73</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>0.45</i>	<i>0.36</i>	<i>0.92</i>	<i>0.45</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>7.89</i>	<i>7.12</i>	<i>8.27</i>	<i>4.42</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>77.09</b>	<b>57.99</b>	<b>92.20</b>	<b>74.75</b>

MISCELLANEOUS (IRON AND STEEL WORKS)
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## Investment

TABLE XIX b  
Capital Expenditure by Areas

'000.000 units of account EUR

Area	Actual expenditure							Estimated expenditure (projects in progress, or approved)		
								on Jan. 1, 1971 for	on Jan. 1, 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Northern Germany .....	6.79	4.12	4.89	3.69	5.96	14.26	14.81	13.06	9.52	3.51
North Rhine/Westphalia .....	31.38	23.20	12.40	17.73	23.39	29.72	40.70	31.18	35.87	13.53
Southern Germany .....	1.14	2.01	2.08	1.44	0.76	4.41	5.21	13.97	2.83	1.32
Saar .....	10.40	9.34	6.48	4.60	4.76	14.49	17.99	18.29	14.05	7.18
Germany (FR) .....	49.71	38.67	25.85	27.46	34.87	62.88	78.71	76.50	62.27	25.54
Belgium .....	9.96	10.94	8.48	5.37	7.25	7.79	10.68	16.99	15.17	10.78
Eastern France .....	30.11	15.28	14.92	26.71	28.18	24.92	19.96	21.16	16.75	4.95
Northern France .....	3.49	4.32	5.13	4.43	6.60	20.51	44.04	41.78	53.02	45.91
Southern France .....	•	•	•	•	•	—	25.52	•	73.82	82.46
France: other areas .....	1.95	3.04	2.04	1.89	2.95	6.23	7.03	67.48	5.35	1.28
France .....	35.55	22.64	22.09	33.03	37.73	51.66	96.55	130.42	148.94	134.60
Italy: coastal areas .....	58.29	54.46	22.14	11.07	11.32	23.52	63.21	113.57	162.74	118.99
Italy: other areas .....	4.41	3.83	6.36	4.22	8.42	15.66	12.95	16.83	16.74	11.33
Italy .....	62.70	58.29	28.50	15.29	19.74	39.18	76.16	130.48	179.48	130.32
Luxembourg .....	1.26	1.73	1.20	2.03	2.92	3.34	4.13	5.51	7.13	4.56
Netherlands .....	6.79	13.15	18.55	22.02	15.08	18.82	22.36	28.67	24.82	9.28
<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>288.59</b>	<b>388.49</b>	<b>437.81</b>	<b>315.08</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, or approved)		
								on Jan. 1, 1971 for	on Jan. 1, 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Northern Germany .....	10.34	6.01	6.82	8.30	7.88	23.88	32.45	17.64	20.74	11.99
North Rhine/Westphalia ....	41.50	30.23	19.76	30.78	40.00	41.72	49.09	41.84	48.50	25.95
Southern Germany .....	2.24	2.80	2.85	1.78	5.24	9.03	13.62	25.35	6.18	2.80
Saar .....	11.63	9.97	6.90	5.31	5.92	16.43	19.59	20.24	15.76	7.67
Germany (FR) .....	65.71	49.01	36.33	46.17	59.04	91.06	114.75	107.13	91.18	48.41
Belgium .....	23.58	24.91	15.94	7.66	10.27	10.84	15.07	21.90	19.85	12.50
Eastern France .....	33.37	18.32	18.04	30.05	30.81	32.32	24.72	26.44	20.56	6.42
Northern France .....	4.96	4.73	5.36	4.57	6.80	21.64	44.26	43.93	53.14	46.00
Southern France .....	•	•	•	•	•	—	32.87	•	94.53	96.86
France: other areas .....	2.60	3.82	3.03	3.10	4.41	6.85	8.02	68.71	6.77	1.88
France .....	40.93	26.87	26.43	37.72	42.02	60.81	109.87	139.08	175.00	151.16
Italy: coastal areas .....	74.94	59.66	23.08	11.45	11.32	23.60	71.29	117.72	177.65	138.00
Italy: other areas .....	5.78	5.51	9.12	5.40	12.01	19.25	19.87	18.99	25.19	21.05
Italy .....	80.72	65.17	32.20	16.85	23.33	42.85	91.16	136.71	202.84	159.05
Luxembourg .....	1.76	3.23	1.67	2.63	2.98	3.37	4.58	5.87	3.05	5.01
Netherlands .....	8.99	19.27	25.57	27.54	20.80	26.53	30.25	35.79	33.09	13.70
Total	221.69	188.46	138.14	138.57	158.44	235.46	365.68	446.48	530.01	389.83

