EUROPEAN COAL AND STEEL COMMUNITY

COMMISSION

Investments in the Community coalmining and iron and steel industries

REPORT ON THE 1971 SURVEY

Position as at January 1, 1971

JULY 1971

CONTENTS

ANNEXES

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 January 1 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 1954-64 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 1971 survey therefore show only the figures from 1966 onwards.

Owing to changes in 1970 in the structure Federal German collieries, the data referring to pithead power stations and other generating plants will not be included in the present report.

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 January 1, 1971, 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.**

a) Capital expenditure

Capital expenditure entered by Community enterprises from January 1, 1954 onwards is recorded for the purposes of the annual surveys in European Monetary Agreement (EMA) units of account, the unit of account being to date equal in value to the United States dollar (see Annex I, 1). It is true that computation in dollars does not reflect changes over a period in the cost of capital goods and in the wage costs involved in their installation; nevertheless, some general observations hold good.

Capital expenditure in the **coalmining industry** was 113m units of account in 1970 and was estimated at 193m for 1971 (projects in progress, approved and merely planned). Expenditure for 1970 was, however, well below the original estimates (142m) and, with one exception, remained close to 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% reduction in four years. Since then it has recovered, rising to 802m in 1968, to 1,039m in 1969 and to 1,688m in 1970. This level will also be substantially exceeded in 1971 and, even allowing for the incomplete nature of the statements submitted by enterprises for the subsequent two years, again in 1972. Capital expenditure (projects in progress and approved, but excluding those merely planned) is expected to exceed 2,500m in 1971 and 2,100m in 1972, which are the highest levels ever recorded. To explain these figures, Annex I, 1d gives a price index for capital goods from 1960 to 1969.

Since the first annual investment survey, actual annual expenditure has been, on average, some 1,154m units of account. At 1,821m, the 1970 investment figure is appreciably above this average. Trends in the mining and iron and steel industries showed considerable divergence. Indeed, capital expenditure in the coal and iron ore mining industries in 1970 (113m and 20m respectively) remained appreciably below the annual averages. For the iron and steel industry, capital expenditure for 1970 (1,688m) is appreciably above the annual average (860m).

TABLE 1

Capital Expenditure in the Community Industries, 1954-72

'000,000 units of accoun

Sectors	Actual expenditure												Estimated expenditure (A+B+C) (1)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972 (2)
Coal mines (3) .	327	268	283	267	250	235	219	189	159	150	101	110	186	159
Briquette and lignite char plants	5	6	4	6	9	8	8	4	5	4	4	3	7	7
Iron-ore mines .	39	43	52	47	28	24	25	17	16	21	20	20	30	25
Iron and steel industry	581	775	1 123	1 230	1 480	1 315	932	848	730	802	1 039	1 688	2 500	2 130
Total	**952**	**1 092**	**1 462**	**1 550**	**1 767**	**1 582**	**1 184**	**1 058**	**910**	**977**	**1 164**	**1 821**	**2 723**	**2 321**
Pithead power-stations and other power generating plants	107	103	97	100	76	56	59	61	84	133	...	...	...	...

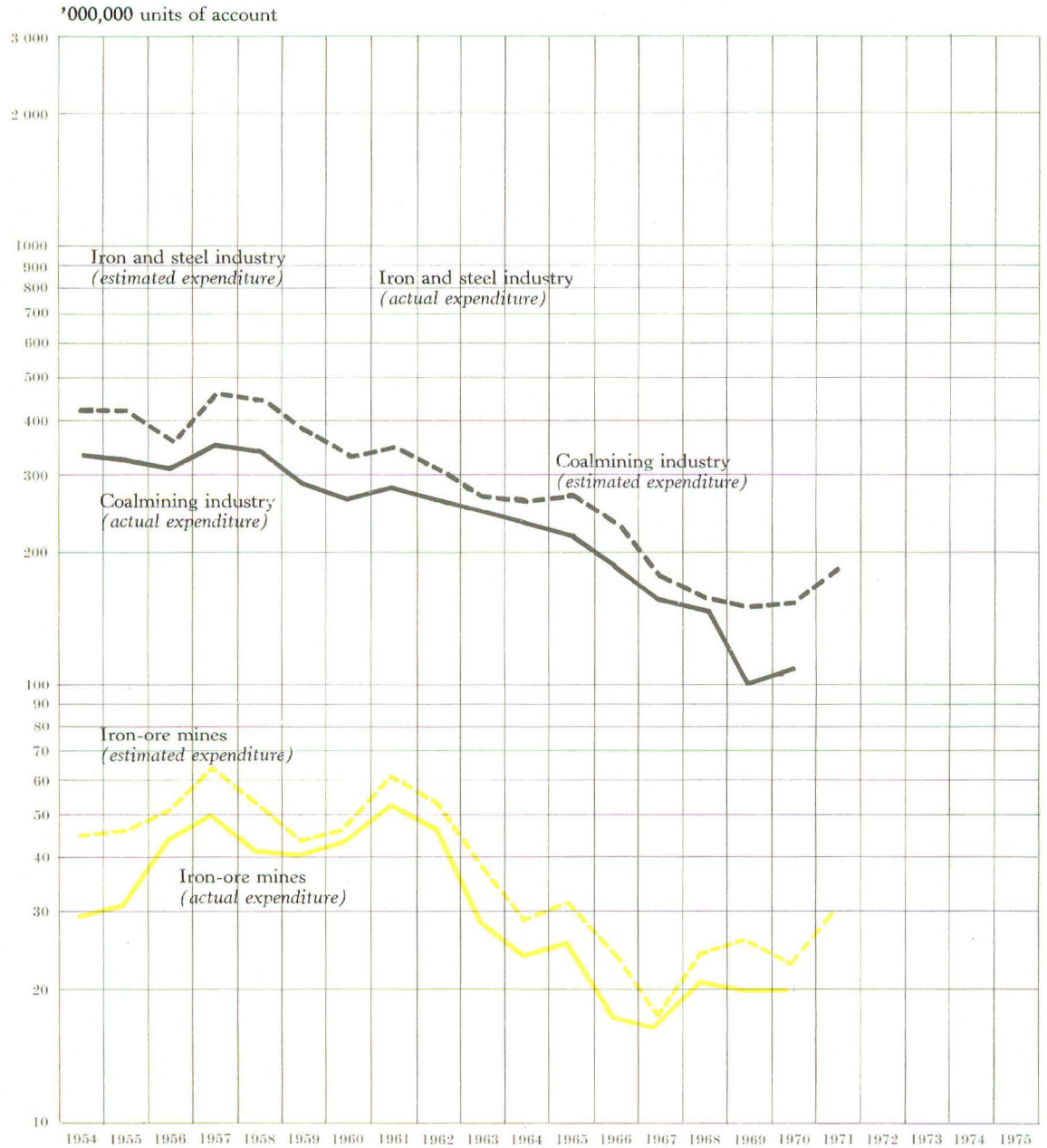
(1) The estimates for the iron and steel industry relate only to expenditure on projects already in progress (A) or approved (B) at January 1, 1971, not to those merely planned (C). For the extractive industries (coal and iron ore mines), however, Category C projects are covered.

(2) On January 1, 1971, the enterprises were still unable to give a complete estimate of their actual expenditure in 1972. Accordingly, the estimates showu in all tables of this Report are less accurate for 1972 than for 1971.

(3) 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



The figures for the years 1969 and 1970 do not altogether tally with those given in last year's Report, inasmuch as it is normally the case that

(a) for 1969, the expenditure figures returned before the balance-sheets were closed are corrected when the next survey is drawn up;

(b) for 1970, actual expenditure differs to varying extents from the estimates submitted on January 1.

Indeed, the 1970 survey had suggested that capital expenditure in that year would total 142m units of account for the coalmining industry, 23m for the iron-ore mines and 1,623m for the iron and steel industry, but the figures for actual expenditure were 113m, 20m and 1,688m respectively. The estimates therefore proved to be 77% correct for coal, 87% for iron-ore and over 100% correct for steel (see Fig. 1).

TABLE 2

General Trend in Investment in Recent Years

indices

Sector	Projects effected												Expenditure scheduled for 1971
	1954-1955 (annual average)	en 1959	en 1961	en 1962	en 1963	en 1964	en 1965	en 1966	en 1967	en 1968	en 1969	en 1970	
Coal mines (1)	100	83	86	82	78	73	68	58	49	46	32	34	57
Iron-ore mines	100	110	133	121	72	62	64	44	41	54	51	51	77
Iron and steel industry ...	100	133	193	212	255	226	160	146	126	138	179	290	430
All ECSC industries	100	115	154	163	186	166	124	111	96	103	122	191	286

(1) 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 (within the meaning of the survey) is expected to drop by some 22.1m tons between 1970 and 1974, thus declining from 183.0 to 160.9m tons. The reduction announced is, however, far less than that recorded (46.6m tons) during the four-year period preceding the date of the survey.

Iron-ore production potential, which had shown a marked reduction since 1962, appears to have levelled off at around 80m tons per annum since 1968. This stabilization seems largely due to productivity investment applied in Lorraine, and to a lesser extent in Luxembourg.

Iron and steel production potential, after expanding by over 18.8m ingot tons from 1966 to 1970, will increase by 33.8m tons during the coming four-year period, totalling 160.6m tons by 1974.

TABLE 3

Actual Production and Production Potential in the Community Industries

Product	Actual Production			Production potential				
	1952 ('000,000 metric tons)	Average cumulative annual movement (%)	1970 ('000,000 metric tons)	1966 ('000,000 metric tons)	Average cumulative annual movement (%)	1970 ('000,000 metric tons)	Average cumulative annual movement (%)	1974 ('000,000 metric tons)
Coal (1)	237.4	—2.0	164.6	229.6	—5.5	183.0	—3.1	160.9
Coke	61.2	+0.7	70.1	77.6	—2.2	70.7	+3.3	80.5
Iron-ore	65.3	+0.4	71.1	90.5	—2.9	80.3	—0.5	78.4
Pig-iron	34.7	+4.8	80.4	80.3	+4.0	94.1	+7.0	123.5
Crude steel	41.8	+5.5	109.2	108.0	+4.0	126.8	+6.1	160.6

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

In 1970, the utilization rate of production potential declined in the pig-iron and steel sectors. On the other hand it remained exceptionally high for the coking plants.

No sector of the Community industries has yet recorded a 100% utilisation rate. In order to interpret the production potential figures correctly, it should be remembered that the 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.

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 potentials declared. It would even appear from the data in Table 4, that this maximum rate, characteristic of boom periods, is in decline. This trend may be attributed in particular to the following reasons:

a) the average size of certain plants has grown at a more rapid rate than Community productionl and the closure of any one of them, for whatever reason, has more serious effects on the leve, of production, both primary and secondary, than in the past;

b) to varying degrees and depending on the Community region concerned, a number of firms may choose for miscellaneous reasons, especially those of a social or a regional nature, to maintain obsolete capacity which can in fact only be fully utilized during boom conditions.

c) during boom periods, full utilization of production potential may be prevented by labour and raw material supply problems.

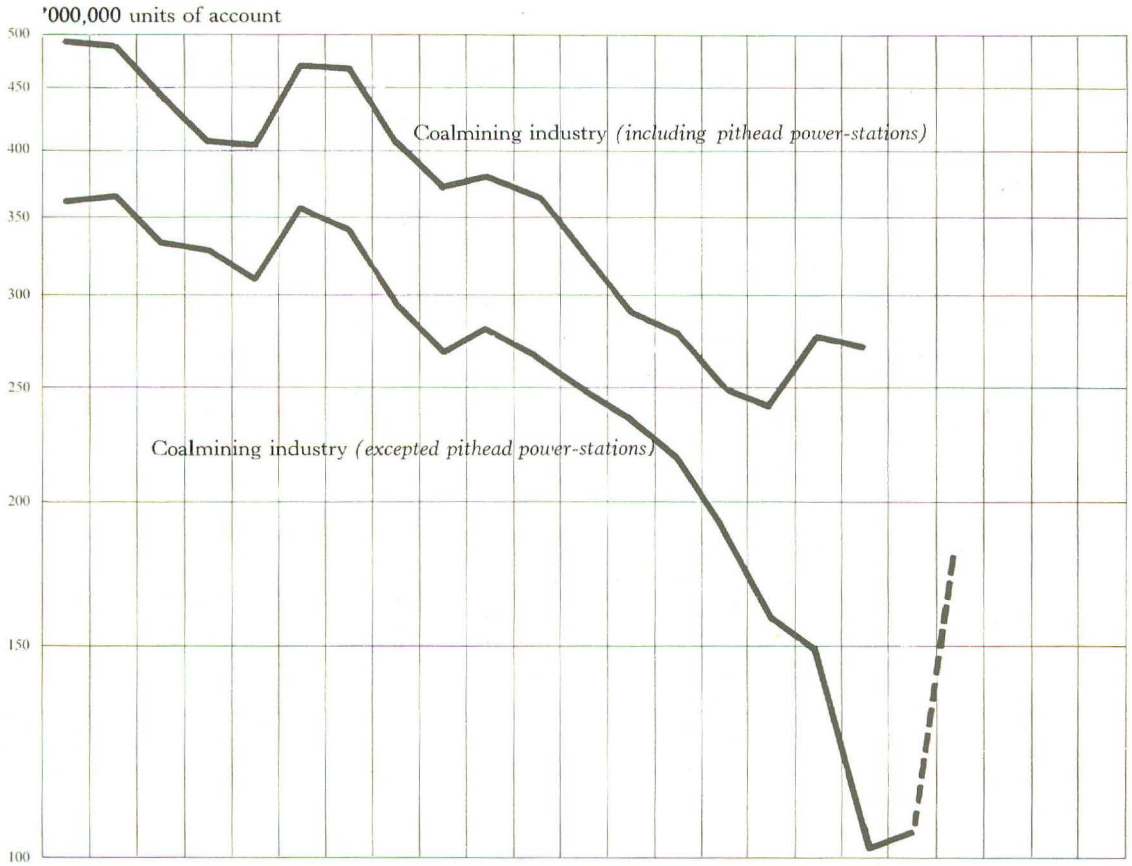
FIGURE 2

Investment in the Iron and Steel Industries

FIGURE 3

Investment in the Coalmining Industry

A—Capital expenditure



B—Actual production and production potential

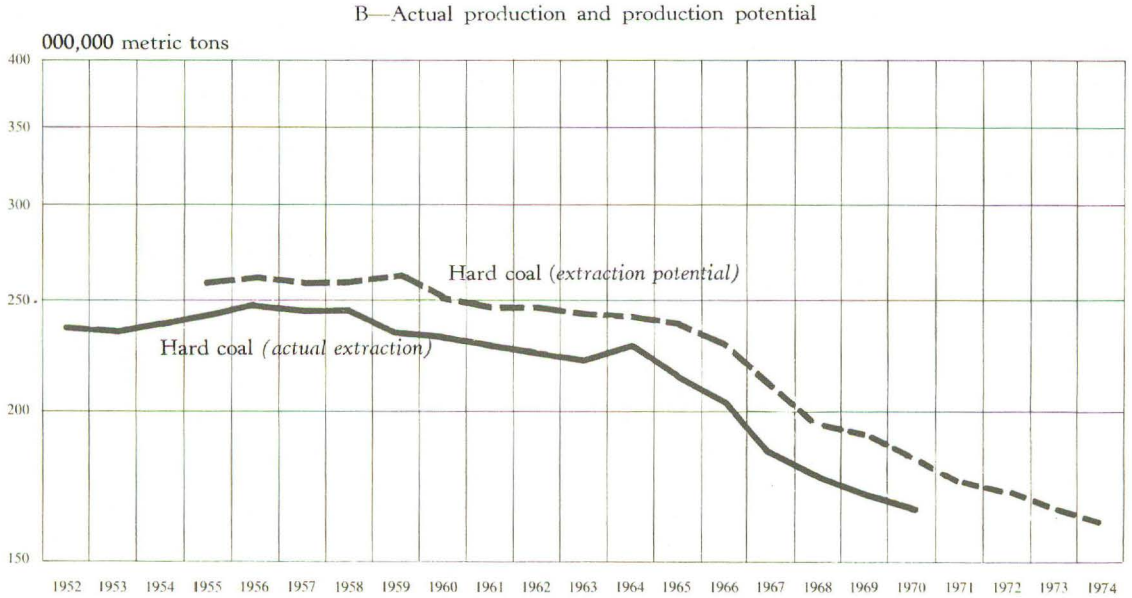


TABLE 4

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
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
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	98.6
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
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
Crude steel	95.8	96.1	94.1	85.7	89.6	95.6	91.7	87.3	83.4	90.0	84.3	78.7	80.0	85.9 (1)	88.8 (1)	86.1 (1)

(1) 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 Community coalmining industry (including plants producing BKB and browncoal coke, but excluding pithead power stations and other generating plants) in 1970 totalled 113m units of account, slightly up on the 1969 figure (105m), but considerably below all the other figures returned for the Sixties. The 7,6% increase for 1969-70 was mainly attributable to the Ruhr collieries, which forecast the possibility of sharp increase in capital spending for 1971 and 1972. It should, however, be borne in mind that Ruhr's actual spending for the year under review fell short by something like one third of what had been declared under the previous survey.

TABLE 5

Capital Expenditure in the Coalmining Industry (1) 1954-72

'000,000 units of account

Sector	Actual expenditure												Estimated expenditure (Categories A+B+C)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Collieries	253.9	226.0	235.4	220.5	217.5	202.9	190.4	162.8	139.9	127.9	86.2	87.9	133.9	123.1
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	19.3	45.1 (3)	32.0 (3)
Coking plants, independent (2) .	10.8	1.6	1.4	5.1	3.5	5.9	5.0	5.3	3.8	4.6	4.4	1.8	3.9 (3)	0.8 (3)
Briquetting-plants	5.0	7.1	3.4	5.1	9.5	9.1	7.5	7.3	4.8	0.9	0.7	1.3	3.4	2.8
Total (1)	**327.2**	**268.4**	**283.3**	**266.6**	**249.5**	**235.2**	**218.7**	**188.6**	**158.7**	**150.0**	**101.3**	**110.3**	**186.3**	**158.7**
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	2.7	6.8	6.8
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	...	...	...	...

(1) Excluding capital expenditure on pithead power stations and other generating plants.
(2) Less the French nationalized gas industry (Gaz de France) from 1957.
(3) Only investment in categories A + B have been taken into account for the coking plants.

FIGURE 4

Capital Expenditure in the Coalmining Industry

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

a) Pits

Capital expenditure on the pits, after a continuous decline to 1969, levelled out and remained unchanged in 1970. This stabilization might of course be accounted for, at least in part, by the implementation in Germany of investment projects which had been postponed pending completion of the reorganization of the Ruhr colliery structure.

The firms declare a slight increase in their capital expenditure for 1971. It should, however, be pointed out that in 1970 both for the pits and for the industry as a whole, actual spending remained well below the estimates.

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 in 1967 to 0.76, in 1968 0.70, in 1969 to 0.50, levelling out at 0.53 in 1970.

TABLE 6

Capital Expenditure on Pits 1954-70

'000,000 units of account

Type of installation	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
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	8.2
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	37.7
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
Coal extraction	*134.5*	*127.2*	*125.3*	*114.7*	*114.4*	*112.8*	*106.7*	*92.6*	*85.7*	*84.3*	*53.6*	*53.1*
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	9.2
Other surface installations	32.9	32.9	35.1	33.9	35.7	30.2	27.8	21.8	19.3	18.2	13.4	15.5
Buildings, etc.	29.8	20.5	25.7	24.6	25.3	22.7	23.6	19.3	14.5	12.3	8.4	10.1
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*
Total	**253.9**	**226.0**	**235.4**	**220.5**	**217.5**	**202.9**	**190.4**	**162.8**	**139.9**	**127.9**	**86.2**	**87.9**

According to the statements returned by the coalmining firms, **annual coal extraction potential** (within the meaning of the survey, see Annex I, IIa) should fall by some 22.1m tons between 1970 and 1974, shrinking from 183.0 to 160.9m tons. The reduction is, however, far less than that recorded (46.6m tons) during the four-year period preceding the date of the survey. The decline in the level of extraction potential estimated for the forthcoming years might be more rapid than the producers at the moment expect.

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

Survey dates	Extraction potential declared					
	1969	1970	1971	1972	1973	1974
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

Extraction potential expected for 1974 is considerably less than that for 1970 in the French, Dutch, and Belgian coalfields, all of which expect their potential to reduce by 18.1m tons in four years. The shrinkage is particularly marked in the Southern Belgian coalfield, in the Netherlands and in the Nord/Pas-de-Calais and Centre-midi coalfields of France. In the Federal Republic, the decline expected is very small, except in the Saar where 2.1m tons will be lost between now and 1974. But it is not impossible that in the latter country in particular the programmes will be revised and that the cut-back will be greater than that announced by the enterprises.

TABLE 8

Movement of Extraction Potential by Coalfields (1)

'000,000 metric tons

Extraction		Extraction potential					
		realizations			previsions		
1952	1970	1966	1970	1971	1972	1973	1974
237.4	164.6	229.6	183.0	174.5	711.0	165.5	160.9

(1) As in previous years, mines producing only small tonnages are excluded - Their combined production in 1970 amounted to about 0,2 million tons.

b) Coal-briquetting plants

Capital spending on **coal-briquetting plants** remains at a very low level.

Annual briquetting potential is expected to continue its decline, reducing from 13.8 to 12.3m tons between 1970 and 1974.

c) Plants producing BKB and low-temperature brown coal

Capital spending on **brown-coal briquette (BKB) plants** remain at a level below 5m units of account. The plants do, however, indicate spending in the near future which will slightly exceed this amount. Annual production potential is expected to decline from 9.8 to 6.8m tons between 1970 and 1974.

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. In view of the uncertainty with regard to projects "merely planned", which may be shelved or abandoned, they are only mentioned for information purposes.

a) Capital expenditure

Capital spending on mine-owned **coking plants** declined gradually from an average of 57.5m units of account per annum in 1954-59 to 13.2m in 1966 and 10m in 1969. In 1970, there was an appreciable recovery to 19.3m. The increase in expenditure is largely accounted for by the Ruhr Coalfield; capital spending in this area was double that of 1969. The forecasts for 1971 and 1972 reflect the intention of the Ruhr collieries to intensify their capital spending programme for coking plants: the investment figure forecast is expected to be 39 and 28m respectively, thus considerably exceeding, at least for 1971, the highest figures recorded since 1954. However, no investment is envisaged for a number of obsolescent coking plants which therefore seem likely to close down. 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 (10.8m) capital expenditure at the **independent coking plants** has fallen to a negligible level. In 1970 the figure was 1.8m, one of the lowest figures recorded hitherto for this sector. There may be a certain recovery at the coking plants on the Italian seaboard, which use overseas fines. It should, however, be noted that the figures recorded for 1970 for these companies were considerably below the estimates returned for the previous survey.

The increase in capital spending at the **steelworks coking plants** has been particularly high since 1969. Expenditure, at 31.1m units of account, then showed a figure approaching the 1963 record. This doubled in 1970 and, disregarding projects merely planned, it is possible that it may rise to 139m in 1971 and 149m in 1972. Most of these investments concern coastal works.

TABLE 9

Capital Expenditure at Mine-Owned, Independent and Steelworks Coking Plants 1954-72

'000,000 units of account

Coking plants	Actual expenditure												Forecast expenditure			
	1954–1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971		1972	
													Categ. A+B	Categ. A+B+C	Categ. A+B	Categ. A+B+C
Mine-owned .	57.5	33.7	43.1	35.9	19.0	17.3	15.8	13.2	10.2	16.6	10.0	19.3	45.1	46.1	32.0	53.1
Independent .	10.8	1.6	1.4	5.1	3.5	5.9	5.1	5.2	3.8	4.6	4.4	1.8	3.9	4.9	0.8	1.5
Steelworks ...	22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	13.7	31.1	61.7	138.6	138.9	149.4	158.7
Total	**91.2**	**46.8**	**62.8**	**66.0**	**56.3**	**52.9**	**38.1**	**28.8**	**25.5**	**34.9**	**45.5**	**82.8**	**187.6**	**189.9**	**182.2**	**213.3**

Reference should be made to the extent of capital spending merely planned at the mine-owned coking plants for 1972. The figure is almost the same as that for investments already in progress or approved.