## SINTER

## Production

TABLE XX  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
8.3	Northern Germany .....	7.9	8.4	8.4	9.0	10.0	10.6	10.8	10.8	10.8	10.8
19.1	North Rhine/Westphalia ...	21.4	20.8	22.0	21.4	21.6	25.4	30.6	31.1	31.9	32.1
0.3	Southern Germany .....	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5.5	Saar .....	6.1	6.1	6.5	7.0	7.5	7.3	7.5	7.5	7.5	7.5
33.2	Germany (FR) .....	35.8	35.7	37.2	37.7	39.4	43.6	49.2	49.7	50.5	50.7
10.3	Belgium .....	9.4	10.1	10.7	11.3	11.8	12.1	13.8	14.7	14.9	15.1
24.0	Eastern France .....	18.0	19.7	20.2	22.1	22.3	25.1	26.1	26.8	28.1	28.1
5.2	Northern France .....	3.7	4.3	5.0	5.2	5.6	6.2	9.7	9.7	9.7	9.7
—	Southern France .....	—	—	—	—	—	—	—	—	3.2	4.3
1.0	France: other areas .....	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
30.2	France .....	23.1	25.4	26.6	28.7	29.4	32.8	37.3	38.0	42.5	43.6
8.5	Italy: coastal areas .....	8.0	9.3	9.4	9.6	10.9	11.7	12.0	14.8	17.1	17.1
0.2	Italy: other areas .....	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
8.7	Italy .....	8.6	9.8	9.9	10.1	11.4	12.2	12.5	15.3	17.5	17.5
6.4	Luxembourg .....	5.6	5.7	5.7	5.8	5.8	7.4	7.4	7.4	9.4	9.4
5.9	Netherlands .....	3.2	3.3	3.4	3.4	5.3	6.2	7.0	7.1	7.2	7.2
94.7	Total	85.7	90.0	93.5	97.0	103.1	114.3	127.2	136.2	142.0	143.5

<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 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
5.2	Northern Germany .....	5.7	5.9	6.2	6.7	7.4	8.0	7.9	10.5	10.7	10.7
19.9	North Rhine/Westphalia ...	23.3	23.6	24.0	24.2	25.7	27.2	27.7	30.8	32.6	33.8
1.0	Southern Germany .....	1.8	1.7	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
3.9	Saar .....	5.0	5.1	5.1	5.4	5.7	5.8	6.5	6.9	7.1	7.1
30.0	Germany (FR) .....	35.8	36.3	36.7	37.6	40.1	42.3	43.4	49.5	51.7	52.9
10.5	Belgium .....	10.2	11.3	12.2	12.6	13.1	13.4	14.2	14.7	15.1	15.3
12.3	Eastern France .....	14.1	14.1	13.9	13.4	14.0	14.1	14.3	14.4	14.5	13.0
5.0	Northern France .....	4.1	4.2	4.7	5.6	6.3	6.7	6.8	8.7	9.5	10.2
—	Southern France .....	—	—	—	—	—	—	—	—	1.0	2.5
1.0	France: other areas .....	1.1	1.0	0.8	0.9	0.9	1.1	1.2	1.2	1.2	1.3
18.3	France .....	19.3	19.3	19.4	19.9	21.2	21.9	22.3	24.3	26.2	27.0
8.2	Italy: coastal areas .....	7.3	8.1	8.1	8.9	10.0	11.3	11.9	13.4	15.3	16.3
0.3	Italy: other areas .....	0.5	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.7
8.5	Italy .....	7.8	8.6	8.7	9.6	10.7	11.9	12.5	14.0	16.0	17.0
4.6	Luxembourg .....	4.8	5.1	5.1	5.2	5.3	5.3	5.3	5.4	5.4	5.5
3.8	Netherlands .....	2.4	2.6	2.9	3.5	3.8	4.5	5.2	5.6	6.0	6.0
75.7	<b>Total</b>	80.3	83.2	85.0	88.4	94.1	99.3	102.9	113.5	120.4	123.7



<b>BASIC BESSEMER STEEL</b>
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Production

TABLE XXII a  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
—	Northern Germany .....	1.2	1.2	0.8	0.4	—	—	—	—	—	—
0.5	North Rhine/Westphalia ...	7.4	6.4	3.8	2.9	0.8	0.9	0.5	—	—	—
—	Southern Germany .....	1.0	1.0	1.0	1.0	—	—	—	—	—	—
2.3	Saar .....	3.8	3.9	3.9	3.7	3.6	3.7	3.1	2.7	1.3	1.5
2.8	Germany (FR) .....	13.4	12.5	9.5	8.0	4.4	4.6	3.6	2.7	1.3	1.5
4.3	Belgium .....	7.1	7.4	7.5	7.1	6.5	5.4	3.4	2.5	2.3	2.3
7.6	Eastern France .....	10.2	10.5	10.5	10.1	9.4	8.9	7.9	6.7	6.2	6.2
—	Northern France .....	1.4	1.2	1.3	1.2	0.8	—	—	—	—	—
0.5	France: other areas .....	0.6	0.5	0.4	0.3	0.4	0.4	0.5	0.4	0.4	0.4
8.1	France .....	12.2	12.2	12.2	11.6	10.6	9.3	8.4	7.1	6.6	6.6
3.2	Luxembourg .....	4.3	4.0	3.7	3.8	3.6	3.6	3.4	2.2	2.2	2.2
18.4	Total	37.0	36.1	32.9	30.5	25.1	22.9	18.8	14.5	12.4	12.6

<b>BOTTOM-BLOWN STEELS</b> <b>(OBM, LWS, ETC.)</b>
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Production

TABLE XXII b  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential		Expected production potential			
		1970	1971	1972	1973	1974	1975
0.8	Southern Germany .....	1.1	1.3	1.3	1.3	1.3	1.3
0.2	Saar .....	0.3	0.3	0.5	0.7	1.2	1.2
1.0	Germany (FR) .....	1.4	1.6	1.8	2.0	2.5	2.5
0.0	Belgium .....	—	1.1	1.4	1.8	1.8	1.8
0.8	Eastern France .....	0.3	1.0	1.1	1.3	1.7	1.7
0.7	Northern France .....	0.2	0.8	0.8	0.8	0.8	0.8
1.5	France .....	0.5	1.8	1.9	2.1	2.5	2.5
0.1	Luxembourg .....	0.1	0.1	0.3	0.6	0.6	0.6
2.6	Total	2.0	3.6	5.4	6.5	7.4	7.4