In the coking industry as a whole, the share of expenditure allotted to the construction of new plant increased considerably from 1967 onwards. In 1970 and 1969 it accounted 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 plants it is largely a question of repairs and replacements.

TABLE 10

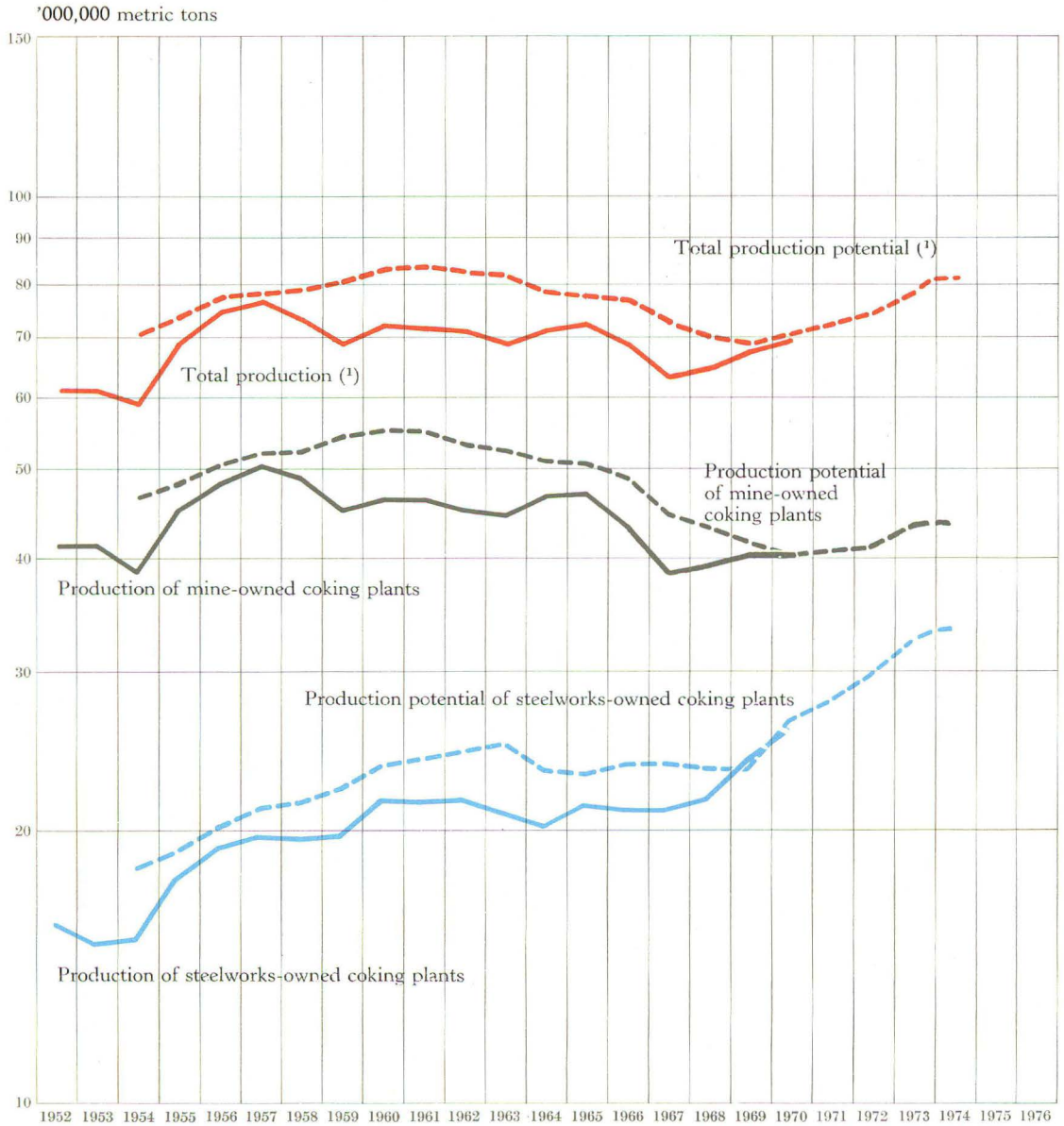
Breakdown of Capital Spending at Mine-Owned, Independent and Steelworks Coking Plants from 1954-70

'000,000 units of accoun

Sector	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Coking ovens	37.9	20.7	26.6	29.2	28.0	17.6	12.2	9.9	10.6	19.2	30.0	54.7
New plant	(21.6)	(9.6)	(13.7)	(14.4)	(21.2)	(12.4)	(5.3)	(4.1)	(6.7)	(12.0)	(27.2)	(47.2)
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)	(7.5)
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
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	14
Miscellaneous	21.8	12.1	17.4	16.6	16.8	19.9	15.0	11.8	9.9	10.7	9.1	14.0
Total	**91.2**	**46.8**	**62.8**	**66.0**	**56.3**	**52.9**	**38.1**	**28.8**	**25.5**	**34.9**	**45.5**	**82.8**

FIGURE 5

Production and Production Potential of Coking Plants



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

b) Production potential

Annual production potential at the **mine-owned coking plants,** which has been in constant decline since the Sixties, is expected to rise in 1970-74 from 40.6 to 43.4m tons per year. Almost all of this increase will be accounted for by the Ruhr, while in most of the other coalfields production is expected to be maintained thanks, in certain cases, to increased use of imported fines.

Production potential at the **independent coking plants** should maintain its present level of 4m tons per year over the next four years.

Production potential at the **steelworks coking plants,** which has remained virtually unchanged since 1964 at some 24m tons, increased to nearly 27m tons in 1970. It may increase further by more then 6m tons between now and 1974. It would then account for 41% as compared with 38% of Community production potential. Most of the new capacity is installed in the coastal regions.

Altogether, Community coke making capacity, which in 1970 showed an unprecedented 99% utilization rate, could increase during the 1970-74 period from 70.7 to 80.5m tons per year. The mean cumulative annual growth rate (+3.3%) would therefore be substantially below the rate declared for pig iron (7%). Any estimate of the possible future balance between supply and demand of coke up to 1974 should not confine itself to a comparison of these rates but also take into account the exceptionally high utilisation rate of coking plants in 1970, as well as the anticipated reduction in the coke rate and the market trend between now and 1974 of coke not intended for metallurgical use. Moreover, in order to appreciate the production potential figures for the period ending in 1974, it should be noted that also for social and political 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. Their closure might be dictated by technical necessity or by the emergence of modern capacity.

TABLE 11

Movement of Production Potential in Coking Plants

'000,000 metric tons

Coking plants	Production		Production potential									
			Actual		Forecast							
					1971		1972		1973		1974	
	1952	1970	1966	1970	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	40.6	49.9	40.6	41.4	41.4	41.6	41.5	43.2	43.0	43.3	44.2
Independent coking plants ..	3.2	3.5	3.9	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Steelworks coking plants ..	15.8	25.6	23.8	26.6	27.9	27.9	30.4	30.4	32.2	32.3	33.2	34.1
Total	**61.2**	**69.7**	**77.6**	**70.7**	**73.3**	**73.3**	**76.0**	**75.9**	**79.4**	**79.3**	**80.5**	**82.3**

IV—THE IRON-ORE MINES

Capital spending in the Community **iron-ore industry** fell steadily between 1962 and 1967, and has since maintained a level at around 20m units of account per year. According to producers' forecasts, expenditure will probably go up slightly in 1971. This will only involve sizeable amounts in Lorraine and, to a more limited extent, in Luxembourg.

TABLE 12

Capital Expenditure in the Iron-Ore Industry 1954-72

'000,000 units of account

Type of installation	Actual expenditure												Estimated expenditure (Categories A+B+C)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
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	14.4	21.4	19.0
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	1.0	2.5	1.0
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	5.0	6.4	5.4
Total	**39.2**	**43.2**	**52.4**	**46.6**	**28.2**	**23.9**	**25.6**	**17.3**	**16.0**	**20.7**	**20.3**	**20.4**	**30.3**	**25.4**

For 1971 and 1972, the amounts forecast include not only 18.0 and 7.3m units of account for projects already in progress and approved but also 3.4 and 11.7m 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 eight years, as a result of competition from overseas ores, it gradually fell to 80.3m tons: in Lorraine from 67.7 to 61.0m and in Luxembourg from 8.3 to 7.3m tons. The decline was particularly marked in the other ore fields: Lower Saxony (12.5 to 6.2m) and the various minor orefields taken as a whole (17.0 to 11.2m). The extraction potential should show a tendency towards stabilisation in most of the orefields, at least for the next few years, and the share of the Lorraine mines in the Community total should remain at around 75%.

TABLE 13

Movement of Crude-Ore Extraction Potential

'000,000 metric tons

Actual extraction		Extraction potential					
1952	1970	1966	1970	1971	1972	1973	1974
65.3	71.1	90.5	80.3	78.4	80.2	79.7	78.4

The following table will show that, at least as far as the last few surveys are concerned, the opinion of the producers with regard to the medium-term prospects for Community crude ore extraction has hardly changed.

TABLE 14

Movement in Crude-Ore Extraction Potential Declared

'000,000 units of account

Survey date	Extraction potential declared					
	1969	1970	1971	1972	1973	1974
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

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 for 1970 (1,688m) was not only more than double that for 1967, but even exceeded the peak recorded in 1963. Current forecasts for 1971 expect a new high of 2,500m and, for 1972, indicate a figure (2,100m) which suggests a reinforcement of this upward trend.

The recovery applies to all sectors. In 1970, the shares of the four plant categories—ironmaking, steelmaking, rolling and general services—in total expenditure were 21%, 14%, 52% and 13% respectively, as compared with 18%, 18%, 49% and 15% in 1969.

TABLE 15

Capital Expenditure in the Iron and Steel Industry 1954-72

'000,000 units of account

Type of installation	Actual expenditure												Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Plant for production of :														
pig-iron	143.3	172.2	218.8	233.2	258.4	222.7	160.4	132.5	130.6	124.3	188.7	358.8	565.1	583.3
steel	84.1	95.4	162.8	152.4	175.0	158.3	124.7	122.1	143.8	148.1	186.8	231.2	274.0	241.6
rolled products	249.8	350.3	532.4	597.6	726.4	634.3	425.5	405.0	317.7	391.1	504.7	872.3	1 214.6	923.1
General services	*103.8*	*157.3*	*209.1*	*247.1*	*319.7*	*300.0*	*221.7*	*188.5*	*138.1*	*138.6*	*158.4*	*225.7*	*446.5*	*381.8*
Total	**581.0**	**775.2**	**1 123.1**	**1 230.3**	**1 479.5**	**1 315.3**	**932.3**	**848.1**	**730.2**	**802.1**	**1 038.6**	**1 688.0**	**2 500.2**	**2 129.8**

This survey, compared with that for the previous year, confirms the estimates relating to expenditure and points up an accelerating trend in the expansion of production potential. The 1970 survey had, moreover, hinted at such a possibility.

FIGURE 6

Capital Expenditure in the Iron and Steel Industry

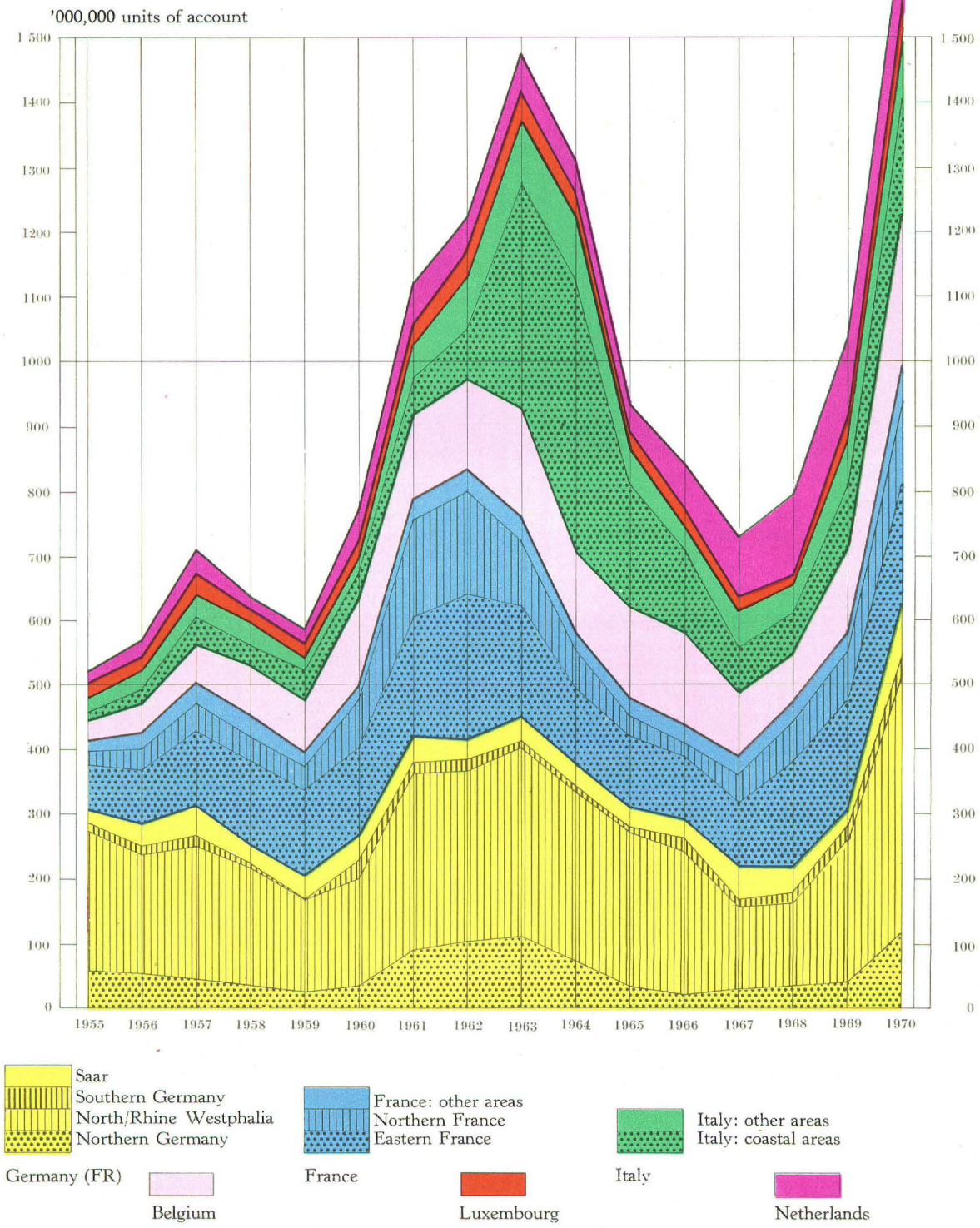


FIGURE 7

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

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 sinter charged in the 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 slightly more than 1,150 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 play an important part in the Community. For the first time, however, they will reach the industrial stage for the production of blast furnace pellets and even for the production of sponge iron for direct charging into electric furnaces. **Pig iron** production potential, which in 1969 had shown a 4% increase, sustaining the rate of growth of the 2 preceding years, increased by 6.4% in 1970, and is expected to expand between now and 1974 at a rate of 7% per year, increasing from 94.1 to 123.5m metric tons between 1970 and 1974.

TABLE 16

Movement of Forecast Production Potential

'000,000 metric tons

	Date of survey	1969	1970	1971	1972	1973	1974
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
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
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

According to the annexed tables, in particular Table XV, the increase in capital spending in 1970, as compared with the previous year, is particularly marked in Germany, Belgium and Italy.

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

With capital expenditure in 1970 at a new record level of 358,8m units of account, the highest since the last peak of 258m in 1963, this survey shows an increase of 90% in relation to expenditure recorded in 1969. The subsequent increase is expected to be even sharper, and the sum forecast for 1971 is more than double the 1963 record.

All stages in production are affected: steelworks coking plants, burden preparation and blast furnaces.

The upswing is particularly marked in Germany and Belgium, where spending in 1970 was, respectively, three times and twice what it had been in 1969.

TABLE 17

Capital Expenditure on Pig-Iron Production Plant 1954-72

'000,000 units of account

Type of installation	Actual expenditure												Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
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	61.7	138.6	149.4
Burden preparation	42.7	73.7	93.3	110.9	123.2	85.0	52.0	45.0	43.8	44.3	68.3	134.0	142.3	170.2
Blast furnaces	77.7	87.0	107.2	97.3	101.4	108.0	91.2	77.1	75.3	66.3	89.3	163.1	284.2	263.6
Total	**143.3**	**172.2**	**218.8**	**233.2**	**258.4**	**222.7**	**160.4**	**132.5**	**130.6**	**124.3**	**188.7**	**358.8**	**565.1**	**583.3**

TABLE 18

Movement of Pig-Iron Production Potential

'000,000 metric tons

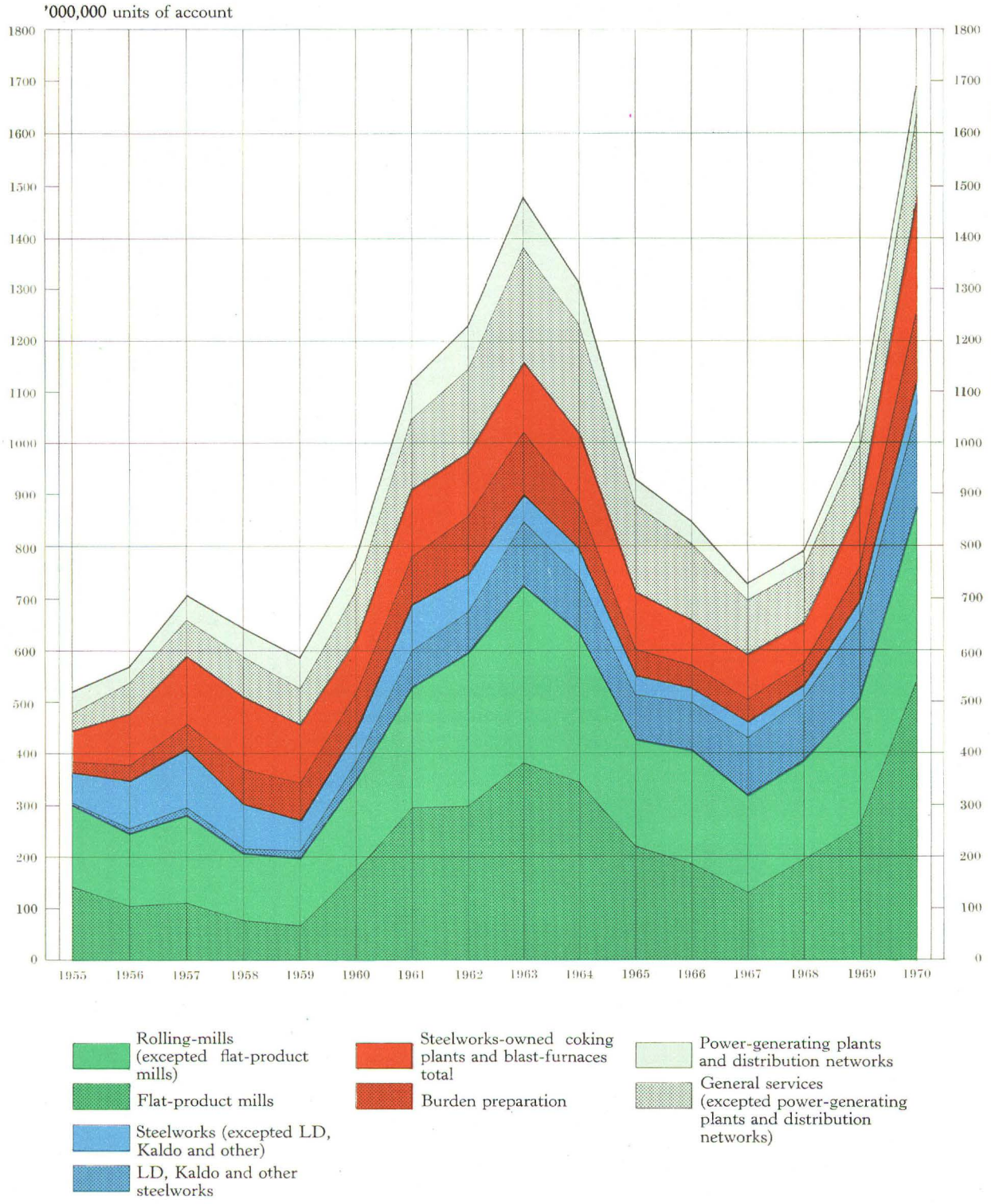
Product	Actual production		Production potential					
	1925	1970	1966	1970	1971	1972	1973	1974
Coke (steelworks-owned plant)	15.8	25.6	23.8	26.6	27.9	30.4	32.2	33.2
Sinter	15.6	92.3	85.7	103.1	113.8	128.4	131.8	141.2
Pig-iron	34.7	80.4	80.3	94.1	99.4	106.4	116.1	123.5

b) Steel Production

Capital expenditure on steelmaking capacity in 1970, at 231m units of account, has broken the record established in 1969, exceeding by around 15% the amount forecast in the 1970 survey. Actual spending in 1969 had also exceeded the survey estimates for that year by a similar percentage.

FIGURE 8

Breakdown of Capital Expenditure in the Iron and Steel Industry



Capital expenditure on **basic Bessemer** steelmaking capacity is at least for the time being, maintaining the even trend recorded in 1968 and 1969. It is, however, considerably lower than the corresponding figure for the beginning of the Sixties. Moreover, the spending involved here is directed more towards the conversion of old melting shops to the new bottom-blown oxygen processes (OBM, LWS, etc.) than to the repair or renovation of conventional basic Bessemer shops. 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 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 5% of the total capital expenditure on steelmaking capacity.

Expenditure on **electric steelmaking** capacity, on the other hand, continues to rise and in 1970 had more than doubled in relation to the previous year. The relative share of electric steelmaking capacity in the total thus rose from some 12% in 1969 to close on 20% in 1970. The main areas of concentration were in Germany, Central and Southern France and the inland areas of Italy. The investments in the south of France and Italian interior are likely to be of a more permanent nature.

The rapid increase in basic **oxygen steelmaking** capacity (LD, Kaldo and similar processes(1)) continues and has substantially exceeded the forecasts of the previous year. It accounted for 74% of total expenditure on steelmaking capacity in 1970. The main areas of concentration were a certain number of the seaboard areas (North Germany, Italy) but also inland areas, especially those fed by large capacity inland waterways (Rhineland — Westphalia, Belgium, Lorraine). Comparable amounts are expected for 1971 and 1972 in the same areas plus the northern and southern seaboard of France.

TABLE 19

Capital Expenditure on Steelmaking Plant 1954-72

'000,000 units of account

Production process	Actual expenditure												Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Basic Bessemer .	30.4	21.2	24.2	23.0	18.4	9.2	10.2	10.2	12.9	5.3	7.0	6.3	7.6	2.5
Open-hearth ...	33.5	29.1	44.8	30.2	18.5	22.7	13.0	8.7	3.9	6.7	4.9	5.4	7.8	3.0
Electric-furnace	13.0	11.1	21.8	21.1	18.1	19.9	16.5	10.4	16.8	16.6	21.7	48.2	47.9	41.5
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	171.3	210.7	194.6
Total	**84.1**	**95.4**	**162.8**	**152.4**	**175.0**	**158.3**	**124.7**	**122.1**	**143.8**	**148.1**	**186.8**	**231.2**	**274.0**	**241.6**

(1) Expenditure on the new bottom-blown oxygen processes (OBM, LWS, etc.) is for the present grouped together with that on conventional basic Bessemer plants, since the investment involved is usually for the straightforward conversion of existing vessels. On the other hand, the corresponding production potential is now set out under a separate heading.

Owing in particular to heavy investment in basic oxygen steelmaking plant (LD, Kaldo and similar processes), Community crude steel production potential should rise from 126.8m tons in 1970 to 160.6m tons in 1974, representing an average cumulative annual growth rate of 6.1%.