<b>OPEN-HEARTH STEEL</b>
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Production

TABLE XXII c  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
1.2	Northern Germany .....	3.4	3.6	3.2	2.3	2.3	2.5	2.5	1.9	1.9	1.9
6.3	North Rhine/Westphalia ...	14.2	12.2	11.4	10.7	9.9	9.7	9.2	9.0	7.4	7.2
0.4	Southern Germany .....	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5
0.6	Saar .....	1.1	1.1	1.1	0.9	0.9	0.9	0.6	0.7	0.7	0.7
8.5	Germany (FR) .....	19.5	17.7	16.4	14.6	13.7	13.6	12.8	12.1	10.5	10.3
0.3	Belgium .....	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
2.0	Eastern France .....	2.8	2.9	2.8	2.6	2.6	2.4	1.5	1.5	1.3	1.0
1.4	Northern France .....	2.4	2.2	1.9	1.9	1.9	1.8	1.8	1.8	1.4	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
3.8	France .....	5.7	5.6	5.2	5.0	5.0	4.7	3.8	3.8	3.2	2.8
2.3	Italy: coastal areas .....	3.7	3.9	3.9	3.8	3.4	2.7	2.7	2.7	2.6	2.6
1.7	Italy: other areas .....	2.4	2.4	2.4	2.5	2.5	2.2	2.2	1.9	1.5	0.9
4.0	Italy .....	6.1	6.3	6.3	6.3	5.9	4.9	4.9	4.6	4.1	3.5
0.7	Netherlands .....	1.0	1.0	1.1	1.1	1.0	1.0	0.7	0.1	0.1	0.1
17.3	Total	32.8	31.1	29.4	27.4	26.0	24.6	22.6	21.0	18.2	17.0

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

TABLE XXII d  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0.3	Northern Germany .....	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.7	1.0	1.1
2.8	North Rhine/Westphalia ...	3.1	2.9	3.1	3.3	3.5	3.6	3.5	3.7	3.8	4.0
0.5	Southern Germany .....	0.2	0.3	0.3	0.4	0.7	0.6	0.9	1.0	1.0	0.1
0.4	Saar .....	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4.0	Germany (FR) .....	3.8	3.8	4.1	4.5	4.9	5.1	5.5	5.9	6.3	6.6
0.5	Belgium .....	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.7	1.0	1.0
0.7	Eastern France .....	0.6	0.6	0.6	0.7	0.7	0.9	0.9	0.9	0.9	1.0
0.4	Northern France .....	0.3	0.3	0.4	0.5	0.5	0.4	0.6	0.6	0.6	0.6
0.2	Southern France .....	•	•	•	•	•	0.2	0.2	0.3	0.5	0.5
1.1	France - other areas .....	1.4	1.5	1.5	1.5	1.6	1.4	1.4	1.4	1.5	1.6
2.4	France .....	2.3	2.4	2.5	2.7	2.8	2.9	3.1	3.2	3.5	3.7
0.4	Italy: coastal areas .....	0.6	0.7	0.6	0.8	0.5	0.6	0.7	0.8	0.8	0.8
6.7	Italy: other areas .....	5.9	6.1	7.0	7.1	7.6	7.9	8.2	8.7	9.4	10.4
7.1	Italy .....	6.5	6.8	7.6	7.9	8.1	8.5	8.9	9.5	10.2	11.2
0.1	Luxembourg .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.3	Netherlands .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
14.4	<b>Total</b>	13.6	14.0	15.1	16.1	16.8	17.6	18.7	19.8	21.5	23.0

LD, KALDO AND OTHER STEELS
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## Production

TABLE XXII e  
Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction  1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
5.1	Northern Germany .....	1.8	1.9	3.3	5.3	6.6	6.5	7.2	8.1	8.7	8.7
17.9	North Rhine/Westphalia ...	8.7	11.4	14.1	16.9	20.6	24.6	25.8	27.1	30.9	32.3
—	Southern Germany .....	0.0	—	—	—	—	—	—	—	—	—
1.0	Saar .....	0.3	0.4	0.4	1.3	1.6	1.8	2.3	4.0	3.2	4.2
24.0	Germany (FR) .....	10.8	13.7	17.8	23.5	28.8	32.9	35.3	38.2	42.8	45.2
7.4	Belgium .....	2.9	3.9	5.4	6.5	7.8	9.1	11.3	12.2	12.7	13.0
2.6	Eastern France .....	1.1	1.1	1.1	1.4	2.3	2.6	4.4	4.9	5.3	5.5
4.2	Northern France .....	2.1	2.5	2.9	3.7	4.4	5.4	5.9	7.8	9.1	10.1
—	Southern France .....	—	—	—	—	—	—	—	—	1.2	3.0
0.2	France: other areas .....	0.0	0.1	0.2	0.3	0.4	0.5	0.4	0.6	0.5	0.5
7.0	France .....	3.2	3.7	4.2	5.4	7.1	8.5	10.7	13.3	16.1	19.1
6.2	Italy: coastal areas .....	4.9	5.7	5.7	6.1	7.0	8.9	10.5	12.4	14.1	15.5
0.1	Italy: other areas .....	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	0.2
6.3	Italy .....	4.9	5.7	5.7	6.1	7.1	9.1	10.8	12.7	14.3	15.7
1.9	Luxembourg .....	0.7	1.6	1.9	2.0	2.2	2.3	2.3	3.5	3.5	3.5
4.1	Netherlands .....	2.1	2.2	2.4	3.4	3.9	4.9	5.7	6.5	6.9	6.9
50.7	Total	24.6	30.8	37.4	46.9	56.9	66.8	76.1	86.4	96.3	103.4