TABLE 20

Movement of Forecast Crude Steel Production Potential

'000,000 metric tons

Date of survey	Production potential forecast					
	1969	1970	1971	1972	1973	1974
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

Actual production potential usually exceeds that estimated 4 years ahead by the enterprises for the Commission's Annual Investment Surveys. These underestimates may be attributed to a number of factors:

1) the enterprises frequently tend not to declare projects for rapid execution in cases where their implementation is not considered necessary for the immediate future. Under these circumstances, over the long term, the growth estimates returned may often be lower than the growth rates subsequently recorded;

2) the enterprises frequently succeed in increasing the production potential of certain plant over and above the forecasts. Where no new investments worthy of note have been made, the movement recorded may be attributed to better knowledge of the production equipment, improvement of operating techniques, specialisation of production programmes between works, etc.

The Figure 10 will give an illustration of these remarks.

Even taking the estimates returned by the enterprises at face value, annual crude steel production potential for the next four years is expected to increase by 33.8m ingot tons, as compared with the 25.9m tons estimated for the 1969-73 period. Annual basic oxygen steelmaking potential (LD, Kaldo and similar processes) alone is expected to increase by 36.4m tons, as compared with 32.6m tons for the 1969-73 period. Electric steelmaking potential should increase by close on 4m tons, thus exceeding the figure (2.1m tons) forecast for the 1969-73 period.

On the other hand, basic Bessemer and open hearth steel production potential are expected to decline by 6.1 and 4.2m tons respectively. The decline in the open hearth process was greater than forecast in the previous survey for the 1969-73 period. Basic Bessemer continued to decline at a rapid rate, both as a result of a certain number of closures and the conversion of some others, particularly in the Saar, Southern Germany, Belgium, Lorraine and Luxembourg, to the new bottom-blown oxygen processes (OBM, LWS, etc.).

FIGURE 9

Actual Production and Production Potential of the Iron and Steel Industry

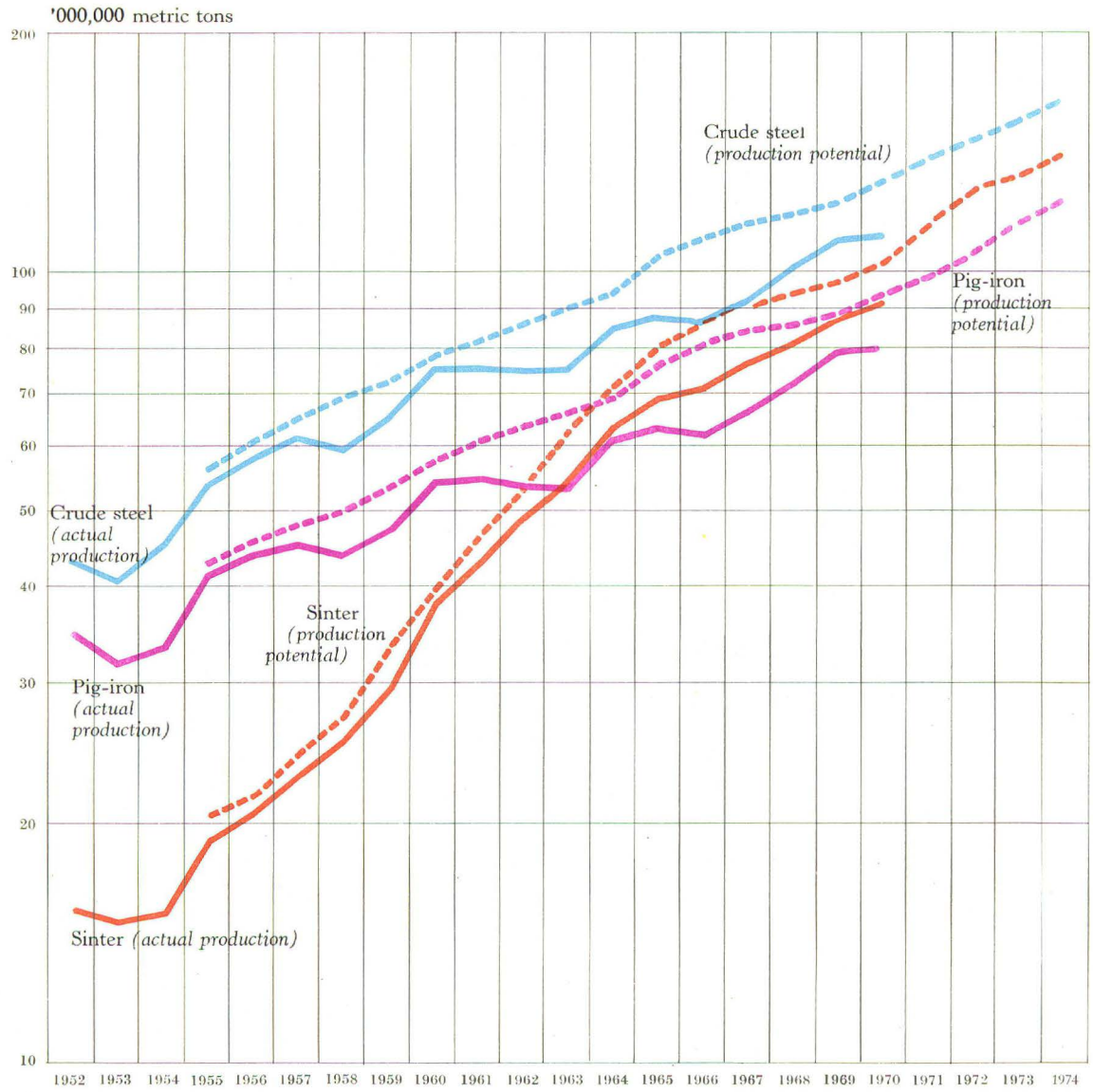
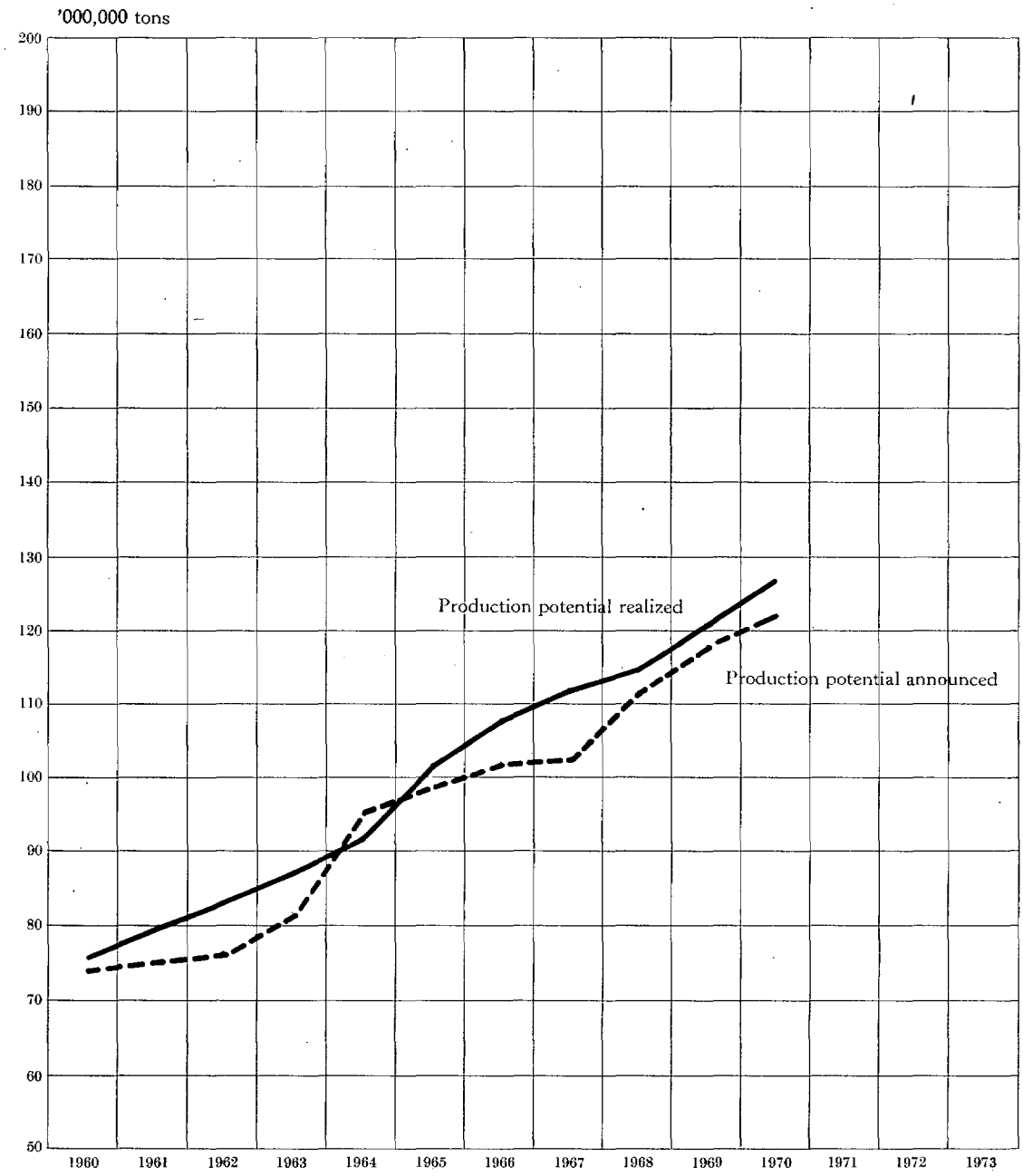


FIGURE 10

Community Crude Steel Production Potential Announced (1) and Realized



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

TABLE 21

Net Decrease in Open Hearth and Basic Bessemer Steelmaking Potential

'000,000 metric tons

	basic Bessemer	open-hearth	Total
1967	0.9	1.7	2.6
1968	3.2	1.7	4.9
1969	2.4	2.0	4.4
1970	5.4	1.4	6.8
Total net (actual) decrease for the period 1966-70	11.9	6.8	18.7
Total net (forecast) decrease for the period 1970-74 ...	6.1	4.2	10.3

The following Table shows the speeding up of the technological progress reported in the preceding surveys.

TABLE 22

Movement of Estimated Crude Steel Production Potential According to Production Process

'000,000 metric tons

Production process	Date of survey	Production potential					
		1969	1970	1971	1972	1973	1974
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
OBM, LWS and similar processes	1969	—	—	—	—	...	...
	1970	—	1.6	2.8	3.1	1.3	...
	1971	...	2.0	3.9	5.5	5.7	5.8
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
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
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

TABLE 23

Movement of Actual Crude-Steel Production Potential According to Manufacturing Process

'000,000 metric tons

Production process	Production		Production potential					
	1952	1970	1966	1970	1971	1972	1973	1974
Basic Bessemer	23.0	21.9	37.0	25.1	23.9	20.0	19.1	19.0
OBM, LWS and similar processes	—	1.4	—	2.0	3.9	5.5	5.7	5.8
Open hearth	15.2	22.2	32.8	26.0	24.6	24.1	22.8	21.8
Electric furnace	3.3	15.0	13.6	16.8	17.7	18.8	19.4	20.7
LD, Kaldo, etc.	0.3	48.7	24.6	56.9	66.9	76.7	84.8	93.3
Total	*41.8*	*109.2*	*108.0*	*126.8*	*137.0*	*145.1*	*151.8*	*160.6*
Continuous casting	0.0	4.7	...	6.4	9.9	13.0	16.8	21.7

The forecasts of the enterprises show that all Community countries hope to produce in 1974 more than half their crude steel output by basic oxygen processes (the percentages of actual basic oxygen production in 1970 are given in brackets) : Northern France 77% (56%), Netherlands 93% (78%), North Germany 77% (71%), Italian seaboard 84% (62%), Belgium 64% (52%), Ruhr 66% (59%), Luxembourg 52% (36%). In the same year the percentages applying to the Lorraine and the Saar steel industries should not exceed 31% and 34% respectively. Steel production potential by the bottom-blown oxygen processes (OBM, LWS, etc.) in 1974 will also reach 6% in northern France, 6% in the east of France, 52% in southern Germany, 8% in the Saar, 8% in Belgium and 8% in Luxembourg. The regional differences alone should not, of course, be regarded as indicative of the greater or lesser competitivity of the various steel producing areas.

For the Community as a whole, basic oxygen steelmaking plant (LD, Kaldo, etc.) is expected to account for more than 58% of overall capacity in 1974.

TABLE 24

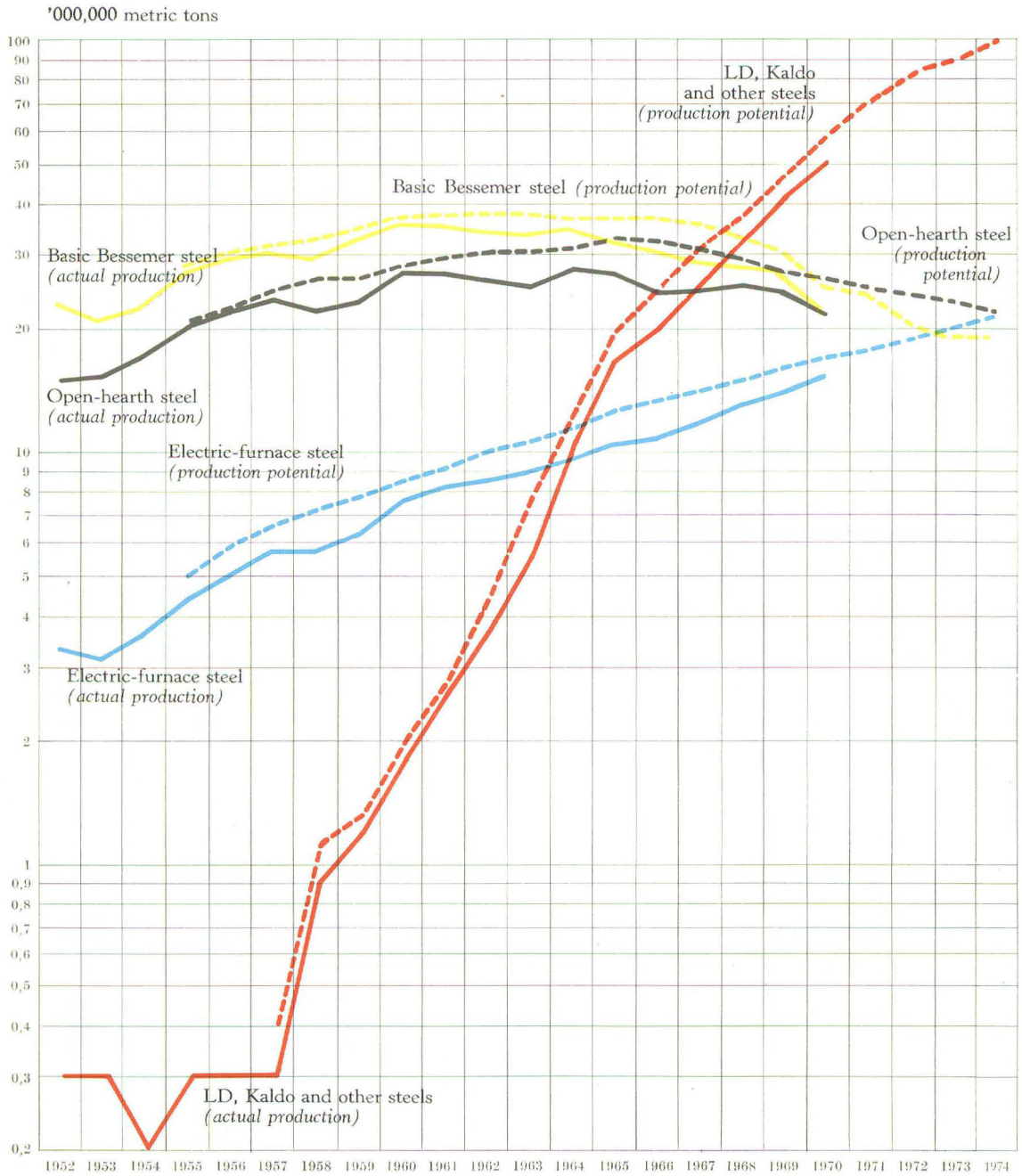
Shares of the Different Steelmaking Processes in 1952, 1966, 1970 and 1974

%

Production process	Actual production		Production potential		
	1952	1970	1966	1970	1974 (Estimated Share)
Basic Bessemer	55.0	20.1	34.2	19.8	11.8
OBM, LWS, etc.	—	1.3	—	1.6	3.6
Open hearth	36.4	20.3	30.4	20.5	13.6
Electric furnace	7.9	13.7	12.6	13.2	12.9
LD, Kaldo, etc.	0.7	44.6	22.8	44.9	58.1
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

FIGURE 11

Actual Production and Production Potential of Crude Steel by Production Process



A cumulative annual average growth rate of 13.2% is expected for conventional basic oxygen steels in 1970-74 and a rate of decline of about 4.3% for open hearth and 6.7% for basic Bessemer as against 1.9% and 9.3% respectively anticipated for 1970 for the period 1969-73.

TABLE 25

Average Annual Movement of the Different Steelmaking Processes

%

Production process	Average annual movement in actual production, 1952-1970	Estimated average annual movement in completed or approved production potential	
		1966-1970	1970-1974
Pig-iron (for comparison)	*+ 4.8*	*+ 4.0*	*+ 7.0*
Basic Bessemer	— 0.3	— 9.3	— 6.7
OBM, LWS, etc.	...	...	...
Open hearth	+ 2.1	— 5.7	— 4.3
Electric furnace	+ 8.8	+ 5.3	+ 5.3
LD, Kaldo, etc.	+32.7	+23.3	+13.2
Total, crude steel	*+ 5.5*	*+ 4.0*	*+ 6.1*

Production potential in 1970-74 is expected to increase at a cumulative average rate of 6.1% per year. This rate is well above those forecast in the previous surveys for each of the four-year periods covered (3.7% for 1965-69, 3.1% for 1966-70, 2.6% for 1967-71, 3.6% for 1968-72 and 5.0% for 1969-73) and should be practically the same as the rate forecast by the 1962 survey.

The average rate of 6.1% conceals considerable regional differences: 14% for coastal works, compared with about 4% for works inland.

Moreover, owing to the length of time required for the implementation of capital projects in the steel industry, this rate does not take into account a project already announced for the construction of one new coastal steelworks, and only partially the envisaged extension of two others.

The growth rate indicated in the present survey—as the previous report had forecast—is substantially in excess of that which had been declared in the 1970 survey for the 1969-73 period. It is quite possible that the 1972 Survey for the period ending 1975 will indicate a sustained high rate of growth. By 1975 the effects of the major new investments, declared or approved, on the Community seaboard will be making themselves felt. This shows that, while the growth trend for production potential follows the trend in the business cycle, there is a certain time-lag between them.

High though it may be, the growth rate for steel production potential remains below the 7% forecast for pig iron production potential. This exceptional rate, allowing for the particularly high cost of capital projects for ironmaking, suggests that the figure estimated for steel production

potential will be either achieved or even exceeded. This is reminiscent of the situation observed in the 1960-63 Surveys in which the growth rates forecast for pig iron production potential were above those for steel. The pig iron potential surplus, in which subsequent expansion of steelmaking capacity originates, seems to be associated, at least in part, with boom conditions in the economy.

TABLE 26

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
Period covered	1959-1963	1960-1964	1961-1965	1962-1966	1963-1967	1964-1968	1965-1969	1966-1970	1967-1971	1968-1972	1969-1973	1970-1974
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
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

c) Production of semis and rolled products

Between 1969 and 1970, capital expenditure approved for rolling mill plant (semis and finished products) increased from 504.7m to 872.3m units of account. The corresponding amounts for 1971 and 1972 are expected to be substantially higher, namely: 1214.6m and 923.1m, respectively.

Spending on rolling mill plant thus accounts for approximately 50% of capital expenditure in the steel industry as a whole. The same rolling mill share has generally been in evidence over the past ten years.

As far as **primary mill** plant is concerned, capital spending in 1970 for blooming and slabbing mills (80.8 million) did not quite reach the level recorded in 1969—or even those of the previous record years 1962 and 1963. In medium and heavy mills, which comprise a large number of primary mills, especially billet mills, spending in 1970 was not only below the 1969 level but also failed to attain the record levels of the early Sixties. As far as 1971 is concerned, spending should be the highest ever recorded for all mill categories.

Continuous casting followed an expanding trend in 1970. Actual spending was double that of 1969 but did not reach the same level as that of spending approved for blooming and slabbing mills, contrary to the forecasts made by the firms in the previous survey. In 1971, the increase expected for continuous casting, although considerable, will not be as high as that for conventional primary mills.

The process, however, at least at its present stage in development, is not following the same trends as the rolling mills—especially hot wide strip mills—which are showing the most rapid rate of growth.

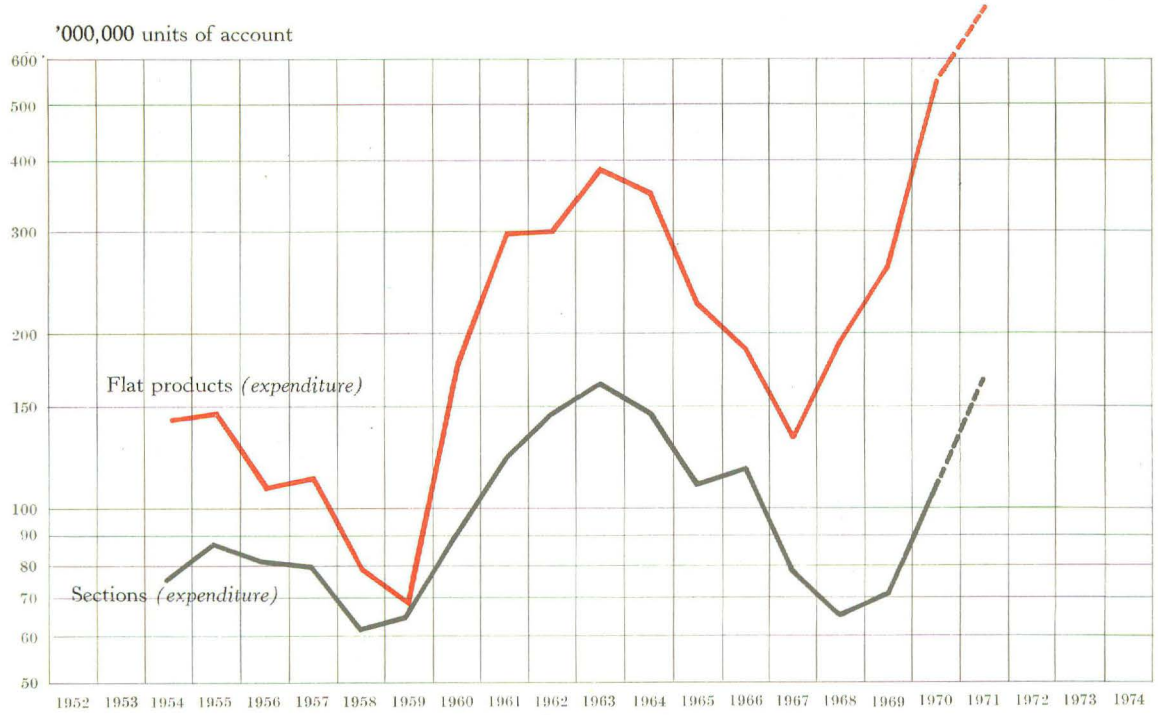
The data assembled in the present Survey should, however, be evaluated within a wider context. The development which has taken place over recent years shows the growing share of continuous casting in the production of semis for certain section and heavy and medium plate mills.

The following table reflects the development expected in continuous casting potential.