<b>STEEL-TOTAL</b>
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Production

TABLE XXII f  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
6.6	Northern Germany .....	6.7	7.0	7.6	8.3	9.1	9.4	10.3	10.7	11.6	11.7
27.5	North Rhine/Westphalia ...	33.4	32.9	32.4	33.8	34.7	38.8	39.0	39.8	42.1	43.5
1.7	Southern Germany .....	2.0	2.1	2.0	2.1	2.4	2.4	2.7	2.8	2.8	2.8
4.5	Saar .....	5.4	5.7	5.8	6.4	6.8	7.2	7.0	7.6	6.9	8.1
40.3	Germany (FR) .....	47.5	47.7	47.8	50.6	53.0	57.8	59.0	60.9	63.4	66.1
12.5	Belgium .....	11.1	12.4	13.8	14.5	15.2	15.6	17.2	17.6	18.1	18.4
13.7	Eastern France .....	14.7	15.1	15.0	14.8	15.3	15.8	15.8	15.3	15.4	15.4
6.7	Northern France .....	6.2	6.2	6.5	7.3	7.9	8.4	9.1	11.0	11.9	12.8
0.2	Southern France .....	•	•	•	•	•	0.2	0.2	0.3	1.7	3.5
2.2	France: other areas .....	2.5	2.6	2.6	2.6	2.9	2.8	2.8	2.9	2.9	3.0
22.8	France .....	23.4	23.9	24.1	24.7	26.1	27.2	27.9	29.5	31.9	34.7
8.9	Italy: coastal areas .....	9.2	10.3	10.2	10.7	11.0	12.2	13.9	15.9	17.5	18.9
8.5	Italy: other areas .....	8.3	8.5	9.4	9.6	10.2	10.3	10.7	10.9	11.1	11.5
17.4	Italy .....	17.5	18.8	19.6	20.3	21.2	22.5	24.6	26.8	28.6	30.4
5.3	Luxembourg .....	5.1	5.7	5.7	5.9	6.0	6.1	6.1	6.4	6.4	6.4
5.1	Netherlands .....	3.4	3.5	3.8	4.9	5.3	6.3	6.8	7.0	7.4	7.4
103.4	Total	108.0	112.0	114.8	120.9	126.8	135.5	141.6	148.2	155.8	163.4

## SECTIONS

## Production

TABLE XXIII a  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
1.4	Northern Germany .....	2.6	2.8	2.9	3.1	2.6	2.9	3.0	3.1	3.2	3.2
7.1	North Rhine/Westphalia ..	12.5	12.7	12.4	11.0	11.6	12.6	12.5	12.8	13.1	13.1
1.1	Southern Germany .....	1.0	1.1	1.1	1.3	1.3	1.7	2.1	2.2	2.3	2.3
2.2	Saar .....	3.7	3.6	3.6	3.4	3.6	3.4	3.5	4.1	4.4	4.5
11.8	Germany (FR) .....	19.8	20.2	20.0	18.8	19.1	20.6	21.1	22.2	23.0	23.1
4.2	Belgium .....	4.6	4.9	5.0	5.2	5.1	5.7	6.7	6.8	6.9	6.9
5.6	Eastern France .....	6.0	6.1	6.9	7.0	7.1	7.2	7.2	7.5	7.3	7.3
1.4	Northern France .....	1.8	1.6	1.6	1.6	1.6	1.7	1.8	1.8	1.8	1.8
—	Southern France .....	—	—	—	—	—	—	—	0.0	0.0	0.1
1.3	France: other areas .....	1.2	1.2	1.3	1.4	1.6	1.6	1.7	1.7	1.7	1.7
8.3	France .....	9.0	8.9	9.8	10.0	10.3	10.5	10.7	11.0	10.8	10.9
1.6	Italy: coastal areas .....	1.5	1.9	2.3	2.5	2.2	2.6	2.7	2.7	2.7	2.7
5.0	Italy: other areas .....	4.7	5.3	6.0	5.9	6.5	6.3	6.5	6.8	6.9	7.0
6.6	Italy .....	6.2	7.2	8.3	8.4	8.7	8.9	9.2	9.5	9.6	9.7
2.5	Luxembourg .....	2.5	2.7	2.7	2.9	2.9	3.0	3.1	3.3	3.3	3.3
0.7	Netherlands .....	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.0	1.0	1.0
34.1	Total	42.8	44.6	46.6	46.1	47.0	49.7	51.8	53.8	54.6	54.9

<b>FLAT PRODUCTS (1)</b>
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**Production**