FIGURE 12

Sections and Flat Products

A—Capital expenditure



B—Actual production and production potential

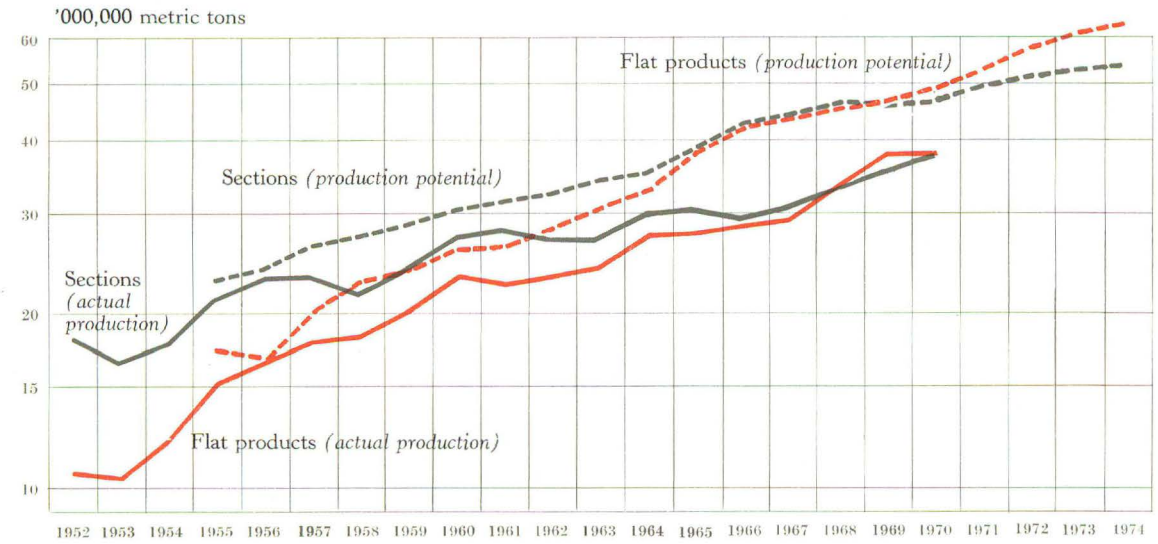


FIGURE 13

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

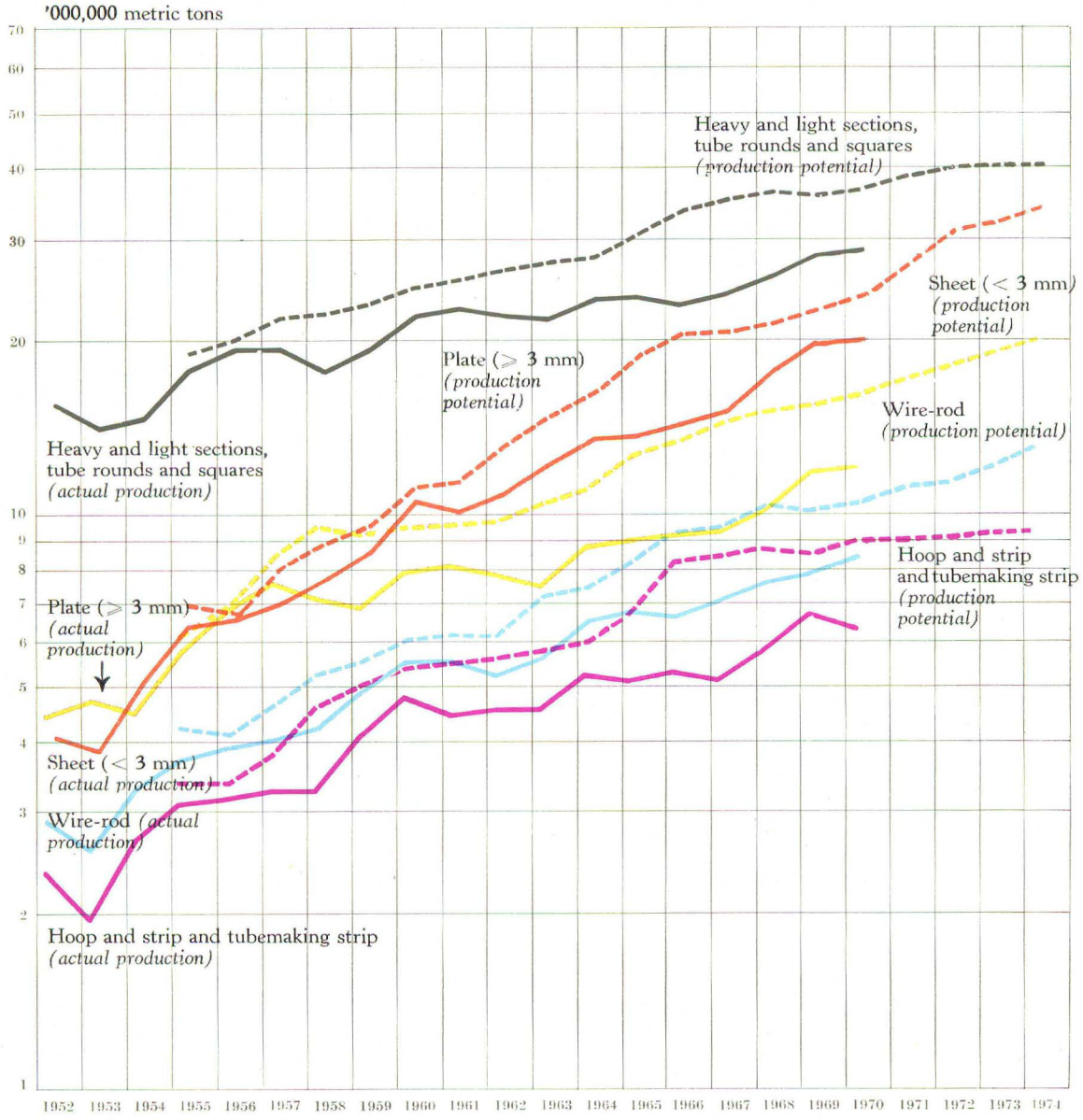


TABLE 27

Movement of Continuous Casting Potential

'000,000 metric tons

	Production 1970	Production potential				
		1970	1971	1972	1973	1974
Continuous casting	4.7	6.4	9.9	13.0	16.8	21.7

TABLE 28

Capital Expenditure on Production Capacity for Semis and Rolled Products, 1954-72

'000,000 units of account

Type of mill	Actual expenditure												Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
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	45.0	73.1	47.2
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	45.0	53.3	14.3
Wire mills	11.0	16.2	28.4	51.0	40.0	24.1	12.8	15.4	21.3	21.0	9.6	21.0	38.9	45.9
Total, section mills	*74.4*	*90.4*	*121.0*	*144.5*	*163.4*	*146.3*	*109.5*	*116.3*	*78.9*	*66.4*	*72.3*	*111.0*	*165.3*	*107.4*
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	14.0	8.2	3.5
Plate and universal mills .	29.0	24.8	35.4	46.2	64.0	32.2	23.1	33.2	20.5	34.6	43.6	92.7	181.2	104.1
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	0.1	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	1.0	—	—
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	110.2	261.9	251.0
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	321.4	272.1	199.3
Total, flat-product mills ...	*107.9*	*175.5*	*293.2*	*298.7*	*380.4*	*344.5*	*219.0*	*186.0*	*130.9*	*193.8*	*260.3*	*539.7*	*723.5*	*558.0*
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*	*80.8*	*154.1*	*106.8*
Continuous-casting plants ...	...	...	...	*2.3*	*4.1*	*5.6*	*10.0*	*13.1*	*28.2*	*19.9*	*30.5*	*64.0*	*81.1*	*69.8*
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*	*76.8*	*90.6*	*81.1*
Total	**249.9**	**350.3**	**532.4**	**597.6**	**726.4**	**634.3**	**425.5**	**405.0**	**317.7**	**391.1**	**504.7**	**872.3**	**1 214.6**	**923.1**

Considering the main categories of **rolling mills**, amounts spent in 1970 on long product capacity increased considerably over the corresponding amounts for the previous years. This trend is certainly expected to continue in 1971 and perhaps also in 1972. Flat product mills, on the other hand, will alone continue to absorb more than half the total expenditure on rolling mills and more than 5 times the amount set aside for section mills.

The annual rate of growth in production potential for rolled steel finished products, having declined considerably over recent years, continues its recovery stimulated by the boom conditions of 1969 and the first half of 1970. The growth rate for the 1970-74 period is thus expected to be 5.1%, viz. 3.3% for sections and 6.6% for flat products.

Almost without interruption during the past ten years, the rate of growth for flat products has been appreciably more rapid than for sections. This discrepancy is tending to be intensified. However, in 1970, total production of flat products was only able to sustain its 1969 level because of an increase in the production of sections (1.4m tons), whilst total production of flat products decreased by 0.8m tons.

TABLE 29

Average Annual Movement of the Different Types of Finished Products

Product	Actual production			Production potential				
	1952 (mill. tons)	Average cumulative annual movement (%)	1970 (mill. tons)	1966 (mill. tons)	Average cumulative annual movement (%)	1970 (mill. tons)	Average cumulative annual movement (%)	1974 (mill. tons)
Heavy and light sections, incl. tube rounds and squares	15.2	+ 3.7	29.3	33.6	+ 2.0	36.6	+ 2.9	41.2
Wire-rod	2.8	+ 6.2	8.3	9.2	+ 3.1	10.4	+ 4.7	12.5
Total, sections	**18.0**	**+ 4.2**	**37.6**	**42.8**	**+ 2.4**	**47.0**	**+ 3.3**	**53.7**
Hoop and strip and tube strip	2.3	+ 5.8	6.3	8.2	+ 0.5	8.4	+ 2.6	9.3
Plate of 3mm. and over (1) ..	4.3	+ 5.7	11.6	13.0	+ 5.8	16.3	+ 5.1	19.9
Hot-rolled sheet under 3mm. (1)	3.1	—10.7	0.5	1.8	—13.7	1.0	+ 0	1.0
Cold-reduced sheet under 3mm.	0.8	+19.3	19.1	18.0	+ 6.4	23.2	+ 9.2	33.1
Total, flats (1)	**10.5**	**+ 7.3**	**37.5**	**41.0**	**+ 4.5**	**48.9**	**+ 6.6**	**63.3**
Total, finished rolled products (1)	*28.5*	*+ 5.5*	*75.1*	*83.8*	*+ 3.3*	*95.9*	*+ 5.1*	*117.0*
(of which: products rolled in continuous and semi-continuous mills)	(.)	(.)	(51.6)	(.)	(.)	(65.2)	(+ 6.8)	(84.9)

(1) Exclusive of coils rating as end products in respect of which the production potential would increase from 5.7 to 9.2 m. tons from 1970 to 1974.

The average annual rate of growth between now and 1974 is expected to be particularly rapid for **coils**, as is shown in the table below.

FIGURE 14

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

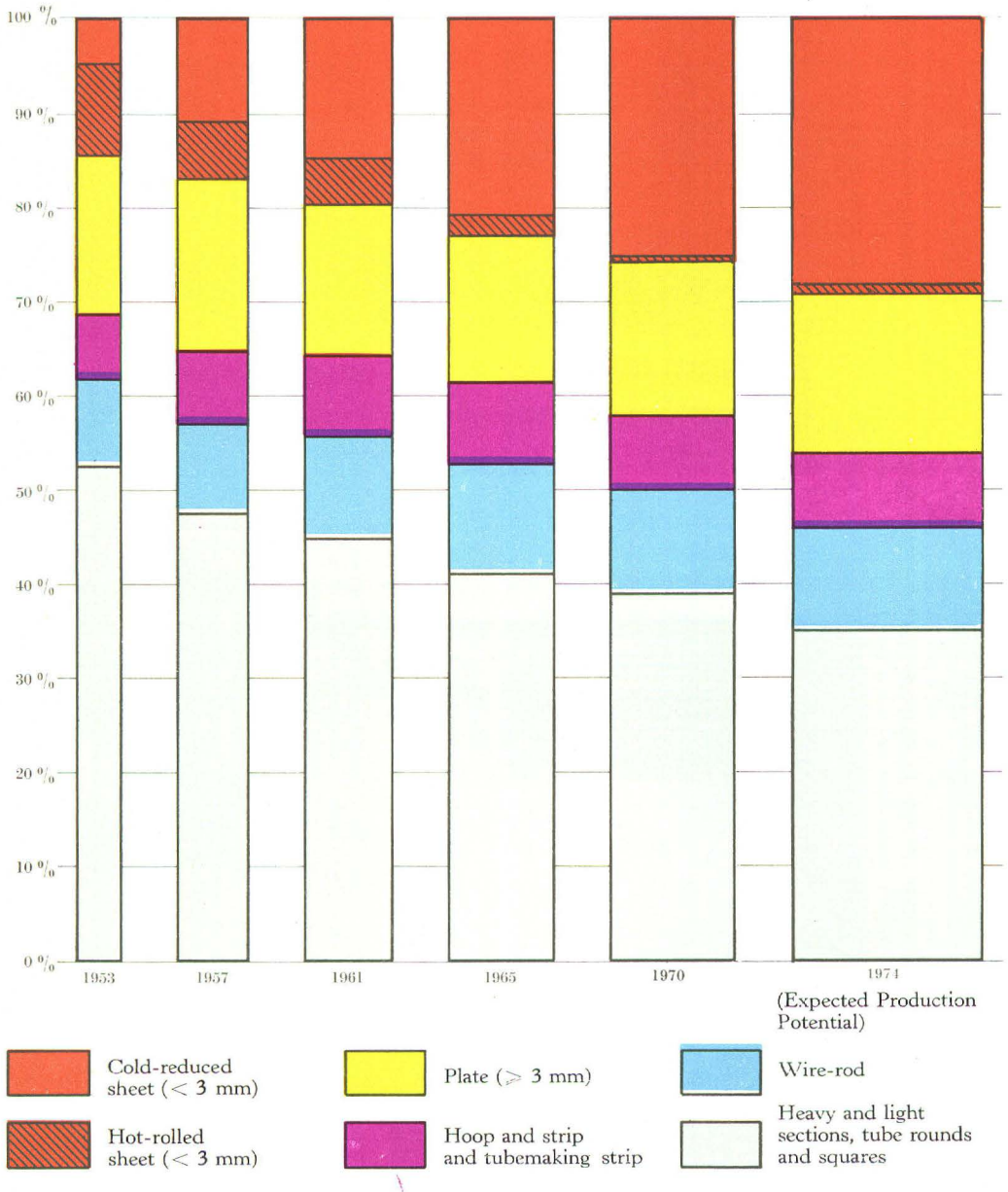


FIGURE 15

Development of technics for the production of Plate ⩾ 3 mm, Hoop and strip and tubemaking strip

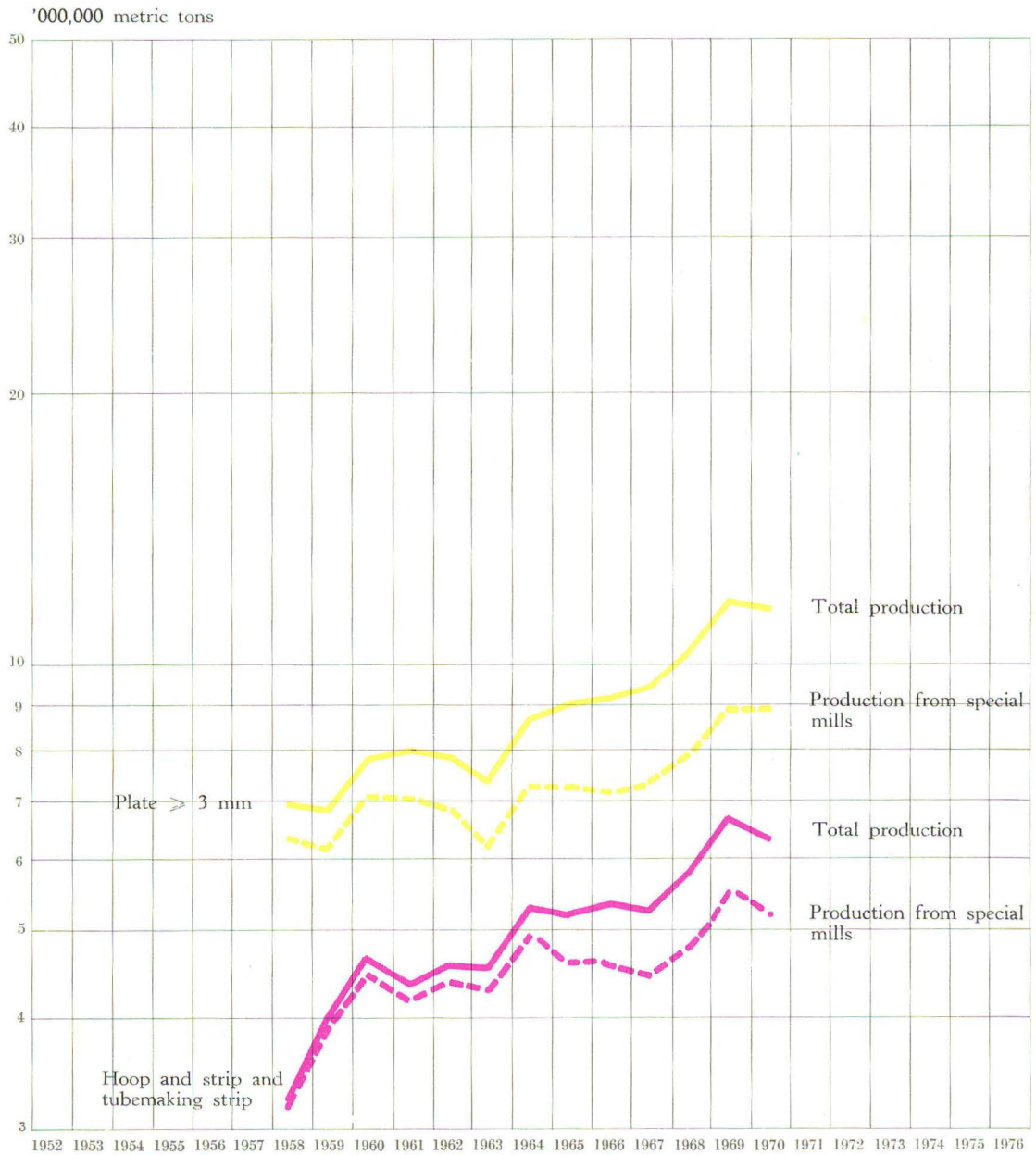


TABLE 30

Annual Rate of Growth in Coils Production Potential

	Production potential				
	1966 ('000,000 tons)	Average cumulative annual movement (%)	1970 ('000,000 tons)	Average cumulative annual movement (%)	1974 ('000,000 tons)
Coils	23,6	+9,1	33,5	+11,6	51,9

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 it difficult to give a survey of this material. In particular, the data supplied by the firms on production potential for coils as finished products are influenced to a considerable extent by their demand forecasts and especially by the anticipated structure of external exchanges.

According to the current survey, the firms expect to be able to sell some 9.2m tons of coils as finished products in 1974 (as compared with 4.4m in 1970, with production potential estimated at 5.7m). If these tonnages of coils as finished products are added to the 117.0m ton given in Table 29, the flat product share would rise from 54% in 1969 to 57% in 1974.

The trend in production potential for coils is not only associated with the expansion of demand for cold-reduced sheet, but also with the production of heavy and medium plate and/of hoop and strip, the former obtained by cutting and the latter by slitting. In 1958 the share of heavy and medium plate obtained by cutting up coils accounted for 9% of the total production of plate $\geqslant$ 3 mm. This percentage rose from 19% in 1965 to 23% in 1970. The corresponding percentages for hoop and strip obtained by slitting were 2% in 1958, 11% in 1965 and 18% in 1970.

TABLE 31

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

'000,000 metric tons

Product	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Heavy and medium plate													
— 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
— from coils	0.6	0.6	0.7	1.0	1.0	1.0	1.4	1.7	1.9	1.9	2.3	2.7	2.7
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*
Hoop and strip and tubemaking strip													
— 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
— 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
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*

d) General services

Capital expenditure on general services—civil engineering, workshops, laboratories—had increased rapidly up to 1964, when it accounted for 300m units of account or 24% of total investments in the steel industry. In 1970, the corresponding figure was only 225.7m units of account, or 13%. However, spending is up almost 50% on 1969.

A new increase in this item may be expected for the period in which the major projects of enterprises about to expand or to build new integrated works on the Community seaboard are implemented.

TABLE 32

Capital Expenditure on the General Services of the Iron and Steel Industry, 1954-72

'000.000 units of account

Type of installation	Actual expenditure												Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
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	45.6	58.0	78.4
Miscellaneous ..	58.3	96.6	137.4	162.9	226.1	213.7	166.0	145.4	104.7	105.2	117.6	180.1	388.5	303.4
Total	**103.8**	**157.3**	**209.1**	**247.1**	**319.7**	**300.0**	**221.7**	**188.5**	**138.2**	**138.6**	**158.4**	**225.7**	**446.5**	**381.8**

VIII—CONCLUSIONS

According to the estimates returned by the firms, annual **coal extraction potential** is expected to fall some 22m tons between 1970 and 1974 to a level of 161m tons. This suggests a slowing down in the rate of decline which would only be 3.1% per annum as compared with an average of 5.5% for the period 1966 to 1970. However, as previous reports have shown, the forecasts returned by the collieries generally underestimate the actual closures : thus, for example, in 1971 the extraction potential declared for January 1, 1971, shows a cut-back of 4% in excess of that estimated a year earlier for the same year, although in 1970, as in 1969, colliery sales were considerably higher in previous years and substantial price increases had been applied. 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 161m figure declared.

On the other hand, in the **cokemaking** sector, the recovery forecast in the 1970 survey, has been confirmed. In decline for ten years, Community cokemaking potential—for which the exceptional utilisation rate of 99% was recorded in 1970—is expected to rise from 70.7m tons to 80.5m in 1974, thus returning to the 1964 level. This increase—representing an average annual rate of some 3%—is partly attributable to the investment effort of the collieries, which have earmarked about a third of their capital spending to the cokemaking sector. An even more significant factor will be the programmes of the steelworks, for implementation mainly at coastal sites. However, the age and obsolescent state of many batteries may necessitate the closure of some of them earlier than intended by the operators, for technical or economic reasons. It is thus by no means certain that production potential will actually exceed the figure of 77.0m tons forecast for 1975 by the last General Objectives Steel of the ECSC.

In the **iron ore mines** capital spending in 1970 remained at the same modest level as in the two previous years, but may possibly increase slightly in 1971. Extraction potential is expected to remain practically unchanged, especially as regards Lorraine, the share of which in the Community total would remain at around 75%. The gross potential figure of about 80m tons per year tallies with the estimates given in the General Objectives of the Community which forecast for 1975, assuming average trading condition, a figure for consumption of Community ore of 21.5m tons Fe-content, in other words a figure fairly close to the 20.9m tons consumed in 1970.

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, is expected to increase further to 2,500m in 1971 and, as a result, their production potential would expand at an accelerated rate at all levels of production.

Almost all the regions of the Community have a share, admittedly in unequal proportions, in the increase in capital spending recorded in 1970 and forecast for 1971 and 1972. The disparity

is, however, most noticeable between the growth rate in production potential forecast for coastal steelwork—14% today for crude steel, compared with 9% in the 1970 Survey—and the corresponding rate for inland steelworks, which remains unchanged at 4%.

The upswing is particularly noticeable in the **pig iron** sector. The average growth rate in production potential is expected to reach 7% between 1970 and 1974, whereas the rate forecast in the previous survey for the 1969-73 period was 5.3%. This rapid increase in the expansion of pig iron potential, outstripping that forecast for steelmaking, had first been noted at the beginning of the last decade. Under these circumstances the figure of 123m tons of pig iron forecast by the General Objectives for 1975 could be reached as early as 1974.

Between 1970 and 1974 **crude steel** production potential will probably increase from 127 to 161 million tons. The General Objectives forecast production potential at 163 million for 1975. As the previous Survey report had forecast, the resulting average annual growth rate, i.e. 6.1%, will probably exceed considerably the 5% rate announced by the 1970 Survey for the 1969-73 period. The 1972 Survey for the period ending in 1975 will no doubt also forecast a high rate of growth, since it will take account to a greater extent of the major new investment projects, planned or approved, for the Community seaboard.