TABLE XXIII b  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
2.2	Northern Germany .....	2.7	3.1	3.2	3.1	3.4	3.5	3.5	3.5	3.6	3.6
9.7	North Rhine/Westphalia ...	14.2	14.4	14.7	14.7	15.4	15.6	17.2	17.8	18.1	18.1
1.5	Southern Germany .....	1.8	1.9	1.9	1.9	1.9	1.9	2.2	2.7	2.6	2.7
0.7	Saar .....	1.4	1.4	1.5	1.8	1.4	1.5	2.3	2.2	2.3	2.2
14.1	Germany (FR) .....	20.1	20.8	21.3	21.5	22.1	22.5	25.2	26.2	26.6	26.6
4.3	Belgium .....	4.0	4.7	4.9	5.0	5.2	6.2	6.8	6.8	7.3	7.4
5.1	Eastern France .....	5.0	5.0	5.0	5.4	6.1	6.2	6.5	6.8	6.7	6.6
3.0	Northern France .....	2.7	2.8	3.0	3.4	3.7	3.9	4.2	4.4	4.9	5.3
0.6	France: other areas .....	0.5	0.5	0.5	0.6	0.6	0.6	0.7	1.1	1.2	1.2
8.7	France .....	8.2	8.3	8.5	9.4	10.4	10.7	11.4	12.3	12.8	13.1
2.8	Italy: coastal areas .....	2.4	2.9	3.3	3.4	3.6	4.1	5.0	5.8	6.8	7.4
2.9	Italy: other areas .....	3.0	3.3	3.4	3.4	3.6	3.7	3.9	4.0	4.1	4.1
5.7	Italy .....	5.4	6.2	6.7	6.8	7.2	7.8	8.9	9.8	10.9	11.5
1.3	Luxembourg .....	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7
2.3	Netherlands .....	1.9	1.7	2.1	2.3	2.4	3.2	3.8	4.0	4.2	4.2
36.4	<b>Total</b>	<b>41.0</b>	<b>43.2</b>	<b>45.0</b>	<b>46.5</b>	<b>48.9</b>	<b>52.0</b>	<b>57.7</b>	<b>60.8</b>	<b>63.5</b>	<b>64.6</b>

(1) Except coils—finished products.



FINISHED ROLLED PRODUCTS-TOTAL (1)
---------------------------------------

Production

TABLE XXIII c  
Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction  1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
3.6	Northern Germany .....	5.3	5.9	6.1	6.2	6.0	6.4	6.5	6.6	6.8	6.8
16.8	North Rhine/Westphalia ...	26.7	27.1	27.1	25.7	27.0	28.2	29.7	30.6	21.2	31.2
2.6	Southern Germany .....	2.8	3.0	3.0	3.2	3.2	3.6	4.3	4.9	4.9	5.0
2.9	Saar .....	5.1	5.0	5.1	5.2	5.0	4.9	5.8	6.3	6.7	6.7
25.9	Germany (FR) .....	39.9	41.0	41.3	40.3	41.2	43.1	46.3	48.4	49.6	49.7
8.5	Belgium .....	8.6	9.6	9.9	10.2	10.3	11.9	13.5	13.6	14.2	14.3
10.7	Eastern France .....	11.0	11.1	11.9	12.4	13.2	13.4	13.7	14.3	14.0	13.9
4.4	Northern France .....	4.5	4.4	4.6	5.0	5.3	5.6	6.0	6.2	6.7	7.1
—	Southern France .....	—	—	—	—	—	—	—	0.0	0.0	0.1
1.9	France: other areas .....	1.7	1.7	1.8	2.0	2.2	2.2	2.4	2.8	2.9	2.9
17.0	France .....	17.2	17.2	18.3	19.4	20.7	21.2	22.1	23.3	23.6	24.0
4.4	Italy: coastal areas .....	3.9	4.8	5.6	5.9	5.8	6.7	7.7	8.5	9.5	10.1
7.9	Italy: other areas .....	7.7	8.6	9.4	9.3	10.1	10.0	10.4	10.8	11.0	11.1
12.3	Italy .....	11.6	13.4	15.0	15.2	15.9	16.7	18.1	19.3	20.5	21.2
3.8	Luxembourg .....	3.9	4.2	4.2	4.4	4.5	4.6	4.7	5.0	5.0	5.0
3.0	Netherlands .....	2.6	2.4	2.9	3.1	3.3	4.2	4.8	5.0	5.2	5.2
70.5	Total	83.8	87.8	91.6	92.6	95.9	101.7	109.5	114.6	118.1	119.5

(1) Except coils—finished products.

**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 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
1.1	Northern Germany .....	2.4	2.6	2.6	2.8	2.3	2.6	2.5	2.6	2.6	2.6
4.8	North Rhine/Westphalia ...	9.5	9.7	9.2	8.0	8.4	9.2	9.1	9.3	9.4	9.4
0.9	Southern Germany .....	0.9	1.0	1.0	1.1	1.1	1.4	1.7	1.8	1.9	1.9
1.7	Saar .....	3.1	3.0	2.9	2.8	2.9	2.7	2.8	3.0	3.1	3.1
8.5	Germany (FR) .....	15.9	16.3	15.7	14.7	14.7	15.9	16.1	16.7	17.0	17.0
3.5	Belgium .....	3.4	3.7	3.8	4.1	4.1	4.7	5.8	5.8	5.9	6.0
3.8	Eastern France .....	4.2	4.4	4.9	4.9	4.9	4.9	5.0	5.2	4.8	4.8
1.2	Northern France .....	1.5	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.5	1.5
0.9	France: other areas .....	0.9	0.9	1.0	1.1	1.3	1.2	1.3	1.2	1.2	1.1
5.9	France .....	6.6	6.6	7.2	7.3	7.5	7.5	7.8	7.9	7.5	7.4
1.4	Italy: coastal areas .....	1.3	1.6	2.0	2.2	1.9	2.3	2.4	2.4	2.4	2.4
4.2	Italy: other areas .....	3.9	4.4	4.9	4.9	5.5	5.1	5.3	5.6	5.7	5.8
5.6	Italy .....	5.2	6.0	6.9	7.1	7.4	7.4	7.7	8.0	8.1	8.2
2.1	Luxembourg .....	2.2	2.4	2.3	2.4	2.4	2.5	2.6	2.8	2.8	2.8
0.4	Netherlands .....	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6
26.0	Total	33.6	35.3	36.3	36.0	36.6	38.6	40.6	41.8	41.9	42.0