High though it may be, the growth rate for steelmaking potential still remains below the corresponding rate of 7% already mentioned for pig iron. This exceptional growth rate, allowing for the especially high cost of ironmaking investment, suggests that the figures expected for steelmaking potential will be confirmed, or even exceeded. A similar dynamic trend was noted during the previous boom period in steel trading conditions, and high rates of growth were forecast for steel and higher ones still for pig iron in the 1959, 1960 and 1961 Surveys. In view of the length of time taken for investments adopted at that time to be implemented, these rates only decreased very slowly during the ensuing years in spite of the intervening downturn in the economy.

The around 34m tons per annum of production potential to be installed between now and 1974 can be traced to two opposing trends obtaining since the middle of the sixties. Basic oxygen steelmaking (LD, Kaldo, etc.) is expected to expand by more than 36m tons, to which should be added the production potential supplied by the new bottom-blown oxygen processes (OBM, LWS, etc.), which made their appearance in 1969, i.e. close on 4m tons. Moreover, electric furnace steelmaking is also expected to show an increase of some 4m tons. On the other hand, basic Bessemer and open hearth potential should decrease respectively by 6m and 4m tons. Most enterprises abandoning the basic Bessemer process prefer to convert their melting shops to the new processes sooner than close them. Open hearth steelmaking potential is expected to decline at a more rapid rate than that forecast in the previous survey. Moreover, part of this potential will probably consist of furnaces kept in reserve, which would only be put back to service during exceptional boom periods.

With regard to **semis production** the expansion of continuous casting is expected to accelerate. The expected trend reflects the increasing share of this process in the production of semis for certain section mills and for heavy and medium plate mills.

In **flat product mills,** capital spending in 1970 was approximately 5 times the figure spent on **long product mills,** representing a considerable increase. The relative disparity between the annual growth rates forecast for production potential in the new sectors increases from one Survey period to the next: for the 1970-74 period 3.3% for long products and 6.6% for flat products, compared with 2.9% and 5.3% respectively in 1969-73. In particular the growth rate in coils production potential expected is very high: 11.6% per year for 1970-74.

Overall, the steel industry forecasts reflect to a greater degree than in the previous year, the decisions made by the firms in a period which was characterised by a sharp upswing in trading conditions. Comparison of these data with the outlook given by the Community's General Objectives for Steel 1975-80 raises the question as to whether the staggering of certain projects would not facilitate a better adjustment between supply and demand trends. This would make it possible to reduce the importance of phases of high investment and phases in which—when the completion of the projects involved has resulted in the presence of actual capacity—the tendency to invest reduces rapidly under the impact of economic and financial constraints.

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 January 1, 1971;*

B—*Projects approved but not yet in progress on January 1, 1971;*

C—*Other projects planned to be started between January 1, 1971 and December 31, 1973.*

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) Unit of account

The unit adopted is the unit of account of the European Payments Union (EPU) and subsequently that of the *European Monetary Agreement* (EMA). Their equivalents in national currencies are given in the following table:

Country	Currency	Up to and including 1956	1957	1958	1959 and 1960	1961	1962 to 1968	1969	1970 and onwards
Germany (Fed. Rep.)	DM	4.20	4.20	4.20	4.20	4.03 (4)	4.00	3.94 (7)	3.66
Belgium/Luxembourg	BF/LF	50	50	50	50	50	50	50	50
France (1)	FF (2)	350	377 (3)	420	4.937 (2)	4.937	4.937	5.178 (6)	5.554
Italy	Lire	625	625	625	625	625	625	625	625
Netherlands	Fl.	3.80	3.80	3.80	3.80	3.65 (5)	3.62	3.62	3.62

(1) And Saar up to July 5, 1959.
(2) NF as from January 1, 1959.
(3) Mean between official rate of exchange in force from January 1 to August 11, 1957 (350) and that in force from August 12 to December 31, 1957 (4.20).
(4) Mean between official rate of exchange in force from January 1 to March 3, 1961 (420) and that in force from March 4 to December 31, 1961 (4.00).
(5) Mean between official rate of exchange in force from January 1 to March 3, 1961 (3.80), and that in force from March 4 to December 31, 1961 (3.62).
(6) Mean between official rate of exchange in force from January 1 to August 10, 1969 (4.937) and that in force from August 11 to December 31, 1969 (5.554)
(7) Mean between official rate of exchange in force from January 1 to October 26, 1969 (4.00) and that in force from October 27 to December 31, 1969 (3.66).

(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 gives the indices calculated according to this new method, starting with 1960.

1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
92.5	93.0	97.2	100.0	102.0	104.4	106.9	107.8	107.8	112.3	

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 1970 of only about 0.2 million metric tons, out of 164.6 million, i.e. 0.1%.

(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 entreprises would over the next few years remain at the level of actual production for 1970. 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 1970. 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, Meurthe-et-Moselle, Meuse, Vosges, Territoire de Belfort, Haute-Saône, Moselle, Bas-Rhin, Haut-Rhin;
Northern France:	Departments of Aisne, Nord, Oise, Pas-de-Calais, Seine, Région parisienne, Seine-et-Marne, Somme;
France: other areas:	all other Departments.

II—STATISTICAL TABLES(1)

COAL

IRON ORE

STEEL

(1) In order to facilitate comparison between the statistical tables of this and previous reports, the numbering used in the previous reports has been retained here.

HARD-COAL INDUSTRY (1)

Total investment

TABLE I

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Ruhr	127.75	110.02	85.87	77.74 (4)	55.94 (4)	63.37 (4)	88.91 (4)	129.76 (4)	115.87 (4)
Aachen	5.37	6.09	4.05	6.98 (5)	5.69 (5)	9.10 (5)	10.16 (5)	9.81 (5)	8.11 (5)
Lower Saxony	2.68	1.65	0.89	1.18	2.24	3.13	3.14	4.47	4.23
Saar	14.61	8.72	9.66	9.21	4.22	6.31	7.51	11.49	7.53
Germany (FR)	*150.41*	*126.48*	*100.47*	*95.11*	*68.09*	*81.91*	*109.72*	*155.53*	*135.80*
Campine (2)	6.97	5.65	5.49	7.56	4.45	3.71	5.15	5.83	2.60
Southern Belgium (2)	8.09	5.23	5.89	6.01	3.95	3.86	6.36	5.26	1.99
Dutch Limburg (2)	7.39	4.34	2.21	1.90	0.50	1.01	0.90	0.88	0.07
Belgium and the *Netherlands*	*22.72*	*16.27*	*14.41*	*16.56*	*10.43*	*9.62*	*13.52*	*13.83*	*4.97*
Nord/Pas-de-Calais	16.07	15.55	16.65	15.78	7.40	6.94	6.34	5.76	7.01
Lorraine	17.05	13.96	12.52	10.92	6.65	6.73	6.80	5.76	7.40
Centre-Midi	6.94	7.99	6.70	5.82	3.39	2.20	2.12	1.84	1.76
Independent plants (3)	0.64	0.60	0.30	—	—	—	—	—	—
France	*40.70*	*38.10*	*36.17*	*32.52*	*17.44*	*15.87*	*15.26*	*13.36*	*16.17*
Italy	*4.89*	*7.75*	*7.67*	*5.84*	*5.35*	*2.85*	*3.97*	*3.66*	*1.70*
Total	**218.72**	**188.60**	**158.72**	**150.03**	**101.31**	**110.25**	**142.47**	**186.38**	**158.64**

(1) Without the expenses of the central thermal units and other energetical installations.
(2) These figures do not include the independent cooking mines. However these latter are re-inserted in the total Belgium and Netherlands.
(3) Manufactures of agglomerates.
(4) Without the expenses of the Ruhr part of EBV.
(5) Includes the expenses of the Ruhr part of EBV.

HARD-COAL COLLIERIES

Investment

TABLE II

Capital Expenditure by Coalfields

'000,000 units of account

Coalfield	Actual expenditure						Estimated expenditure		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Ruhr	114.38	98.80	78.75	70.71 (1)	47.73 (1)	47.51 (1)	67.61 (1)	87.94 (1)	85.47 (1)
Aachen	5.27	4.26	2.36	5.07 (2)	5.30 (2)	7.46 (2)	8.05 (2)	6.92 (2)	6.42 (2)
Lower Saxony	2.66	1.60	0.88	1.13	2.22	3.08	2.99	4.33	4.19
Saar	13.62	8.54	9.33	5.23	3.64	5.54	6.24	10.05	6.97
Germany (FR)	*135.93*	*113.20*	*91.32*	*82.14*	*58.89*	*63.59*	*84.89*	*109.24*	*103.05*
Campine	4.51	4.71	5.49	7.56	4.45	3.71	5.15	5.83	2.60
Southern Belgium	7.55	5.06	5.72	5.83	3.77	3.81	6.16	4.93	1.90
Belgium	*12.06*	*9.77*	*11.21*	*13.39*	*8.22*	*7.52*	*11.31*	*10.76*	*4.50*
Netherlands (Limburg)	*7.04*	*3.63*	*2.08*	*1.80*	*0.50*	*1.01*	*0.90*	*0.88*	*0.07*
Nord/Pas-de-Calais	13.33	13.51	13.07	12.34	6.40	5.03	4.36	4.47	5.77
Lorraine	16.03	13.09	12.24	10.59	6.49	6.62	6.58	5.26	6.90
Centre-Midi	5.97	6.13	5.30	5.52	3.28	2.06	2.05	1.72	1.63
France	*35.33*	*32.73*	*30.61*	*28.45*	*16.17*	*13.71*	*12.99*	*11.45*	*14.30*
Italy	—	*3.51*	*4.66*	*2.13*	*2.46*	*2.10*	*1.90*	*1.60*	*1.20*
Total	**190.36**	**162.84**	**139.88**	**127.91**	**86.24**	**87.93**	**111.99**	**133.93**	**123.12**

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

MINE-OWNED AND INDEPENDENT COKING-PLANTS (1)

Investment

TABLE III

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Mine-owned coking-plants									
Ruhr	12.18	10.43	6.91	6.97 (2)	8.05 (2)	15.67 (2)	21.07 (2)	34.26 (2)	28.07 (2)
Aachen	0.06	0.16	0.23	1.84 (3)	0.34 (3)	0.91 (3)	1.35 (3)	2.68 (3)	1.67 (3)
Saar	0.99	0.18	0.33	3.98	0.58	0.77	1.27	1.44	0.62
Germany (FR)	*13.23*	*10.77*	*7.47*	*12.79*	*8.97*	*17.35*	*23.69*	*43.38*	*30.36*
Belgium and *Netherlands*	*0.11*	*0.01*	—	*0.21*	—	—	*0.07*	—	—
Nord/Pas-de-Calais	1.10	1.37	1.96	3.16	0.77	1.70	1.71	1.15	1.00
Lorraine	1.02	0.87	0.28	0.33	0.16	0.11	0.22	0.50	0.50
Centre-Midi	0.34	0.16	0.45	0.14	0.10	0.11	0.04	0.12	0.11
France	*2.46*	*2.40*	*2.69*	*3.63*	*1.03*	*1.92*	*1.97*	*1.77*	*1.61*
Total	**15.80**	**13.18**	**10.16**	**16.63**	**10.00**	**19.27**	**25.73**	**45.15**	**31.97**
Independent coking-plants									
Belgium and *Netherlands*	*0.16*	*1.04*	*0.82*	*0.88*	*1.53*	*1.04*	*1.04*	*1.86*	*0.31*
Italy	*4.89*	*4.24*	*3.01*	*3.71*	*2.89*	*0.75*	*2.07*	*2.06*	*0.50*
Total	**5.05**	**5.28**	**3.83**	**4.59**	**4.42**	**1.79**	**3.11**	**3.92**	**0.81**
Grand Total	**20.85**	**18.46**	**13.99**	**21.22**	**14.42**	**21.06**	**28.94**	**49.07**	**32.78**

(1) Including low and medium-temperature coking-plants.
(2) Without the expenses of the Ruhr part of EBV.
(3) Includes the expenses of the Ruhr part of EBV.

HARD-COAL BRIQUETTING-PLANTS

Investment

TABLE IV

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Ruhr	1.19	0.79	0.21	0.06 (1)	0.16 (1)	0.19 (1)	0.23 (1)	2.56 (1)	2.33 (1)
Aachen	0.04	1.67	1.46	0.07 (2)	0.05 (2)	0.73 (2)	0.76 (2)	0.21 (2)	0.02 (2)
Lower Saxony	0.02	0.05	0.01	0.05	0.02	0.05	0.15	0.14	0.04
Germany (FR)	*1.25*	*2.51*	*1.68*	*0.18*	*0.23*	*0.97*	*1.14*	*2.91*	*2.39*
Campine	2.46	0.94	—	—	—	—	—	—	—
Southern Belgium	0.54	0.17	0.17	0.18	0.18	0.05	0.20	0.33	—
Belgium	*3.00*	*1.11*	*0.17*	*0.18*	*0.18*	*0.05*	*0.20*	*0.33*	*0.09*
Netherlands (Limburg)	*0.35*	*0.71*	*0.13*	*0.10*	—	—	—	—	—
Nord/Pas-de-Calais	1.64	0.67	1.62	0.28	0.23	0.21	0.27	0.14	0.24
Centre-Midi	0.63	1.70	0.95	0.16	0.01	0.03	0.03	—	0.02
Independent plants	0.64	0.60	0.30	—	—	—	—	—	—
France	*2.91*	*2.97*	*2.87*	*0.44*	*0.24*	*0.24*	*0.30*	*0.14*	*0.26*
Total	**7.51**	**7.30**	**4.85**	**0.90**	**0.65**	**1.26**	**1.64**	**3.38**	**2.74**

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

TABLE VI

Extraction and Extraction Potential by Coalfields

'000,000 metric tons

Actual extraction 1970	Coalfield	Extraction potential					Expected extraction potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
91.1	Ruhr	121.7	108.8	100.7	104.3	101.4	98.8	98.9	99.0	1 00.0
6.9	Aachen	8.4	8.4	8.2	7.5	6.9	7.1	7.1	7.1	6.7
2.7	Lower Saxony	2.0	2.3	2.3	2.7	2.8	2.8	2.7	2.7	2.7
10.6	Saar	14.3	13.9	12.2	14.1	14.2	12.2	12.3	12.1	12.1
111.3	*Germany (FR)*	*146.4*	*133.4*	*123.4*	*128.6*	*125.3*	*120.9*	*121.0*	*120.9*	*121.5*
7.1	Campine	10.0	9.0	9.4	9.4	9.1	9.1	9.1	7.6	7.6
4.3	Southern Belgium	10.0	9.4	6.8	5.7	4.9	4.4	4.1	3.7	2.9
11.4	*Belgium*	*20.0*	*18.4*	*16.2*	*15.1*	*14.0*	*13.5*	*13.2*	*11.3*	*10.5*
4.3	*Netherlands* (Limburg)	*11.4*	*9.3*	*8.6*	*5.8*	*5.0*	*4.5*	*3.4*	*3.0*	*1.2*
17.0	Nord/Pas-de-Calais	25.7	24.1	22.2	19.9	17.3	15.4	14.0	12.5	11.5
12.8	Lorraine	15.5	15.2	15.2	14.7	13.4	12.7	12.5	12.4	12.2
7.5	Centre/Midi	9.9	9.4	9.2	8.4	7.6	7.2	6.6	5.2	3.8
37.3	*France*	*51.1*	*48.7*	*46.6*	*43.0*	*38.3*	*35.3*	*33.1*	*30.1*	*27.5*
0.3	*Italy*	*0.7*	*0.7*	*0.4*	*0.4*	*0.4*	*0.3*	*0.3*	*0.2*	*0.2*
164.6	**Total**	**229.6**	**210.5**	**195.2**	**192.9**	**183.0**	**174.5**	**171.0**	**165.5**	**160.9**

N.B.: The above table does not take into account the extraction of some mines of small capacity (206,000 metric tons in 1970 of which 172,000 metric tons from the "small" German mines, which do not figure in the official production statistics).

COKE

Production

TABLE VII a

Production and Production Potential by Areas

'000,000 metric tons

Actual production (1) 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
	Mine-owned coking-plants									
27.9	Ruhr	34.4	30.5	28.8	28.2	27.5	28.1	28.5	30.1	30.9
2.1	Aachen	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1
1.8	Saar	1.3	1.3	1.8	1.8	1.9	2.0	2.0	2.0	2.0
31.8	*Germany (FR)*	*37.6*	*33.7*	*32.6*	*32.0*	*31.5*	*32.2*	*32.5*	*34.2*	*35.0*
—	*Belgium* and the *Netherlands*	*3.4*	*2.4*	*2.1*	*1.0*	*0.1*	—	—	—	—
5.3	Nord/Pas-de-Calais	5.2	5.2	5.1	5.3	5.3	5.5	5.4	5.4	5.4
2.7	Lorraine	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.5
0.8	Centre/Midi	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.4
8.8	*France*	*8.9*	*8.9*	*8.8*	*9.0*	*9.0*	*9.2*	*9.1*	*9.0*	*8.3*
40.6	**Total**	**49.9**	**45.0**	**43.5**	**42.0**	**40.6**	**41.4**	**41.6**	**43.2**	**43.3**
	Independent coking-plants									
1.4	*Belgium* and the *Netherlands*	*1.4*	*1.4*	*1.4*	*1.2*	*1.0*	*1.5*	*1.5*	*1.5*	*1.5*
2.5	*Italy*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*
3.9	**Total**	**3.9**	**3.9**	**3.9**	**3.7**	**3.5**	**4.0**	**4.0**	**4.0**	**4.0**
	Steelworks-owned coking-plant									
8.1	*Germany (FR)*	*8.4*	*8.1*	*7.9*	*7.6*	*8.3*	*8.7*	*9.0*	*9.7*	*9.4*
7.7	*Belgium* and the *Netherlands*	*6.6*	*6.7*	*6.8*	*6.9*	*8.3*	*8.3*	*9.7*	*9.6*	*9.5*
5.3	*France*	*4.5*	*4.6*	*4.4*	*4.7*	*5.3*	*5.4*	*5.6*	*6.3*	*6.9*
4.5	*Italy*	*4.3*	*4.3*	*4.3*	*4.3*	*4.7*	*5.5*	*6.1*	*6.6*	*7.4*
25.6	**Total**	**23.8**	**23.7**	**23.4**	**23.5**	**26.6**	**27.9**	**30.4**	**32.2**	**33.2**
70.1	**Grand Total**	**77.6**	**72.6**	**70.8**	**69.2**	**70.7**	**73.3**	**76.0**	**79.4**	**80.5**

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

COKING-PLANTS

Technical Data

TABLE VIII

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

Type of coal	1966 (1)		1967		1968 (1)		1969		1970	
	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%
Group V (2)	65 877	75.7	61 124	72.9	61 885	73.4	69 022	77.0	71 469	78.0
Group VI (2)	16 168	18.5	17 092	20.4	17 971	21.3	15 050	16.8	15 148	16.5
Other groups	4 244	4.9	4 900	5.8	3 593	4.3	4 585	5.1	4 315	4.7
Coke breeze and low-temperature coke breeze	764	0.9	730	0.9	812	1.0	1 031	1.1	758	0.8
Total	**87 053**	**100.0**	**83 846**	**100.0**	**84 261**	**100.0**	**89 688**	**100.0**	**91 690**	**100.0**
	'000 metric tons	output kg/t (3)	'000 metric tons	output kg/t (3)	'000 metric tons	output kg/t (3)	'000 metric tons	output kg/t (3)	'000 metric tons	output kg/t (3)
Coke production ..	65 630	753.9	63 256	754.4	63 499	753.6	67 951	757.6	70 103	764.6
	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of input total
Oil input	55 204	0.063	27 463	0.033	32 315	0.038	29 117	0.032	34 764	0.038

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

(2) The breakdown between Groups V and VI is only approximate.

(3) 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
a) Coke-oven gas delivered	'000,000 stand. cub. m.	29 481	28 602	28 697	30 795	30 860
b) Gas output	stand. cub. metres per ton of wet-charged coal	399	341	341	343	337
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
	% of *a*)	(67.6)	(68.7)	(67.2)	(66.7)	(65.1)
d) Consumption for heating oven:						
1. Coke-oven gas	'000,000 stand. cub. m.	9 556	8 936	9 416	10 260	10 771
	% of 4)	(70.8)	(71.3)	(74.1)	(77.9)	(80.5)
2. Producer gas	'000,000 stand. cub. m.	702	552	424	193	63
	% of 4)	(5.2)	(4.4)	(3.3)	(1.5)	(0.5)
3. Blast-furnace and other gases	'000,000 stand. cub. m.	3 237	3 050	2 874	2 716	2 549
	% of 4)	(24.0)	(24.3)	(22.6)	(20.6)	(19.0)
4. Total consumption of gas for heating ovens	'000,000 stand. cub. m.	13 495	12 538	12 714	13 169	13 383
		(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

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

HARD-COAL BRIQUETTES

Production

TABLE IX

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
2.1	Ruhr	4.6	4.4	3.8	3.2	2.8	2.7	2.7	2.4	2.6
1.0	Aachen	0.8	0.9	1.0	1.1	1.0	1.1	1.1	1.1	1.2
0.6	Lower Saxony	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
3.7	*Germany (FR)*	*6.0*	*5.9*	*5.4*	*4.9*	*4.5*	*4.5*	*4.5*	*4.2*	*4.5*
—	Campine	0.2	0.2	0.2	0.1	—	—	—	—	—
0.7	Southern Belgium	2.3	1.8	1.8	1.6	1.5	1.2	1.2	1.2	1.0
0.7	*Belgium*	*2.5*	*2.0*	*2.0*	*1.7*	*1.5*	*1.2*	*1.2*	*1.2*	*1.0*
0.9	*Netherlands* (Limburg)	*1.7*	*1.7*	*1.7*	*1.6*	*1.5*	*1.3*	*1.0*	*0.9*	*0.7*
2.5	Nord/Pas-de-Calais	4.1	4.1	3.8	3.6	3.3	3.3	3.3	3.3	3.3
1.1	Centre/Midi	2.0	1.9	1.8	1.7	1.5	1.3	1.3	1.3	1.3
0.9	Independent plants	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
4.5	*France*	*7.6*	*7.5*	*7.1*	*6.8*	*6.3*	*6.1*	*6.1*	*6.1*	*6.1*
9.8	**Total**	**17.8**	**17.1**	**16.2**	**15.0**	**13.8**	**13.1**	**12.8**	**12.4**	**12.3**

BKB AND LOW-TEMPERATURE BROWN-COAL COKE

Investment and Production

TABLE XII a

Capital Expenditure on Plants Producing BKB (Brown-Coal Briquettes) and Low-Temperature Brown-Coal Coke

'000,000 units of account

	Actual expenditure						Estimated expenditure		
							on Jan. 1. 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Briquetting-plants	7.90	3.79	4.97	3.65	4.37	2.66	4.62	6.85	6.85
Low-temperature coking-plants	0.02	—	—	—	—	—	—	—	—
Total	**7.92**	**3.79**	**4.97**	**3.65**	**4.37**	**2.66**	**4.62**	**6.85**	**6.85**

TABLE XII b

Production and Production Potential for BKB and Low-Temperature Brown-Coal Coke

'000,000 metric tons

Production 1970		Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
9.6	BKB	12.3	9.6	9.6	9.8	9.8	9.0	8.5	8.0	6.8
—	Low-temperature-coke ...	0.6	0.4	—	—	—	—	—	—	—

IRON-ORE INDUSTRY

Investment

TABLE XIII

Capital Expenditure by Orefields

'000,000 units of account

Orefield	Actual expenditure						Estimated expenditure		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Salzgitter, Ilsede, Harzvorland	4.03	1.09	0.52	0.73	1.18	1.95	1.78	0.85	0.49
Osnabrück, Weser-Wiehengebirge	0.11	0.17	0.01	0.08	0.25	0.15	0.62	0.92	—
Siegerland-Wied	0.16	0.17	0.20	0.08	0.04	0.01	0.03	0.05	0.07
Central and Southern Germ.									
Other German fields	1.50	0.65	0.37	0.78	1.13	0.68	1.73	1.91	2.37
Germany (FR)	*5.80*	*2.08*	*1.10*	*1.67*	*2.60*	*2.79*	*4.16*	*3.73*	*2.93*
Belgium	—	—	*0.02*	—	—	—	—	—	—
Eastern France	16.07	12.51	12.88	16.16	14.29	13.25	13.38	17.68	15.39
Western France	1.96	1.12	1.06	1.87	1.04	1.21	0.99	1.04	0.87
France: Centre/Midi	0.11	0.03	0.03	0.04	0.05	0.18	0.17	0.19	—
France	*18.14*	*13.66*	*13.97*	*18.07*	*15.38*	*14.64*	*14.54*	*18.91*	*16.26*
Italy	*0.68*	*0.67*	*0.28*	*0.14*	*0.87*	*0.56*	*0.56*	*3.43*	*3.22*
Luxembourg	*0.97*	*0.91*	*0.61*	*0.80*	*1.47*	*2.45*	*4.02*	*4.25*	*3.02*
Total	**25.59**	**17.32**	**15.98**	**20.68**	**20.32**	**20.44**	**23.28**	**30.32**	**25.43**

TABLE XIV

Extraction and Extraction Potential by Orefields

'000,000 metric tons

Actual extraction 1970	Orefield	Extraction potential					Expected extraction potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
5.6	Salzgitter, Ilsede, Harzvorland ..... Osnabrück, Weser-Wiehengebirge .	8.6	7.5	7.2	6.4	6.2	6.6	6.6	6.5	6.5
0.3	Siegerland-Wied ..... Central and Southern Germany	0.7	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3
0.9	Other German fields	2.1	2.0	1.6	1.6	0.9	0.8	0.8	0.8	0.8
6.8	*Germany (FR)*	*11.4*	*10.0*	*9.2*	*8.3*	*7.4*	*7.7*	*7.7*	*7.6*	*7.6*
—	*Belgium*	*0.2*	*0.2*	*0.1*	*0.1*	—	—	—	—	—
54.4	Eastern France	64.5	60.6	59.4	59.3	61.0	60.3	61.2	60.8	59.4
2.9	Western France	4.7	4.7	4.4	3.7	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
57.4	*France*	*69.4*	*65.4*	*63.9*	*63.1*	*64.2*	*63.5*	*64.4*	*64.0*	*62.6*
1.2	*Italy*	*1.5*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.5*
5.7	*Luxembourg*	*8.0*	*7.3*	*7.3*	*7.3*	*7.3*	*5.8*	*6.7*	*6.7*	*6.7*
71.1	**Total**	**90.5**	**84.3**	**81.9**	**80.2**	**80.3**	**78.4**	**80.2**	**79.7**	**78.4**

IRON AND STEEL INDUSTRY

Total Investment

TABLE XV

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	35.60	21.66	30.02	35.84	43.28	117.85	122.24	145.09	112.30
North Rhine/Westphalia	238.20	220.84	128.27	131.90	220.42	394.63	336.39	366.59	310.65
Southern Germany	9.06	22.78	9.35	15.12	21.15	38.56	39.59	58.32	15.26
Saar	28.70	29.05	55.93	41.71	21.75	76.21	69.62	119.00	42.58
Germany (FR)	*311.56*	*294.33*	*223.57*	*224.57*	*306.60*	*627.25*	*567.84*	*689.00*	*480.79*
Belgium	*142.35*	*142.87*	*100.17*	*74.45*	*132.66*	*231.06*	*253.11*	*216.39*	*80.39*
Eastern France	111.45	99.91	99.36	161.03	165.76	185.83	188.51	179.12	105.90
Northern France	30.93	22.42	42.97	66.15	79.30	131.98	133.65	288.98	304.92
France: other areas	27.53	25.23	28.08	25.94	34.00	51.22	58.43	257.79	261.60
France	*169.91*	*147.56*	*170.41*	*253.12*	*279.06*	*369.03*	*380.59*	*725.89*	*671.92*
Italy: coastal areas	193.98	131.50	69.11	64.90	102.42	188.89	183.12	599.97	699.60
Italy: other areas	52.29	35.09	56.53	46.53	57.21	107.92	93.38	104.35	63.25
Italy	*246.27*	*166.59*	*125.64*	*111.43*	*159.63*	*296.81*	*276.50*	*704.32*	*762.85*
Luxembourg	*24.83*	*28.37*	*15.80*	*13.55*	*34.13*	*49.02*	*46.21*	*45.54*	*37.02*
Netherlands	*37.32*	*68.35*	*94.61*	*124.95*	*126.57*	*114.77*	*98.42*	*119.05*	*96.85*
Total	932.24	848.07	730.20	802.07	1 038.65	1 687.94	1 622.67	2 500.19	2 129.82

STEELWORKS-OWNED COKING-PLANTS

Investment

TABLE XVI a

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	0.26	0.10	0.03	0.08	0.28	5.82	0.28	5.44	—
North Rhine/Westphalia	0.10	0.50	0.31	1.11	1.41	7.19	7.83	11.02	7.32
Southern Germany	0.03	0.02	0.06	—	—	—	—	—	—
Saar	0.12	0.10	0.88	0.42	0.32	0.26	0.25	0.86	0.22
Germany (FR)	*0.51*	*0.72*	*1.28*	*1.61*	*2.01*	*13.27*	*8.36*	*17.32*	*7.54*
Belgium	*1.91*	*2.18*	*1.27*	*0.44*	*0.89*	*13.39*	*18.64*	*40.18*	*7.80*
Eastern France	0.17	0.40	0.28	0.32	0.29	0.34	0.17	5.61	20.75
Northern France	0.45	0.21	3.96	9.51	16.40	10.90	13.15	14.50	27.00
France: other areas	0.10	0.02	0.08	0.06	0.03	0.75	—	1.26	0.12
France	*0.72*	*0.63*	*4.32*	*9.89*	*16.72*	*11.99*	*13.32*	*21.37*	*47.87*
Italy: coastal areas	12.49	5.47	1.72	1.03	11.23	20.59	19.40	42.62	63.94
Italy: other areas	—	—	—	—	—	—	—	—	—
Italy	*12.49*	*5.47*	*1.72*	*1.03*	*11.23*	*20.59*	*19.40*	*42.62*	*63.94*
Luxembourg	—	—	—	—	—	—	—	—	—
Netherlands	*1.61*	*1.37*	*2.88*	*0.73*	*0.24*	*2.45*	*1.12*	*17.08*	*22.31*
Total	**17.24**	**10.37**	**11.47**	**13.70**	**31.09**	**61.69**	**60.84**	**138.57**	**149.46**

BURDEN-PREPARATION

Investment

TABLE XVI b

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	1.16	0.35	0.16	1.22	2.09	5.36	4.10	4.51	3.47
North Rhine/Westphalia	3.16	1.95	2.56	2.44	8.26	39.24	25.50	21.75	28.67
Southern Germany	0.24	0.06	0.16	0.01	0.02	0.16	0.09	0.15	0.06
Saar	1.56	3.63	16.32	1.58	1.19	1.79	2.39	1.16	0.28
Germany (FR)	*6.12*	*5.99*	*19.20*	*5.25*	*11.56*	*46.55*	*32.08*	*27.57*	*32.48*
Belgium	*5.11*	*11.41*	*6.89*	*3.65*	*5.23*	*13.57*	*11.77*	*20.69*	*13.60*
Eastern France	13.51	11.79	9.70	17.09	9.15	21.57	21.50	17.20	10.42
Northern France	5.00	5.20	2.50	5.10	7.70	13.60	20.10	28.40	23.50
France: other areas	0.54	0.11	0.40	0.88	0.17	0.07	0.08	8.26	14.52
France	*19.05*	*17.10*	*12.60*	*23.07*	*17.02*	*35.24*	*41.68*	*53.86*	*48.44*
Italy: coastal areas	19.91	9.61	3.47	6.04	3.78	8.58	7.55	27.37	58.85
Italy: other areas	0.05	0.02	0.06	0.10	0.23	0.21	0.37	0.40	0.30
Italy	*19.96*	*9.63*	*3.53*	*6.14*	*4.01*	*8.79*	*7.92*	*27.77*	*59.15*
Luxembourg	*0.62*	*0.43*	*0.28*	*0.85*	*8.61*	*20.13*	*15.45*	*9.99*	*14.70*
Netherlands	*1.08*	*0.49*	*1.30*	*5.33*	*21.84*	*9.78*	*4.34*	*2.47*	*1.85*
Total	**51.94**	**45.05**	**43.80**	**44.29**	**68.27**	**134.06**	**113.24**	**142.35**	**170.22**

BLAST-FURNACES

Investment

TABLE XVI c

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	7.73	4.19	5.35	3.66	6.89	22.37	23.48	30.46	17.88
North Rhine/Westphalia	28.63	16.31	8.19	12.82	16.18	51.41	44.08	71.21	80.92
Southern Germany	0.59	0.49	0.66	0.80	1.10	1.43	0.84	1.52	0.22
Saar	4.34	1.96	1.75	2.62	4.85	5.66	5.68	7.62	0.72
Germany (FR)	*41.29*	*22.95*	*15.95*	*19.90*	*29.02*	*80.87*	*74.08*	*110.81*	*99.74*
Belgium	*11.26*	*16.22*	*12.89*	*9.01*	*10.71*	*19.57*	*27.80*	*20.63*	*14.90*
Eastern France	9.82	7.31	10.93	10.65	11.02	9.14	13.42	21.57	17.51
Northern France	2.31	2.50	11.26	11.38	9.34	11.70	6.59	40.58	47.01
France: other areas	0.56	0.22	0.28	0.44	1.44	1.79	2.41	12.19	19.43
France	*12.69*	*10.03*	*22.47*	*22.47*	*21.80*	*22.63*	*22.24*	*74.34*	*83.95*
Italy: coastal areas	18.14	12.81	9.90	11.24	16.20	22.88	11.93	51.42	50.19
Italy: other areas	0.25	0.27	0.56	0.16	0.34	0.41	0.25	0.53	0.89
Italy	*18.39*	*13.08*	*10.46*	*11.40*	*16.54*	*23.29*	*12.18*	*51.95*	*51.08*
Luxembourg	*4.27*	*2.11*	*0.53*	*2.66*	*8.00*	*7.99*	*5.82*	*1.65*	*0.36*
Netherlands	*3.29*	*12.67*	*13.02*	*0.91*	*3.28*	*8.72*	*10.72*	*24.85*	*13.57*
Total	**91.19**	**77.06**	**75.32**	**66.35**	**89.35**	**163.07**	**152.84**	**284.23**	**263.60**

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

Investment

TABLE XVI d

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	9.15	4.64	5.54	4.96	9.26	33.55	27.86	40.41	21.35
North Rhine/Westphalia	31.89	18.76	11.06	16.37	25.85	97.84	77.41	103.98	116.91
Southern Germany	0.86	0.57	0.88	0.81	1.12	1.59	0.93	1.67	0.28
Saar	6.02	5.69	18.95	4.62	6.36	7.71	8.32	9.64	1.22
Germany (FR)	*47.92*	*29.66*	*36.43*	*26.76*	*42.59*	*140.69*	*114.52*	*155.70*	*139.76*
Belgium	*18.28*	*29.81*	*21.05*	*13.10*	*16.83*	*46.53*	*58.21*	*81.50*	*36.30*
Eastern France	23.50	19.50	20.91	28.06	20.46	31.05	34.91	44.38	48.68
Northern France	7.76	7.91	17.72	25.99	33.44	36.20	39.84	83.48	97.51
France: other areas	1.20	0.35	0.76	1.38	1.64	2.61	2.49	21.71	34.07
France	*32.46*	*27.76*	*39.39*	*55.43*	*55.54*	*69.86*	*77.24*	*149.57*	*180.26*
Italy: coastal areas	50.54	27.89	15.09	18.31	31.21	52.05	38.88	121.41	172.98
Italy: other areas	0.30	0.29	0.62	0.26	0.57	0.62	0.62	0.93	1.19
Italy	*50.84*	*28.18*	*15.71*	*18.57*	*31.78*	*52.67*	*39.50*	*122.34*	*174.17*
Luxembourg	*4.89*	*2.54*	*0.81*	*3.51*	*16.61*	*28.12*	*21.27*	*11.64*	*15.06*
Netherlands	*5.98*	*14.53*	*17.20*	*6.97*	*25.36*	*20.95*	*16.18*	*44.40*	*37.73*
Total	**160.37**	**132.48**	**130.59**	**124.34**	**188.71**	**358.82**	**326.92**	**565.15**	**583.28**

BASIC BESSEMER STEELWORKS

Investment

TABLE XVII a

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
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	0.64	0.31	0.27	0.31
Saar	1.61	1.37	0.96	0.34	0.52	0.45	0.48	0.63	0.12
Germany (FR)	*4.05*	*2.74*	*8.11*	*1.26*	*1.71*	*1.09*	*0.79*	*0.99*	*0.43*
Belgium	*2.37*	*1.80*	*0.89*	*1.17*	*1.16*	*1.79*	*2.57*	*2.93*	*0.54*
Eastern France	2.32	3.33	2.88	2.80	3.98	3.02	4.60	2.47	0.90
Northern France	0.20	0.20	—	—	—	—	—	—	—
France: other areas	0.11	0.08	0.04	0.03	0.05	0.10	0.62	0.18	0.06
France	*2.63*	*3.61*	*2.92*	*2.83*	*4.03*	*3.12*	*5.22*	*2.65*	*0.96*
Luxembourg	*1.11*	*2.08*	*0.95*	*0.09*	*0.04*	*0.28*	*1.20*	*0.98*	*0.62*
Total	**10.16**	**10.23**	**12.87**	**5.35**	**6.94**	**6.28**	**9.78**	**7.55**	**2.55**

OPEN-HEARTH STEELWORKS

Investment

TABLE XVII b

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	2.19	0.59	0.13	0.26	0.65	0.44	0.52	1.58	0.95
North Rhine/Westphalia	4.80	3.37	1.54	1.32	0.98	1.43	2.16	2.13	0.27
Southern Germany	0.35	0.37	0.13	0.05	0.02	0.74	0.78	0.35	0.30
Saar	0.46	0.32	0.32	1.35	0.55	0.24	0.17	0.03	—
Germany (FR)	*7.80*	*4.65*	*2.12*	*2.98*	*2.20*	*2.85*	*3.63*	*4.09*	*1.52*
Belgium	*0.21*	*0.05*	*0.03*	*0.01*	—	*0.02*	—	—	—
Eastern France	1.03	0.86	0.37	0.72	0.60	0.34	0.64	0.46	0.15
Northern France	0.20	0.67	0.21	0.28	0.76	1.10	0.97	1.09	0.08
France: other areas	0.07	0.03	0.06	0.04	0.14	0.31	0.26	0.57	0.35
France	*1.30*	*1.56*	*0.64*	*1.04*	*1.50*	*1.75*	*1.87*	*2.12*	*0.58*
Italy: coastal areas	2.32	0.41	0.24	0.13	0.41	0.12	0.29	0.99	0.57
Italy: other areas	0.90	1.35	0.85	1.94	0.59	0.58	0.58	0.52	0.32
Italy	*3.22*	*1.76*	*1.09*	*2.07*	*1.00*	*0.70*	*0.87*	*1.51*	*0.89*
The Netherlands	*0.52*	*0.63*	*-0.02*	*0.56*	*0.19*	*0.10*	*0.14*	*0.10*	—
Total	**13.05**	**8.65**	**3.86**	**6.66**	**4.89**	**5.42**	**6.51**	**7.82**	**2.99**

ELECTRIC-FURNACE STEELWORKS

Investment

TABLE XVII c

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	0.05	—	0.06	—	0.08	5.54	0.03	1.90	—
North Rhine/Westphalia	2.51	1.21	1.68	1.77	3.98	6.67	11.05	3.64	8.97
Southern Germany	0.51	0.38	0.10	4.01	0.67	0.20	0.15	1.90	0.05
Saar	—	1.49	4.66	0.13	0.38	0.20	1.28	0.74	—
Germany (FR)	*3.07*	*3.08*	*6.50*	*5.91*	*5.11*	*12.61*	*12.51*	*8.18*	*9.02*
Belgium	*0.34*	*0.23*	*0.17*	*0.63*	*1.97*	*7.05*	*5.57*	*0.82*	*0.02*
Eastern France	0.77	0.05	0.04	0.07	0.56	1.13	0.52	3.13	1.52
Northern France	0.34	0.38	0.82	0.09	1.12	6.05	4.99	6.68	3.90
France: other areas	6.30	3.58	2.53	2.39	5.92	6.74	7.58	11.87	12.24
France	*7.41*	*4.01*	*3.39*	*2.55*	*7.60*	*13.92*	*13.09*	*21.68*	*17.66*
Italy: coastal areas	1.41	0.85	0.25	0.67	0.73	1.87	0.26	2.06	0.59
Italy: other areas	3.46	2.06	6.47	6.82	6.23	12.05	8.11	14.23	14.22
Italy	*4.87*	*2.91*	*6.72*	*7.49*	*6.96*	*13.92*	*8.37*	*16.29*	*14.81*
Luxembourg	*0.01*	*0.01*	—	—	—	*0.34*	*0.23*	*0.42*	*0.02*
Netherlands	*0.75*	*0.19*	*0.05*	—	*0.09*	*0.37*	—	*0.52*	—
Total	**16.45**	**10.43**	**16.83**	**16.58**	**21.73**	**48.21**	**39.77**	**47.91**	**41.53**

LD, KALDO AND OTHER STEELWORKS

Investment

TABLE XVII d

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	0.63	0.18	12.43	15.23	16.30	7.85	12.58	10.21	7.73
North Rhine/Westphalia	23.58	31.96	14.20	19.67	43.24	36.06	25.18	15.11	15.40
Southern Germany	—	—	—	—	—	—	—	—	—
Saar	0.36	3.26	10.19	9.10	2.55	1.44	1.52	6.41	3.68
Germany (FR)	*24.57*	*35.40*	*36.82*	*44.00*	*62.09*	*45.35*	*39.28*	*31.73*	*26.81*
Belgium	*25.86*	*21.72*	*27.09*	*12.40*	*22.85*	*30.73*	*19.97*	*18.04*	*11.27*
Eastern France	2.51	3.36	7.84	22.99	32.51	38.57	34.31	41.93	14.44
Northern France	2.40	1.20	2.60	4.60	2.97	13.84	14.73	33.10	32.26
France: other areas	0.15	1.27	1.91	1.77	1.26	1.26	1.45	15.00	24.38
France	*5.06*	*5.83*	*12.35*	*29.36*	*36.74*	*53.67*	*50.49*	*90.03*	*71.08*
Italy: coastal areas	18.16	8.37	7.52	9.00	21.77	28.56	31.73	55.96	73.54
Italy: other areas	—	—	0.73	—	2.41	2.36	—	0.34	0.06
Italy	*18.16*	*8.37*	*8.25*	*9.00*	*24.18*	*30.92*	*31.73*	*56.30*	*73.60*
Luxembourg	*9.79*	*12.59*	*7.73*	*1.64*	*1.81*	*4.76*	*5.80*	*8.77*	*6.85*
Netherlands	*1.59*	*8.90*	*17.95*	*23.13*	*5.54*	*5.82*	*1.98*	*5.82*	*4.98*
Total	**85.03**	**92.81**	**110.19**	**119.53**	**153.21**	**171.25**	**149.25**	**210.69**	**194.59**

STEELWORKS
TOTAL

Investment

TABLE XVII e

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	3.47	1.29	12.69	15.63	17.03	13.83	13.13	13.69	8.68
North Rhine/Westphalia	32.21	37.23	23.62	22.76	48.22	44.16	38.39	20.97	24.64
Southern Germany	1.38	0.91	1.11	4.84	1.86	1.58	1.24	2.52	0.66
Saar	2.43	6.44	16.13	10.92	4.00	2.33	3.45	7.81	3.80
Germany (FR)	*39.49*	*45.87*	*53.55*	*54.15*	*71.11*	*61.90*	*56.21*	*44.99*	*37.78*
Belgium	*28.78*	*23.80*	*28.18*	*14.21*	*25.98*	*39.59*	*28.11*	*21.79*	*11.83*
Eastern France	6.63	7.60	11.13	26.58	37.65	43.06	40.07	47.99	17.01
Northern France	3.14	2.45	3.63	4.97	4.85	20.99	20.69	40.87	36.24
France: other areas	6.63	4.96	4.54	4.23	7.37	8.41	9.91	27.62	37.03
France	*16.40*	*15.01*	*19.30*	*35.78*	*49.87*	*72.46*	*70.67*	*116.48*	*90.28*
Italy: coastal areas	21.89	9.63	8.01	9.80	22.91	30.55	32.28	59.01	74.70
Italy: other areas	4.36	3.41	8.05	8.76	9.23	14.99	8.69	15.09	14.60
Italy	*26.25*	*13.04*	*16.06*	*18.56*	*32.14*	*45.54*	*40.97*	*74.10*	*89.30*
Luxembourg	*10.91*	*14.68*	*8.68*	*1.73*	*1.85*	*5.38*	*7.23*	*10.17*	*7.49*
Netherlands	*2.86*	*9.72*	*17.98*	*23.69*	*5.82*	*6.29*	*2.12*	*6.44*	*4.98*
Total	**124.69**	**122.12**	**143.75**	**148.12**	**186.77**	**231.16**	**205.31**	**273.97**	**241.66**

BLOOMING AND SLABBING MILLS

Investment

TABLE XVIII a

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	1.53	1.25	1.20	1.57	1.52	6.10	9.19	5.27	3.33
North Rhine/Westphalia	6.59	13.11	8.15	9.42	11.66	13.01	14.88	21.71	7.28
Southern Germany	0.56	3.48	0.45	0.13	0.47	0.33	0.45	0.35	—
Saar	4.14	0.82	0.47	0.24	1.51	0.84	0.77	0.25	0.19
Germany (FR)	*12.82*	*18.66*	*10.27*	*11.36*	*15.16*	*20.28*	*25.29*	*27.58*	*10.80*
Belgium	*10.95*	*10.29*	*7.89*	*3.89*	*3.72*	*6.20*	*6.89*	*8.06*	*1.53*
Eastern France	2.57	4.66	18.10	44.85	35.79	23.29	28.81	19.81	5.34
Northern France	1.80	0.90	2.50	5.80	2.40	0.50	0.80	0.30	—
France: other areas	0.25	0.32	0.32	0.33	0.29	1.20	1.04	24.43	28.26
France	*4.62*	*5.88*	*20.92*	*50.98*	*38.48*	*24.99*	*30.65*	*44.54*	*33.60*
Italy: coastal areas	8.96	5.33	5.62	2.60	7.57	10.79	10.83	53.34	49.03
Italy: other areas	3.51	1.68	2.70	2.19	1.51	0.79	0.58	2.16	1.59
Italy	*12.47*	*7.01*	*8.32*	*4.79*	*9.08*	*11.58*	*11.41*	*55.50*	*50.62*
Luxembourg	*0.06*	*0.16*	*0.15*	*0.78*	*2.42*	*9.32*	*10.08*	*15.28*	*7.59*
The Netherlands	*3.22*	*1.43*	*4.95*	*11.17*	*22.53*	*8.42*	*6.34*	*3.11*	*2.66*
Total	**44.14**	**43.43**	**52.50**	**82.97**	**91.39**	**80.79**	**90.66**	**154.07**	**106.80**

CONTINUOUS CASTING PLANTS

Investment

TABLE XVIII b

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	—	—	—	—	—	4.01	7.35	2.62	13.89
North Rhine/Westphalia	9.55	9.56	12.58	4.73	15.55	22.78	16.12	18.04	6.24
Southern Germany	0.02	0.20	0.05	1.19	4.31	1.01	2.00	2.54	—
Saar	0.15	1.88	8.34	6.46	0.54	2.27	1.64	1.50	0.14
Germany (FR)	*9.72*	*11.64*	*20.97*	*12.38*	*20.40*	*30.07*	*27.11*	*24.70*	*20.27*
Belgium	—	—	—	—	—	—	—	*2.10*	*4.20*
Eastern France	0.03	—	—	—	0.02	—	0.03	0.43	—
Northern France	—	—	0.67	1.22	5.00	14.94	15.61	30.58	27.78
France: other areas	—	—	—	0.95	0.62	0.10	0.07	0.01	—
France	*0.03*	—	*0.67*	*2.17*	*5.64*	*15.04*	*15.71*	*31.02*	*27.78*
Italy: coastal areas	—	0.41	0.01	—	1.41	11.16	12.68	20.52	12.26
Italy: other areas	0.26	1.07	6.61	5.34	3.07	7.72	6.80	2.81	5.33
Italy	*0.26*	*1.48*	*6.62*	*5.34*	*4.48*	*18.88*	*19.48*	*23.33*	*17.59*
Luxembourg	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—
Total	**10.01**	**13.12**	**28.26**	**19.89**	**30.52**	**63.99**	**62.30**	**81.15**	**69.84**