## WIRE-ROD

## Production

TABLE XXIV b  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0.3	Northern Germany .....	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6
2.3	North Rhine/Westphalia ...	3.0	3.0	3.2	3.0	3.2	3.4	3.4	3.6	3.7	3.7
0.2	Southern Germany .....	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4
0.5	Saar .....	0.6	0.6	0.7	0.6	0.7	0.7	0.7	1.1	1.3	1.4
3.3	Germany (FR) .....	3.9	3.9	4.3	4.1	4.4	4.7	5.0	5.5	6.0	6.1
0.7	Belgium .....	1.2	1.2	1.2	1.1	1.0	1.0	0.9	1.0	1.0	0.9
1.8	Eastern France .....	1.8	1.7	2.0	2.1	2.2	2.3	2.2	2.3	2.5	2.5
0.2	Northern France .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
—	Southern France .....	—	—	—	—	—	—	—	0.0	0.0	0.1
0.4	France: other areas .....	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6
2.4	France .....	2.4	2.3	2.6	2.7	2.8	3.0	2.9	3.1	3.3	3.5
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
0.8	Italy: other areas .....	0.8	0.9	1.1	1.0	1.0	1.2	1.2	1.2	1.2	1.2
1.0	Italy .....	1.0	1.2	1.4	1.3	1.3	1.5	1.5	1.5	1.5	1.5
0.4	Luxembourg .....	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.3	Netherlands .....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
8.1	Total	9.2	9.3	10.3	10.1	10.4	11.1	11.2	12.0	12.7	12.9

<b>HOOP AND STRIP AND TUBE MAKING STRIP</b>
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Production

TABLE XXIV c  
Production and Production Potential by Areas

'000,000 metric tons

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0.1	Northern Germany .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2.2	North Rhine/Westphalia ...	4.0	3.8	3.9	3.7	3.6	3.1	3.2	3.2	3.2	3.2
0.0	Southern Germany .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	Saar .....	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4
2.5	Germany (FR) .....	4.5	4.3	4.4	4.4	4.1	3.6	3.7	3.7	3.7	3.7
0.3	Belgium .....	0.6	0.6	0.6	0.4	0.5	0.4	0.4	0.4	0.5	0.5
1.1	Eastern France .....	1.2	1.2	1.1	1.2	1.2	1.3	1.4	1.4	1.4	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
—	France: other areas .....	0.0	0.0	0.0	0.0	0.0	—	—	—	—	—
1.2	France .....	1.2	1.2	1.1	1.3	1.3	1.4	1.5	1.6	1.5	1.6
0.4	Italy: coastal areas .....	0.5	0.7	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0
0.4	Italy: other areas .....	0.5	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.8	Italy .....	1.0	1.3	1.5	1.3	1.4	1.4	1.4	1.4	1.5	1.5
0.8	Luxembourg .....	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.1
0.2	Netherlands .....	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5
5.8	<b>Total</b>	8.2	8.4	8.7	8.5	8.4	8.1	8.4	8.6	8.8	8.9

<b>PLATE &gt; 3 mm. (INCLUDING WIDE FLAT STEEL) (1)</b>
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Production

TABLE XXIV d  
Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0.7	Northern Germany .....	1.2	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.3
3.8	North Rhine/Westphalia ...	5.5	5.9	6.0	6.0	6.7	6.8	7.1	7.1	7.2	7.2
0.0	Southern Germany .....	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
0.5	Saar .....	1.0	1.0	1.1	1.2	1.1	1.1	1.9	1.8	1.9	1.9
5.0	Germany (FR) .....	7.8	8.3	8.5	8.5	9.2	9.2	10.3	10.2	10.4	10.4
1.3	Belgium .....	1.2	1.4	1.5	1.5	1.6	1.9	1.9	2.0	1.9	2.0
1.0	Eastern France .....	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.1
0.9	Northern France .....	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.4	1.4	1.6
0.1	France: other areas .....	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3
2.0	France .....	1.8	2.0	2.1	2.4	2.5	2.6	2.8	2.9	2.9	3.0
1.1	Italy: coastal areas .....	0.9	1.2	1.4	1.5	1.5	1.5	1.8	2.4	2.9	3.4
0.5	Italy: other areas .....	0.5	0.6	0.7	0.7	0.7	0.8	0.9	0.9	0.9	0.9
1.6	Italy .....	1.4	1.8	2.1	2.2	2.2	2.3	2.7	3.3	3.8	4.3
0.2	Luxembourg .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.5	Netherlands .....	0.5	0.4	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.7
10.6	<b>Total</b>	<b>13.0</b>	<b>14.2</b>	<b>15.0</b>	<b>15.4</b>	<b>16.3</b>	<b>16.9</b>	<b>18.7</b>	<b>19.4</b>	<b>20.0</b>	<b>20.7</b>

(1) Except coils—finished products.