SECTION MILLS

Investment

TABLE XVIII c

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	3.79	2.86	0.87	0.48	1.26	11.80	4.40	12.93	1.04
North Rhine/Westphalia	22.45	16.07	18.08	11.71	10.45	15.82	20.21	18.57	17.52
Southern Germany	0.93	2.35	0.33	4.27	2.15	5.71	8.48	10.38	3.71
Saar	1.60	2.42	2.38	11.74	0.94	5.14	13.24	38.74	23.17
Germany (FR)	*28.77*	*23.70*	*21.66*	*28.20*	*14.80*	*38.47*	*46.33*	*80.62*	*45.44*
Belgium	*4.93*	*3.62*	*2.70*	*5.17*	*18.42*	*32.00*	*32.52*	*19.08*	*4.18*
Eastern France	25.88	41.10	21.31	14.49	11.68	16.74	18.85	16.07	12.04
Northern France	1.35	1.47	1.80	2.62	1.78	2.14	3.94	5.11	1.38
France: other areas	8.39	6.12	3.83	2.75	2.09	2.55	3.44	21.73	32.78
France	*35.62*	*48.69*	*26.94*	*19.86*	*15.55*	*21.43*	*26.23*	*42.91*	*46.20*
Italy: coastal areas	20.57	22.49	11.54	4.54	2.10	3.20	3.20	3.10	1.88
Italy: other areas	6.33	9.23	12.29	7.25	10.64	12.59	7.06	17.58	8.98
Italy	*26.90*	*31.72*	*23.83*	*11.79*	*12.74*	*15.79*	*10.26*	*20.68*	*10.86*
Luxembourg	*5.42*	*2.58*	*0.38*	*0.86*	*9.40*	*2.34*	*1.56*	*1.38*	*0.68*
Netherlands	*7.83*	*5.97*	*3.33*	*0.51*	*1.43*	*0.97*	*0.03*	*0.62*	—
Total	**109.47**	**116.28**	**78.84**	**66.39**	**72.34**	**111.00**	**116.93**	**165.29**	**107.36**

FLAT-PRODUCT MILLS

Investment

TABLE XVIII d

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	7.01	5.07	2.10	2.85	5.48	26.89	44.97	47.93	52.34
North Rhine/Westphalia	77.51	84.90	31.33	32.88	56.52	134.86	93.54	126.19	89.32
Southern Germany	2.40	4.17	2.24	0.70	2.40	11.69	12.13	10.92	4.92
Saar	0.48	0.43	0.42	0.42	1.01	39.62	26.29	40.37	0.08
Germany (FR)	*87.40*	*94.57*	*36.09*	*36.85*	*65.41*	*213.06*	*176.93*	*225.41*	*146.66*
Belgium	*51.87*	*47.76*	*22.04*	*25.46*	*47.87*	*90.73*	*100.76*	*52.39*	*12.42*
Eastern France	13.93	4.40	6.86	13.13	25.10	32.16	31.57	18.15	8.29
Northern France	10.68	4.67	10.42	19.67	19.42	35.23	27.50	73.89	97.91
France: other areas	6.04	5.41	8.17	9.13	14.09	19.50	23.55	72.31	66.64
France	*30.65*	*14.48*	*25.45*	*41.93*	*58.61*	*86.89*	*82.62*	*164.35*	*172.84*
Italy: coastal areas	10.65	3.35	4.57	17.07	19.50	49.93	37.89	212.03	195.39
Italy: other areas	29.87	12.41	14.38	14.12	17.72	47.44	57.36	40.26	11.85
Italy	*40.53*	*15.76*	*18.95*	*31.19*	*37.22*	*97.37*	*95.25*	*252.29*	*207.24*
Luxembourg	*1.56*	*3.31*	*3.81*	*3.49*	*0.85*	*0.33*	*0.67*	*0.67*	*0.42*
Netherlands	*7.03*	*10.12*	*24.52*	*54.90*	*50.29*	*51.30*	*45.99*	*28.36*	*18.41*
Total	**219.04**	**186.00**	**130.86**	**193.82**	**260.25**	**539.68**	**502.22**	**723.47**	**557.99**

ROLLING-MILLS TOTAL (1)

Investment

TABLE XVIII e

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	12.64	9.72	4.97	6.95	9.11	50.88	69.64	71.29	75.04
North Rhine/Westphalia	132.60	134.62	73.83	61.99	106.35	214.97	170.33	199.80	142.92
Southern Germany	4.58	18.50	4.51	7.69	12.93	28.35	30.40	28.78	10.69
Saar	8.62	6.95	13.95	20.86	5.47	49.80	43.43	81.31	23.58
Germany (FR)	*158.44*	*169.79*	*97.26*	*97.49*	*133.86*	*344.00*	*313.80*	*381.18*	*252.23*
Belgium	*71.71*	*64.35*	*35.00*	*39.48*	*79.58*	*134.01*	*152.17*	*91.20*	*24.81*
Eastern France	47.95	54.49	49.28	76.34	76.84	75.92	82.70	60.31	28.27
Northern France	15.07	7.33	16.26	30.62	34.21	55.70	53.35	120.70	137.66
France: other areas	17.10	16.10	19.75	17.23	20.58	33.13	39.63	139.75	146.26
France	*80.12*	*77.92*	*85.29*	*124.19*	*131.63*	*164.75*	*175.68*	*320.76*	*312.19*
Italy: coastal areas	46.61	34.32	22.93	25.34	36.98	82.85	78.36	301.83	271.42
Italy: other areas	41.85	25.88	38.74	32.11	35.40	73.50	75.66	69.34	32.17
Italy	*88.46*	*60.20*	*61.67*	*57.45*	*72.38*	*156.35*	*154.02*	*371.17*	*303.59*
Luxembourg	*7.27*	*7.92*	*4.64*	*5.68*	*12.69*	*12.15*	*12.64*	*17.86*	*8.87*
Netherlands	*19.49*	*24.83*	*33.86*	*66.75*	*74.59*	*61.02*	*56.88*	*32.42*	*21.41*
Total	**425.49**	**405.01**	**317.72**	**391.04**	**504.73**	**872.28**	**865.19**	**1 214.59**	**923.10**

(1) Including ancillary and auxiliary plants.

STEELWORKS-OWNED POWER-GENERATING PLANTS AND DISTRIBUTION NETWORKS

Investment

TABLE XIX a

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	3.55	1.89	1.93	4.61	1.92	5.05	3.75	6.64	4.58
North Rhine/Westphalia	10.12	7.03	7.36	13.05	16.61	11.13	11.08	10.66	6.92
Southern Germany	1.10	0.79	0.77	0.34	4.48	3.52	3.24	11.38	1.17
Saar	1.23	0.63	0.42	0.71	1.16	1.86	2.37	1.95	1.23
Germany (FR)	*16.00*	*10.34*	*10.48*	*18.71*	*24.17*	*21.56*	*20.44*	*30.63*	*13.90*
Belgium	*13.62*	*13.97*	*7.46*	*2.29*	*3.02*	*3.06*	*4.72*	*4.91*	*2.95*
Eastern France	3.26	3.04	3.12	3.34	2.63	7.66	5.18	5.28	2.79
Northern France	1.47	0.41	0.23	0.14	0.20	1.22	1.51	2.15	3.24
France: other areas	0.65	0.78	0.99	1.21	1.46	0.63	0.76	1.23	0.51
France	*5.38*	*4.23*	*4.34*	*4.69*	*4.29*	*9.51*	*7.45*	*8.66*	*6.54*
Italy: coastal areas	16.65	5.20	0.94	0.38	—	0.02	0.13	4.15	46.05
Italy: other areas	1.37	1.68	2.76	1.18	3.59	3.66	1.79	2.16	2.29
Italy	*18.02*	*6.88*	*3.70*	*1.56*	*3.59*	*3.68*	*1.92*	*6.31*	*48.34*
Luxembourg	*0.50*	*1.50*	*0.47*	*0.60*	*0.06*	*0.03*	*0.15*	*0.36*	*0.14*
Netherlands	*2.20*	*6.12*	*7.02*	*5.52*	*5.72*	*7.71*	*5.93*	*7.12*	*6.50*
Total	**55.72**	**43.04**	**33.47**	**33.37**	**40.85**	**45.55**	**40.61**	**57.99**	**78.37**

MISCELLANEOUS (IRON AND STEEL WORKS)

Investment

TABLE XIX b

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	6.79	4.12	4.89	3.69	5.96	14.54	7.86	13.06	2.65
North Rhine/Westphalia	31.38	23.20	12.40	17.73	23.39	26.53	39.18	31.18	19.26
Southern Germany	1.14	2.01	2.08	1.44	0.76	3.52	3.78	13.97	2.46
Saar	10.40	9.34	6.48	4.60	4.76	14.51	12.05	18.29	12.75
Germany (FR)	*49.71*	*38.67*	*25.85*	*27.46*	*34.87*	*59.10*	*62.87*	*76.50*	*37.12*
Belgium	*9.96*	*10.94*	*8.48*	*5.37*	*7.25*	*7.87*	*9.90*	*16.99*	*4.50*
Eastern France	30.11	15.28	14.92	26.71	28.18	28.14	25.65	21.16	9.15
Northern France	3.49	4.32	5.13	4.43	6.60	17.87	18.26	41.78	30.27
France: other areas	1.95	3.04	2.04	1.89	2.95	6.44	5.64	67.48	43.23
France	*35.55*	*22.64*	*22.09*	*33.03*	*37.73*	*52.45*	*49.55*	*130.42*	*82.65*
Italy: coastal areas	58.29	54.46	22.14	11.07	11.32	23.42	33.47	113.57	134.45
Italy: other areas	4.41	3.83	6.36	4.22	8.42	15.15	6.62	16.83	13.00
Italy	*62.70*	*58.29*	*28.50*	*15.29*	*19.74*	*38.57*	*40.09*	*130.40*	*147.45*
Luxembourg	*1.26*	*1.73*	*1.20*	*2.03*	*2.92*	*3.34*	*4.92*	*5.51*	*5.46*
Netherlands	*6.79*	*13.15*	*18.55*	*22.02*	*15.08*	*18.80*	*17.31*	*28.67*	*26.23*
Total	165.97	145.42	104.67	105.20	117.59	180.13	184.64	388.49	303.41

GENERAL SERVICES (IRON AND STEEL WORKS) TOTAL

Investment

TABLE XIX c

Capital Expenditure by Areas

'000,000 units of account

Area	Actual expenditure						Estimated expenditure (projects in progress, or approved)		
							on Jan. 1, 1970 for	on Jan. 1, 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	10.34	6.01	6.82	8.30	7.88	19.59	11.61	17.64	7.23
North Rhine/Westphalia	41.50	30.23	19.76	30.78	40.00	37.66	50.26	41.84	26.18
Southern Germany	2.24	2.80	2.85	1.78	5.24	7.04	7.02	25.35	3.63
Saar	11.63	9.97	6.90	5.31	5.92	16.37	14.42	20.24	13.98
Germany (FR)	*65.71*	*49.01*	*36.33*	*46.17*	*59.04*	*80.66*	*83.31*	*107.13*	*51.02*
Belgium	*23.58*	*24.91*	*15.94*	*7.66*	*10.27*	*10.93*	*14.62*	*21.90*	*7.45*
Eastern France	33.37	18.32	18.04	30.05	30.81	35.80	30.83	26.44	11.94
Northern France	4.96	4.73	5.36	4.57	6.80	19.09	19.77	43.93	33.51
France: other areas	2.60	3.82	3.03	3.10	4.41	7.07	6.40	68.71	43.74
France	*40.93*	*26.87*	*26.43*	*37.72*	*42.02*	*61.96*	*57.00*	*139.08*	*89.19*
Italy: coastal areas	74.94	59.66	23.08	11.45	11.32	23.44	33.60	117.72	180.50
Italy: other areas	5.78	5.51	9.12	5.40	12.01	18.81	8.41	18.99	15.29
Italy	*80.72*	*65.17*	*32.20*	*16.85*	*23.33*	*42.25*	*42.01*	*136.71*	*195.79*
Luxembourg	*1.76*	*3.23*	*1.67*	*2.63*	*2.98*	*3.37*	*5.07*	*5.87*	*5.60*
Netherlands	*8.99*	*19.27*	*25.57*	*27.54*	*20.80*	*26.51*	*23.24*	*35.79*	*32.73*
Total	**221.69**	**188.46**	**138.14**	**138.57**	**158.44**	**225.68**	**225.25**	**446.48**	**381.78**

SINTER

Production

TABLE XX

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
8.7	Northern Germany	7.9	8.4	8.4	9.0	10.0	10.5	10.5	10.5	10.5
20.0	North Rhine/Westphalia ...	21.4	20.8	22.0	21.4	21.6	25.2	32.1	32.1	32.1
0.3	Southern Germany	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4
6.2	Saar	6.1	6.1	6.5	7.0	7.5	7.5	7.5	7.5	7.5
35.2	*Germany (FR)*	*35.8*	*35.7*	*37.2*	*37.7*	*39.4*	*43.5*	*50.4*	*50.4*	*50.5*
9.7	*Belgium*	*9.4*	*10.1*	*10.7*	*11.3*	*11.8*	*11.9*	*14.4*	*14.4*	*14.5*
21.5	Eastern France	18.0	19.7	20.2	22.1	22.3	24.9	26.0	26.5	28.0
5.4	Northern France	3.7	4.3	5.0	5.2	5.6	6.2	9.7	9.7	9.7
0.9	France: other areas	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	4.7
27.8	*France*	*23.1*	*25.4*	*26.6*	*28.7*	*29.4*	*32.6*	*37.2*	*37.7*	*42.4*
8.7	Italy: coastal areas	8.0	9.3	9.4	9.6	10.9	11.5	11.9	14.7	17.1
0.4	Italy: other areas	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9.1	*Italy*	*8.6*	*9.8*	*9.9*	*10.1*	*11.4*	*12.0*	*12.4*	*15.2*	*17.6*
5.3	*Luxembourg*	*5.6*	*5.7*	*5.7*	*5.8*	*5.8*	*7.3*	*7.3*	*7.3*	*9.3*
5.2	*Netherlands*	*3.2*	*3.3*	*3.4*	*3.4*	*5.3*	*6.5*	*6.7*	*6.8*	*6.9*
92.3	**Total**	**85.7**	**90.0**	**93.5**	**97.0**	**103.1**	**113.8**	**128.4**	**131.8**	**141.2**

PIG-IRON

Production

TABLE XXI

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
5.8	Northern Germany	5.7	5.9	6.2	6.7	7.4	8.3	8.5	11.3	11.2
22.2	North Rhine/Westphalia ...	23.3	23.6	24.0	24.2	25.7	26.7	29.1	32.9	34.0
1.0	Southern Germany	1.8	1.7	1.4	1.3	1.3	1.3	1.3	1.4	1.4
4.6	Saar	5.0	5.1	5.1	5.4	5.7	5.9	6.5	6.5	6.6
33.6	*Germany (FR)*	*35.8*	*36.3*	*36.7*	*37.6*	*40.1*	*42.2*	*45.4*	*52.1*	*53.2*
11.0	*Belgium*	*10.2*	*11.3*	*12.2*	*12.6*	*13.1*	*13.6*	*14.5*	*14.7*	*15.1*
12.7	Eastern France	14.1	14.1	13.9	13.4	14.0	13.9	14.3	14.4	14.6
5.6	Northern France	4.1	4.2	4.7	5.6	6.3	6.7	7.3	8.7	9.7
0.8	France: other areas	1.1	1.0	0.8	0.9	0.9	1.0	1.2	1.3	3.5
19.1	*France*	*19.3*	*19.3*	*19.4*	*19.9*	*21.2*	*21.6*	*22.8*	*24.4*	*27.8*
7.8	Italy: coastal areas	7.3	8.1	8.1	8.9	10.0	11.2	12.3	13.4	15.3
0.5	Italy: other areas	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7
8.3	*Italy*	*7.8*	*8.6*	*8.7*	*9.6*	*10.7*	*11.9*	*13.0*	*14.1*	*16.0*
4.8	*Luxembourg*	*4.8*	*5.1*	*5.1*	*5.2*	*5.3*	*5.4*	*5.4*	*5.4*	*5.4*
3.6	*Netherlands*	*2.4*	*2.6*	*2.9*	*3.5*	*3.8*	*4.7*	*5.3*	*5.4*	*6.0*
80.4	**Total**	**80.3**	**83.2**	**85.0**	**88.4**	**94.1**	**99.4**	**106.4**	**116.1**	**123.5**

BASIC BESSEMER STEEL

Production

TABLE XXII a

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
—	Northern Germany	1.2	1.2	0.8	0.4	—	—	—	—	—
0.7	North Rhine/Westphalia ...	7.4	6.4	3.8	2.9	0.8	0.9	0.9	0.9	0.9
—	Southern Germany	1.0	1.0	1.0	1.0	—	—	—	—	—
2.9	Saar	3.8	3.9	3.9	3.7	3.6	3.5	3.3	3.1	3.1
3.6	*Germany (FR)*	*13.4*	*12.5*	*9.5*	*8.0*	*4.4*	*4.4*	*4.2*	*4.0*	*4.0*
5.2	*Belgium*	*7.1*	*7.4*	*7.5*	*7.1*	*6.5*	*5.9*	*3.9*	*3.6*	*3.6*
8.7	Eastern France	10.2	10.5	10.5	10.1	9.4	9.6	8.5	8.4	8.4
0.7	Northern France	1.4	1.2	1.3	1.2	0.8	—	—	—	—
0.4	France: other areas	0.6	0.5	0.4	0.3	0.4	0.5	0.5	0.5	0.5
9.8	*France*	*12.2*	*12.2*	*12.2*	*11.6*	*10.6*	*10.1*	*9.0*	*8.9*	*8.9*
3.3	*Luxembourg*	*4.3*	*4.0*	*3.7*	*3.8*	*3.6*	*3.5*	*2.9*	*2.5*	*2.5*
21.9	**Total**	**37.0**	**36.1**	**32.9**	**30.5**	**25.1**	**23.9**	**20.0**	**19.1**	**19.0**

BOTTOM-BLOWN STEELS (OBM, LWS ETC.)

Production

TABLE XXII b

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential 1970	Expected production potential 1971	1972	1973	1974
0.7	Southern Germany	1.1	1.3	1.3	1.3	1.3
0.2	Saar	0.3	0.5	0.6	0.6	0.6
0.9	*Germany (FR)*	*1.4*	*1.8*	*1.9*	*1.9*	*1.9*
—	*Belgium*	—	*0.3*	*1.4*	*1.5*	*1.6*
0.2	Eastern France	0.3	0.8	0.9	1.0	1.0
0.2	Northern France	0.2	0.8	0.8	0.8	0.8
0.4	*France*	*0.5*	*1.6*	*1.7*	*1.8*	*1.8*
0.1	*Luxembourg*	*0.1*	*0.2*	*0.5*	*0.5*	*0.5*
1.4	**Total**	2.0	3.9	5.5	5.7	5.8

OPEN-HEARTH STEEL

Production

TABLE XXII c

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
1.8	Northern Germany	3.4	3.6	3.2	2.3	2.3	2.5	2.4	1.9	1.9
8.6	North Rhine/Westphalia ...	14.2	12.2	11.4	10.7	9.9	9.6	9.6	9.6	9.6
0.6	Southern Germany	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.5
0.8	Saar	1.1	1.1	1.1	0.9	0.9	0.9	1.0	1.0	1.0
11.8	*Germany (FR)*	*19.5*	*17.7*	*16.4*	*14.6*	*13.7*	*13.5*	*13.5*	*13.0*	*13.0*
0.3	*Belgium*	*0.5*	*0.5*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
2.3	Eastern France	2.8	2.9	2.8	2.6	2.6	2.2	1.9	1.5	1.4
1.7	Northern France	2.4	2.2	1.9	1.9	1.9	1.9	1.8	1.8	1.5
0.4	France: other areas	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4.4	*France*	*5.7*	*5.6*	*5.2*	*5.0*	*5.0*	*4.6*	*4.2*	*3.8*	*3.4*
2.9	Italy: coastal areas	3.7	3.9	3.9	3.8	3.4	2.6	2.6	2.6	2.6
2.0	Italy: other areas	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.4	2.3
4.9	*Italy*	*6.1*	*6.3*	*6.3*	*6.3*	*5.9*	*5.1*	*5.0*	*5.0*	*4.9*
0.8	*Netherlands*	*1.0*	*1.0*	*1.1*	*1.1*	*1.0*	*1.0*	*1.0*	*0.6*	*0.1*
22.2	**Total**	**32.8**	**31.1**	**29.4**	**27.4**	**26.0**	**24.6**	**24.1**	**22.8**	**21.8**

ELECTRIC-FURNACE STEEL

Production

TABLE XXII d

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
0.3	Northern Germany	0.3	0.3	0.3	0.3	0.3	0.4	0.7	0.7	0.7
3.1	North Rhine/Westphalia ...	3.1	2.9	3.1	3.3	3.5	3.5	3.8	3.8	3.9
0.7	Southern Germany	0.2	0.3	0.3	0.4	0.7	0.7	0.7	0.7	0.7
0.4	Saar	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
4.5	*Germany (FR)*	*3.8*	*3.8*	*4.1*	*4.5*	*4.9*	*5.1*	*5.7*	*5.7*	*5.8*
0.5	*Belgium*	*0.6*	*0.6*	*0.5*	*0.5*	*0.5*	*0.6*	*0.7*	*0.7*	*1.1*
0.7	Eastern France	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8
0.4	Northern France	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.7	0.7
1.5	France – other areas	1.4	1.5	1.5	1.5	1.6	1.7	1.7	1.8	2.0
2.6	*France*	*2.3*	*2.4*	*2.5*	*2.7*	*2.8*	*2.9*	*3.0*	*3.2*	*3.5*
0.3	Italy: coastal areas	0.6	0.7	0.6	0.8	0.5	0.5	0.6	0.6	0.6
6.7	Italy: other areas	5.9	6.1	7.0	7.1	7.6	8.0	8.3	8.7	9.2
7.0	*Italy*	*6.5*	*6.8*	*7.6*	*7.9*	*8.1*	*8.5*	*8.9*	*9.3*	*9.8*
0.1	*Luxembourg*	*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*
15.0	**Total**	**13.6**	**14.0**	**15.1**	**16.1**	**16.8**	**17.7**	**18.8**	**19.4**	**20.7**

LD, KALDO AND OTHER STEELS

Production

TABLE XXII e

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
5.1	Northern Germany	1.8	1.9	3.3	5.3	6.6	6.6	7.3	8.7	8.7
18.1	North Rhine/Westphalia ...	8.7	11.4	14.1	16.9	20.6	24.5	25.8	26.2	28.0
—	Southern Germany	0.0	—	—	—	—	—	—	—	—
	Saar	0.3	0.4	0.4	1.3	1.6	1.7	2.3	2.7	2.7
	Germany (FR)	*10.8*	*13.7*	*17.8*	*23.5*	*28.8*	*32.8*	*35.4*	*37.6*	*39.4*
6.6	*Belgium*	*2.9*	*3.9*	*5.4*	*6.5*	*7.8*	*9.1*	*11.3*	*11.7*	*12.1*
	Eastern France	1.1	1.1	1.1	1.4	2.3	2.8	4.1	4.9	5.2
	Northern France	2.1	2.5	2.9	3.7	4.4	5.6	6.5	7.8	9.6
0.3	France: other areas	0.0	0.1	0.2	0.3	0.4	0.4	0.4	0.4	2.6
	France	*3.2*	*3.7*	*4.2*	*5.4*	*7.1*	*8.8*	*11.0*	*13.1*	*17.4*
5.3	Italy: coastal areas	4.9	5.7	5.7	6.1	7.0	8.9	10.5	12.5	14.0
0.1	Italy: other areas	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2
5.4	*Italy*	*4.9*	*5.7*	*5.7*	*6.1*	*7.1*	*9.1*	*10.7*	*12.7*	*14.2*
	Luxembourg	*0.7*	*1.6*	*1.9*	*2.0*	*2.2*	*2.2*	*2.7*	*3.3*	*3.3*
3.9	*Netherlands*	*2.1*	*2.2*	*2.4*	*3.4*	*3.9*	*4.9*	*5.6*	*6.3*	*6.9*
	Total	**24.6**	**30.8**	**37.4**	**46.9**	**56.9**	**66.9**	**76.7**	**84.8**	**93.3**

STEEL-TOTAL

Production

TABLE XXII f

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
7.2	Northern Germany	6.7	7.0	7.6	8.3	9.1	9.5	10.4	11.3	11.3
30.5	North Rhine/Westphalia ...	33.4	32.9	32.4	33.8	34.7	38.5	40.0	40.6	42.5
2.1	Southern Germany	2.0	2.1	2.0	2.1	2.4	2.4	2.4	2.5	2.5
5.3	Saar	5.4	5.7	5.8	6.4	6.8	7.1	7.6	7.9	7.9
45.1	*Germany (FR)*	*47.5*	*47.7*	*47.8*	*50.6*	*53.0*	*57.5*	*60.4*	*62.3*	*64.2*
12.6	*Belgium*	*11.1*	*12.4*	*13.8*	*14.5*	*15.2*	*16.5*	*17.7*	*17.9*	*18.9*
14.0	Eastern France	14.7	15.1	15.0	14.8	15.3	16.1	16.1	16.6	16.8
7.1	Northern France	6.2	6.2	6.5	7.3	7.9	8.7	9.7	11.0	12.5
2.6	France: other areas	2.5	2.6	2.6	2.6	2.9	3.1	3.1	3.4	5.5
23.7	*France*	*23.4*	*23.9*	*24.1*	*24.7*	*26.1*	*28.0*	*29.0*	*31.0*	*34.8*
8.5	Italy: coastal areas	9.2	10.3	10.2	10.7	11.0	12.0	13.6	15.6	17.2
8.8	Italy: other areas	8.3	8.5	9.4	9.6	10.2	10.6	11.1	11.4	11.8
17.3	*Italy*	*17.5*	*18.8*	*19.6*	*20.3*	*21.2*	*22.6*	*24.7*	*27.0*	*29.0*
5.5	*Luxembourg*	*5.1*	*5.7*	*5.7*	*5.9*	*6.0*	*6.1*	*6.3*	*6.3*	*6.3*
5.0	*Netherlands*	*3.4*	*3.5*	*3.8*	*4.9*	*5.3*	*6.3*	*7.0*	*7.3*	*7.4*
109.2	**Total**	**108.0**	**112.0**	**114.8**	**120.9**	**126.8**	**137.0**	**145.1**	**151.8**	**160.6**

SECTIONS

Production

TABLE XXIII a

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
1.8	Northern Germany	2.6	2.8	2.9	3.1	2.6	2.9	3.1	3.1	3.1
8.8	North Rhine/Westphalia ...	12.5	12.7	12.4	11.0	11.6	12.0	12.5	12.6	12.9
1.1	Southern Germany	1.0	1.1	1.1	1.3	1.3	1.6	1.7	1.8	1.9
2.7	Saar	3.7	3.6	3.6	3.4	3.6	3.7	3.7	4.4	4.5
14.4	*Germany (FR)*	*19.8*	*20.2*	*20.0*	*18.8*	*19.1*	*20.2*	*21.0*	*21.9*	*22.4*
4.3	*Belgium*	*4.6*	*4.9*	*5.0*	*5.2*	*5.1*	*5.9*	*6.5*	*6.6*	*6.6*
6.0	Eastern France	6.0	6.1	6.9	7.0	7.1	7.4	7.5	7.5	7.8
1.5	Northern France	1.8	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.8
1.3	France: other areas	1.2	1.2	1.3	1.4	1.6	1.7	1.7	1.8	1.9
8.8	*France*	*9.0*	*8.9*	*9.8*	*10.0*	*10.3*	*10.8*	*10.9*	*11.1*	*11.5*
1.4	Italy: coastal areas	1.5	1.9	2.3	2.5	2.2	2.2	2.3	2.3	2.3
5.3	Italy: other areas	4.7	5.3	6.0	5.9	6.5	6.7	6.9	6.9	6.9
6.7	*Italy*	*6.2*	*7.2*	*8.3*	*8.4*	*8.7*	*8.9*	*9.2*	*9.2*	*9.2*
2.6	*Luxembourg*	*2.5*	*2.7*	*2.7*	*2.9*	*2.9*	*3.0*	*3.1*	*3.1*	*3.1*
0.8	*Netherlands*	*0.7*	*0.7*	*0.8*	*0.8*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*
37.6	**Total**	**42.8**	**44.6**	**46.6**	**46.1**	**47.0**	**49.7**	**51.6**	**52.8**	**53.7**

FLAT PRODUCTS (1)

Production

TABLE XXIII b

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
2.3	Northern Germany	2.7	3.1	3.2	3.1	3.4	3.5	3.6	3.6	3.7
10.7	North Rhine/Westphalia	14.2	14.4	14.7	14.7	15.4	16.3	17.6	18.2	18.3
1.5	Southern Germany	1.8	1.9	1.9	1.9	1.9	1.8	2.4	2.3	2.4
1.0	Saar	1.4	1.4	1.5	1.8	1.4	1.6	2.4	2.2	2.1
15.5	*Germany (FR)*	*20.1*	*20.8*	*21.3*	*21.5*	*22.1*	*23.2*	*26.0*	*26.3*	*26.5*
4.3	*Belgium*	*4.0*	*4.7*	*4.9*	*5.0*	*5.2*	*6.1*	*6.8*	*6.8*	*7.1*
4.9	Eastern France	5.0	5.0	5.0	5.4	6.1	6.2	6.3	6.9	6.9
3.1	Northern France	2.7	2.8	3.0	3.4	3.7	3.9	4.0	4.4	5.0
0.6	France: other areas	0.5	0.5	0.5	0.6	0.6	0.7	0.9	1.1	1.1
8.6	*France*	*8.2*	*8.3*	*8.5*	*9.4*	*10.4*	*10.8*	*11.2*	*12.4*	*13.0*
2.5	Italy: coastal areas	2.4	2.9	3.3	3.4	3.6	4.3	4.9	6.0	6.8
3.1	Italy: other areas	3.0	3.3	3.4	3.4	3.6	3.6	3.9	4.1	4.1
5.6	*Italy*	*5.4*	*6.2*	*6.7*	*6.8*	*7.2*	*7.9*	*8.8*	*10.1*	*10.9*
1.2	*Luxembourg*	*1.4*	*1.5*	*1.5*	*1.5*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*
2.2	*Netherlands*	*1.9*	*1.7*	*2.1*	*2.3*	*2.4*	*3.1*	*3.7*	*4.0*	*4.1*
37.5	**Total**	**41.0**	**43.2**	**45.0**	**46.5**	**48.9**	**52.7**	**58.1**	**61.2**	**63.3**

(1) Except coils—finished products (see Table XXVb).

FINISHED ROLLED PRODUCTS-TOTAL (1)

Production

TABLE XXIII c

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
4.1	Northern Germany	5.3	5.9	6.1	6.2	6.0	6.4	6.7	6.7	6.8
19.5	North Rhine/Westphalia ...	26.7	27.1	27.1	25.7	27.0	28.3	30.1	30.8	31.2
2.7	Southern Germany	2.8	3.0	3.0	3.2	3.2	3.4	4.1	4.1	4.3
3.6	Saar	5.1	5.0	5.1	5.2	5.0	5.3	6.1	6.6	6.6
29.9	*Germany (FR)*	*39.9*	*41.0*	*41.3*	*40.3*	*41.2*	*43.4*	*47.0*	*48.2*	*48.9*
8.6	*Belgium*	*8.6*	*9.6*	*9.9*	*10.2*	*10.3*	*12.0*	*13.3*	*13.4*	*13.7*
10.9	Eastern France	11.0	11.1	11.9	12.4	13.2	13.6	13.8	14.4	14.7
4.6	Northern France	4.5	4.4	4.6	5.0	5.3	5.6	5.7	6.2	6.8
2.0	France: other areas	1.7	1.7	1.8	2.0	2.2	2.4	2.6	2.9	3.0
17.5	*France*	*17.2*	*17.2*	*18.3*	*19.4*	*20.7*	*21.6*	*22.1*	*23.5*	*24.5*
3.9	Italy: coastal areas	3.9	4.8	5.6	5.9	5.8	6.5	7.2	8.3	9.1
8.4	Italy: other areas	7.7	8.6	9.4	9.3	10.1	10.3	10.8	11.0	11.0
12.3	*Italy*	*11.6*	*13.4*	*15.0*	*15.2*	*15.9*	*16.8*	*18.0*	*19.3*	*20.1*
3.8	*Luxembourg*	*3.9*	*4.2*	*4.2*	*4.4*	*4.5*	*4.6*	*4.7*	*4.7*	*4.7*
3.0	*Netherlands*	*2.6*	*2.4*	*2.9*	*3.1*	*3.3*	*4.0*	*4.6*	*4.9*	*5.0*
75.1	**Total**	**83.8**	**87.8**	**91.6**	**92.6**	**95.9**	**102.4**	**109.7**	**114.0**	**117.0**

(1) Except coils—finished products (see Table XXV*b*).

HEAVY AND LIGHT SECTIONS (INCLUDING TUBE ROUNDS AND SQUARES)

Production

TABLE XXIV a

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
1.5	Northern Germany	2.4	2.6	2.6	2.8	2.3	2.5	2.5	2.5	2.5
6.3	North Rhine/Westphalia ...	9.5	9.7	9.2	8.0	8.4	8.6	9.1	9.2	9.3
0.9	Southern Germany	0.9	1.0	1.0	1.1	1.1	1.3	1.4	1.5	1.6
2.2	Saar	3.1	3.0	2.9	2.8	2.9	3.0	3.0	3.1	3.1
10.9	*Germany (FR)*	*15.9*	*16.3*	*15.7*	*14.7*	*14.7*	*15.4*	*16.0*	*16.3*	*16.5*
3.5	*Belgium*	*3.4*	*3.7*	*3.8*	*4.1*	*4.1*	*4.9*	*5.5*	*5.6*	*5.6*
4.2	Eastern France	4.2	4.4	4.9	4.9	4.9	5.2	5.3	5.2	5.4
1.2	Northern France	1.5	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.5
1.0	France: other areas	0.9	0.9	1.0	1.1	1.3	1.3	1.3	1.3	1.3
6.4	*France*	*6.6*	*6.6*	*7.2*	*7.3*	*7.5*	*7.9*	*8.0*	*8.0*	*8.2*
1.2	Italy: coastal areas	1.3	1.6	2.0	2.2	1.9	1.9	2.0	2.0	2.0
4.6	Italy: other areas	3.9	4.4	4.9	4.9	5.5	5.6	5.8	5.8	5.8
5.8	*Italy*	*5.2*	*6.0*	*6.9*	*7.1*	*7.4*	*7.5*	*7.8*	*7.8*	*7.8*
2.2	*Luxembourg*	*2.2*	*2.4*	*2.3*	*2.4*	*2.4*	*2.5*	*2.6*	*2.6*	*2.6*
0.5	*Netherlands*	*0.3*	*0.3*	*0.4*	*0.4*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
29.3	**Total**	**33.6**	**35.3**	**36.3**	**36.0**	**36.6**	**38.7**	**40.4**	**40.8**	**41.2**

WIRE-ROD

Production

TABLE XXIV b

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
0.3	Northern Germany	0.2	0.2	0.3	0.3	0.3	0.4	0.6	0.6	0.6
2.5	North Rhine/Westphalia ...	3.0	3.0	3.2	3.0	3.2	3.4	3.4	3.4	3.6
0.2	Southern Germany	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3
0.5	Saar	0.6	0.6	0.7	0.6	0.7	0.7	0.7	1.3	1.4
3.5	*Germany (FR)*	*3.9*	*3.9*	*4.3*	*4.1*	*4.4*	*4.8*	*5.0*	*5.6*	*5.9*
0.8	*Belgium*	*1.2*	*1.2*	*1.2*	*1.1*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
1.8	Eastern France	1.8	1.7	2.0	2.1	2.2	2.2	2.2	2.3	2.4
0.3	Northern France	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.3	France: other areas	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6
2.4	*France*	*2.4*	*2.3*	*2.6*	*2.7*	*2.8*	*2.9*	*2.9*	*3.1*	*3.3*
0.2	Italy: coastal areas	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.7	Italy: other areas	0.8	0.9	1.1	1.0	1.0	1.1	1.1	1.1	1.1
0.9	*Italy*	*1.0*	*1.2*	*1.4*	*1.3*	*1.3*	*1.4*	*1.4*	*1.4*	*1.4*
0.4	*Luxembourg*	*0.3*	*0.3*	*0.4*	*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*
8.3	**Total**	**9.2**	**9.3**	**10.3**	**10.1**	**10.4**	**11.0**	**11.2**	**12.0**	**12.5**

HOOP AND STRIP
AND TUBE MAKING STRIP

Production

TABLE XXIV c

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
0.1	Northern Germany	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2.4	North Rhine/Westphalia	4.0	3.8	3.9	3.7	3.6	3.6	3.7	3.7	3.7
0.0	Southern Germany	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	Saar	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4
2.8	*Germany (FR)*	*4.5*	*4.3*	*4.4*	*4.4*	*4.1*	*4.1*	*4.2*	*4.2*	*4.2*
0.4	*Belgium*	*0.6*	*0.6*	*0.6*	*0.4*	*0.5*	*0.5*	*0.5*	*0.5*	*0.6*
1.1	Eastern France	1.2	1.2	1.1	1.2	1.2	1.3	1.4	1.4	1.4
0.1	Northern France	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
0.0	France: other areas	0.0	0.0	0.0	0.0	0.0	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*	*1.5*	*1.5*
0.6	Italy: coastal areas	0.5	0.7	0.8	0.8	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	0.6	0.6	0.6
1.0	*Italy*	*1.0*	*1.3*	*1.5*	*1.3*	*1.4*	*1.4*	*1.5*	*1.6*	*1.6*
0.8	*Luxembourg*	*0.8*	*0.9*	*0.9*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*
0.1	*Netherlands*	*0.1*	*0.1*	*0.2*	*0.2*	*0.2*	*0.3*	*0.3*	*0.4*	*0.4*
6.3	**Total**	**8.2**	**8.4**	**8.7**	**8.5**	**8.4**	**8.7**	**9.0**	**9.2**	**9.3**

PLATE ⩾ 3 mm. (INCLUDING WIDE FLAT STEEL) (1)

Production

TABLE XXIV d

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
0.8	Northern Germany	1.2	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.3
4.3	North Rhine/Westphalia ...	5.5	5.9	6.0	6.0	6.7	6.9	7.0	7.1	7.1
0.1	Southern Germany	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
0.7	Saar	1.0	1.0	1.1	1.2	1.1	1.1	1.9	1.9	1.8
5.9	*Germany (FR)*	*7.8*	*8.3*	*8.5*	*8.5*	*9.2*	*9.3*	*10.2*	*10.3*	*10.2*
1.3	*Belgium*	*1.2*	*1.4*	*1.5*	*1.5*	*1.6*	*2.0*	*1.9*	*1.9*	*1.9*
0.9	Eastern France	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3
1.0	Northern France	0.7	0.8	0.9	1.1	1.2	1.2	1.3	1.4	1.4
0.2	France: other areas	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
2.1	*France*	*1.8*	*2.0*	*2.1*	*2.4*	*2.5*	*2.6*	*2.8*	*2.9*	*3.0*
1.1	Italy: coastal areas	0.9	1.2	1.4	1.5	1.5	1.5	1.8	2.5	2.9
0.5	Italy: other areas	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.9
1.6	*Italy*	*1.4*	*1.8*	*2.1*	*2.2*	*2.2*	*2.2*	*2.5*	*3.3*	*3.8*
0.2	*Luxembourg*	*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*	*0.6*	*0.6*	*0.7*
11.6	**Total**	**13.0**	**14.2**	**15.0**	**15.4**	**16.3**	**17.0**	**18.3**	**19.3**	**19.9**

(1) Except coils—finished products (see Table XXV b).

HOT-ROLLED SHEET
< 3 mm. (1)

Production

TABLE XXIV e

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
0.0	Northern Germany	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	0.1	0.1	0.1	0.1
0.0	Southern Germany	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0
—	Saar	0.0	—	—	—	—	—	—	—	—
0.1	*Germany (FR)*	*0.8*	*0.6*	*0.4*	*0.3*	*0.2*	*0.1*	*0.1*	*0.1*	*0.1*
0.1	*Belgium*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*
0.1	Eastern France	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1
0.1	Northern France	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0
0.1	France: other areas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.3	*France*	*0.5*	*0.4*	*0.4*	*0.3*	*0.4*	*0.2*	*0.2*	*0.2*	*0.2*
0.0	Italy: coastal areas	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	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	*Italy*	*0.3*	*0.3*	*0.2*	*0.2*	*0.2*	*0.3*	*0.3*	*0.3*	*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*	*0.1*	*0.1*
0.5	**Total**	**1.8**	**1.5**	**1.2**	**1.0**	**1.0**	**0.8**	**0.9**	**0.9**	**1.0**

(1) Except coils—finished products (see Table XXV b).

COLD-REDUCED SHEET
< 3 mm.

Production

TABLE XXIV f

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1970	Area	Production potential					Expected production potential			
		1966	1967	1968	1969	1970	1971	1972	1973	1974
1.3	Northern Germany	1.4	1.7	1.8	1.8	2.0	2.1	2.2	2.2	2.3
4.0	North Rhine/Westphalia	4.1	4.3	4.5	4.8	4.9	5.7	6.8	7.3	7.4
1.4	Southern Germany	1.5	1.6	1.7	1.7	1.7	1.9	2.3	2.2	2.3
—	Saar	—	—	—	—	—	—	—	—	—
6.7	*Germany (FR)*	*7.0*	*7.6*	*8.0*	*8.3*	*8.6*	*9.7*	*11.3*	*11.7*	*12.0*
2.5	*Belgium*	*2.0*	*2.5*	*2.6*	*2.9*	*2.9*	*3.4*	*4.2*	*4.2*	*4.4*
2.8	Eastern France	2.5	2.5	2.7	2.9	3.5	3.6	3.5	4.1	4.1
2.0	Northern France	1.9	1.9	1.9	2.1	2.3	2.5	2.6	2.9	3.5
0.3	France: other areas	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.8	0.7
5.1	*France*	*4.7*	*4.7*	*4.9*	*5.4*	*6.2*	*6.7*	*6.7*	*7.8*	*8.3*
0.8	Italy: coastal areas	0.8	0.8	0.9	0.9	1.0	1.6	1.9	2.2	2.5
1.2	Italy: other areas	1.9	2.0	2.0	2.2	2.4	2.4	2.6	2.7	2.6
3.0	*Italy*	*2.7*	*2.8*	*2.9*	*3.1*	*3.4*	*4.0*	*4.5*	*4.9*	*5.1*
0.3	*Luxembourg*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
1.5	*Netherlands*	*1.3*	*1.2*	*1.4*	*1.6*	*1.8*	*2.2*	*2.8*	*2.9*	*2.9*
19.1	**Total**	**18.0**	**19.1**	**20.1**	**21.6**	**23.2**	**26.3**	**29.9**	**31.8**	**33.1**

HOT WIDE-STRIP MILLS

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

Area	Actual expenditure						(Estimated expenditure (projects in progress. or approved)		
							on Jan, 1. 1970 for	on Jan, 1. 1971 for	
	1965	1966	1967	1968	1969	1970	1970	1971	1972
Northern Germany	2.62	1.56	0.33	1.66	3.36	22.39	10.07	36.39	43.85
North Rhine/Westphalia ...	33.56	37.21	10.81	9.46	10.59	43.83	29.20	39.91	35.47
Southern Germany	—	—	—	—	—	—	—	—	—
Saar	—	—	—	—	—	—	—	—	—
Germany (FR)	*36.18*	*38.77*	*11.14*	*11.12*	*13.95*	*66.22*	*39.27*	*76.30*	*79.32*
Belgium	*22.90*	*25.78*	*16.90*	*11.60*	*10.89*	*16.88*	*16.51*	*11.79*	*5.61*
Eastern France	—	1.09	2.17	3.04	2.75	6.39	5.96	3.21	1.86
Northern France	4.50	1.70	7.10	11.80	4.20	4.10	3.80	24.90	30.30
France: other areas	0.06	—	—	—	—	—	—	44.11	45.91
France	*4.56*	*2.79*	*9.27*	*14.84*	*6.95*	*10.49*	*9.76*	*72.22*	*78.07*
Italy: coastal areas	6.70	0.61	0.04	0.73	1.53	5.97	8.27	90.02	82.71
Italy: other areas	14.53	4.09	3.34	1.59	0.68	4.29	4.92	6.58	0.89
Italy	*21.23*	*4.70*	*3.38*	*2.32*	*2.21*	*10.26*	*13.19*	*96.60*	*83.60*
Luxembourg	*0.55*	*0.50*	*0.16*	—	—	*0.02*	*0.04*	*0.07*	*0.06*
Netherlands	*1.15*	*6.31*	*22.34*	*50.70*	*30.00*	*6.29*	*9.25*	*4.91*	*4.32*
Total	**86.57**	**78.85**	**63.19**	**90.58**	**64.00**	**110.16**	**88.02**	**261.89**	**250.98**

COILS (1)

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
1970											
2.8	0.8	Northern Germany	2.8	2.9	3.0	3.2	3.2	4.4	4.9	5.5	5.5
8.0	1.4	North Rhine/Westphalia	6.3	7.5	8.2	9.1	8.7	10.5	12.6	12.6	12.9
—	—	Southern Germany	—	—	—	—	—	—	—	—	—
—	—	Saar	—	—	—	—	—	—	—	—	—
10.8	*2.2*	*Germany (FR)*	*9.1*	*10.4*	*11.2*	*12.3*	*11.9*	*14.9*	*17.5*	*18.1*	*18.4*
4.3	*0.7*	*Belgium*	*2.8*	*4.0*	*4.3*	*4.9*	*5.2*	*6.0*	*6.7*	*6.8*	*7.0*
2.3	0.0	Eastern France	2.6	2.7	2.7	2.9	3.0	3.0	3.0	3.0	3.1
3.7	0.3	Northern France	2.8	2.7	3.0	3.5	4.0	4.5	5.0	5.8	6.3
—	—	France: other areas	0.1	—	—	—	—	—	—	0.7	2.2
6.0	*0.3*	*France*	*5.5*	*5.4*	*5.7*	*6.4*	*7.0*	*7.5*	*8.0*	*9.5*	*11.6*
3.8	0.9	Italy: coastal areas	3.4	4.1	4.1	4.2	4.5	5.3	5.6	7.1	8.3
0.7	0.0	Italy: other areas	0.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
4.5	*0.9*	*Italy*	*4.2*	*5.2*	*5.2*	*5.3*	*5.6*	*6.4*	*6.7*	*8.2*	*9.4*
0.5	—	*Luxembourg*	*0.4*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
2.7	*0.3*	*Netherlands*	*1.6*	*1.6*	*1.7*	*2.1*	*3.3*	*4.2*	*4.8*	*4.9*	*5.0*
28.8	**4.4**	**Total**	**23.6**	**27.1**	**28.6**	**31.5**	**33.5**	**39.5**	**44.2**	**48.0**	**51.9**

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