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

TABLE XXIV e  
Production and Production Potential by Areas

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

Actual production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0.0	Northern Germany .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	North Rhine/Westphalia ...	0.6	0.4	0.3	0.2	0.1	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
0.1	Belgium .....	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
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	Northern France .....	0.1	0.1	0.2	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
0.2	France .....	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3
0.1	Italy: coastal areas .....	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
0.0	Italy: other areas .....	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	Italy .....	0.3	0.3	0.2	0.2	0.2	0.2	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
0.5	<b>Total</b>	1.8	1.5	1.2	1.0	1.0	0.8	0.9	0.9	1.0	1.0

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

<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 production 1971	Area	Production potential						Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
1.4	Northern Germany .....	1.4	1.7	1.8	1.8	2.0	2.1	2.1	2.1	2.2	2.2
3.6	North Rhine/Westphalia ...	4.1	4.3	4.5	4.8	4.9	5.5	6.7	7.3	7.5	7.5
1.5	Southern Germany .....	1.5	1.6	1.7	1.7	1.7	1.9	2.2	2.7	2.6	2.7
—	Saar .....	—	—	—	—	—	—	—	—	—	—
6.5	Germany (FR) .....	7.0	7.6	8.0	8.3	8.6	9.5	11.0	12.1	12.3	12.4
2.6	Belgium .....	2.0	2.5	2.6	2.9	2.9	3.8	4.4	4.3	4.8	4.8
2.9	Eastern France .....	2.5	2.5	2.7	2.9	3.5	3.6	3.8	4.0	4.0	3.9
1.9	Northern France .....	1.9	1.9	1.9	2.1	2.3	2.4	2.6	2.8	3.3	3.5
0.4	France: other areas .....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.8	0.8	0.9
5.3	France .....	4.7	4.7	4.9	5.4	6.2	6.4	6.8	7.6	8.1	8.2
1.2	Italy: coastal areas .....	0.8	0.8	0.9	0.9	1.0	1.5	2.0	2.2	2.5	2.6
2.0	Italy: other areas .....	1.9	2.0	2.0	2.2	2.4	2.4	2.5	2.6	2.7	2.7
3.2	Italy .....	2.7	2.8	2.9	3.1	3.4	3.9	4.5	4.8	5.2	5.3
0.3	Luxembourg .....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
1.6	Netherlands .....	1.3	1.2	1.4	1.6	1.8	2.3	2.7	2.8	3.0	3.0
19.5	<b>Total</b>	18.0	19.1	20.1	21.6	23.2	26.2	29.7	31.9	33.7	34.0

<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. or approved)		
								on Jan. 1. 1971 for	on Jan. 1. 1972 for	
	1965	1966	1967	1968	1969	1970	1971	1971	1972	1973
Northern Germany .....	2.62	1.56	0.33	1.66	3.36	22.39	31.07	36.39	30.95	34.63
North Rhine/Westphalia ...	33.56	37.21	10.81	9.46	10.59	43.73	50.26	39.91	31.04	16.19
Southern Germany .....	—	—	—	—	—	—	—	—	—	—
Saar .....	—	—	—	—	—	—	—	—	—	—
Germany (FR) .....	36.18	38.77	11.14	11.12	13.95	66.12	81.33	76.30	61.99	50.82
Belgium .....	22.90	25.78	16.90	11.60	10.89	16.88	15.49	11.79	8.98	2.57
Eastern France .....	—	1.09	2.17	3.04	2.75	6.27	3.59	3.21	3.03	1.12
Northern France .....	4.50	1.70	7.10	11.80	4.20	4.08	25.87	24.90	33.58	20.48
Southern France .....	•	•	•	•	•	•	11.32	•	77.60	66.62
France: other areas .....	0.06	—	—	—	—	—	—	44.11	—	—
France .....	4.56	2.79	9.27	14.84	6.95	10.35	40.78	72.22	114.21	88.22
Italy: coastal areas .....	6.70	0.61	0.04	0.73	1.53	7.33	47.88	90.02	58.93	63.01
Italy: other areas .....	14.53	4.09	3.34	1.59	0.68	4.29	7.44	6.58	2.20	0.66
Italy .....	21.23	4.70	3.38	2.32	2.21	11.62	55.32	96.60	61.13	63.67
Luxembourg .....	0.55	0.50	0.16	—	—	0.02	0.02	0.07	—	—
Netherlands .....	1.15	6.31	22.34	50.70	30.00	6.29	4.27	4.91	4.63	1.23
<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>197.21</b>	<b>261.89</b>	<b>250.94</b>	<b>206.51</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
1971												
2.9	0.7	Northern Germany . . . .	2.8	2.9	3.0	3.2	3.2	4.3	4.9	5.5	5.5	5.5
7.7	1.6	North Rhine/Westphalia	6.3	7.5	8.2	9.1	8.7	10.7	12.6	12.6	12.9	12.9
—	—	Southern Germany . . . .	—	—	—	—	—	—	—	—	—	—
—	—	Saar . . . . .	—	—	—	—	—	—	—	—	—	—
10.6	2.3	Germany (FR) . . . . .	9.1	10.4	11.2	12.3	11.9	15.0	17.5	18.1	18.4	18.4
4.5	0.7	Belgium . . . . .	2.8	4.0	4.3	4.9	5.2	5.5	6.5	6.5	6.7	6.9
2.8	0.1	Eastern France . . . . .	2.6	2.7	2.7	2.9	3.0	3.0	3.0	3.1	3.3	3.3
3.2	0.3	Northern France . . . . .	2.8	2.7	3.0	3.5	4.0	3.9	4.4	5.7	5.9	6.3
—	—	Southern France . . . . .	—	—	—	—	—	—	—	0.3	1.3	3.0
—	—	France: other areas . . . .	0.1	—	—	—	—	—	—	—	—	—
6.0	0.4	France . . . . .	5.5	5.4	5.7	6.4	7.0	6.9	7.4	9.1	10.5	12.6
4.1	1.2	Italy: coastal areas . . . .	3.4	4.1	4.1	4.2	4.5	5.3	5.6	7.1	8.3	10.3
0.7	0.0	Italy: other areas . . . . .	0.8	1.1	1.1	1.1	1.1	0.9	1.0	1.1	0.9	0.9
4.8	1.2	Italy . . . . .	4.2	5.2	5.2	5.3	5.6	6.2	6.6	8.2	9.2	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
3.2	0.5	Netherlands . . . . .	1.6	1.6	1.7	2.1	3.3	4.3	4.8	4.9	5.0	5.0
29.6	5.1	<b>Total</b>	23.6	27.1	28.6	31.5	33.5	38.4	43.3	47.3	50.3	54.6

(<sup>1</sup>) 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 1971 ( <sup>'000 000</sup> metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate  (in %)
Pig-iron .....	75.7	99.3	76
Basic Bessemer steel .....	18.4	22.9	80
OBM, LWS steel, .....	2.6	3.6	72
Open-hearth steel .....	17.3	24.6	70
Electric-furnace steel .....	14.4	17.6	82
LD, Kaldor and other steels .....	50.7	66.8	76
<b>Total Crude steel</b>	<b>103.4</b>	<b>135.4</b>	<b>76</b>
Coils .....	29.6	38.4	77
Heavy sections $\geq$ 80 mm .....	8.9	15.4	57
Light sections $<$ 80 mm .....	17.1	23.2	73
Wire-rod .....	8.1	11.1	73
Hoop and strip and tubemaking strip .....	5.8	8.1	72
Hot-rolled sheet $\geq$ 3 mm <sup>(1)</sup> .....	10.6	16.9	63
Hot-rolled sheet $<$ 3 mm <sup>(1)</sup> .....	0.5	0.8	62
Cold-reduced sheet $<$ 3 mm .....	19.5	26.2	74
<b>Finished rolled products - total</b>	<b>70.5</b>	<b>101.7</b>	<b>69</b>

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

PIG-IRON
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TABLE XXX b  
Utilization Rate of Production Potential by Country

Country	Production 1971 ( <sup>'000 000</sup> metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	30.0	42.3	71
Belgium .....	10.5	13.4	78
France .....	18.3	21.9	83
Italy .....	8.5	11.9	71
Luxembourg .....	4.6	5.3	87
Netherlands .....	3.8	4.5	84
<b>Total</b> .....	<b>75.7</b>	<b>99.3</b>	<b>76</b>

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

Country	Production 1971 ( <sup>'000 000</sup> metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) . . . . .	40.3	57.8	70
Belgium . . . . .	12.5	15.6	80
France . . . . .	22.8	27.2	84
Italy . . . . .	17.4	22.5	77
Luxembourg . . . . .	5.3	6.1	87
Netherlands . . . . .	5.1	6.3	81
<b>Total . . . . .</b>	<b>103.4</b>	<b>135.5</b>	<b>76</b>

## COILS

TABLE XXX d  
Utilization Rate of Production Potential by Country

Country	Production 1971 ( <sup>'000 000</sup> metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	10.6	15.0	71
Belgium .....	4.5	5.5	82
France .....	6.0	6.9	87
Italy .....	4.8	6.2	77
Luxembourg .....	0.5	0.5	100
Netherlands .....	3.2	4.3	74
<b>Total .....</b>	<b>29.6</b>	<b>38.4</b>	<b>77</b>

SECTIONS
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TABLE XXX e  
Utilization Rate of Production Potential by Country

Country	Production 1971 ( <sup>'000 000</sup> metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	11.8	20.6	57
Belgium .....	4.2	5.7	74
France .....	8.3	10.5	79
Italy .....	6.6	8.9	74
Luxembourg .....	2.5	3.0	83
Netherlands .....	0.7	1.0	70
<b>Total .....</b>	<b>34.1</b>	<b>49.7</b>	<b>69</b>

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

Country	Production 1971 ( <sup>'000 000</sup> metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	14.1	22.5	63
Belgium .....	4.3	6.2	69
France .....	8.7	10.7	81
Italy .....	5.7	7.8	73
Luxembourg .....	1.3	1.6	81
Netherlands .....	2.3	3.2	72
<b>Total .....</b>	<b>36.4</b>	<b>52.0</b>	<b>70</b>

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

<b>COLD REDUCED SHEET</b> < 3 mm (1)
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TABLE XXX g  
Utilization Rate of Production Potential by Country

Country	Production 1971 ( <sup>'000 000</sup> -metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	6.5	9.5	68
Belgium .....	2.6	3.8	68
France .....	5.3	6.4	83
Italy .....	3.2	3.9	82
Luxembourg .....	0.3	0.3	100
Netherlands .....	1.6	2.3	70
<b>Total .....</b>	<b>19.5</b>	<b>26.2</b>	<b>74</b>



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

Country	Production 1971 ( <sup>'000 000</sup> metric tons)	Production potential 1971 ( <sup>'000 000</sup> metric tons)	Utilization rate (in %)
Germany (FR) .....	25.9	43.1	60
Belgium .....	8.5	11.9	71
France .....	17.0	21.2	80
Italy .....	12.3	16.7	74
Luxembourg .....	3.8	4.6	83
Netherlands .....	3.0	4.2	71
<b>Total .....</b>	<b>70.5</b>	<b>101.7</b>	<b>69</b>

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