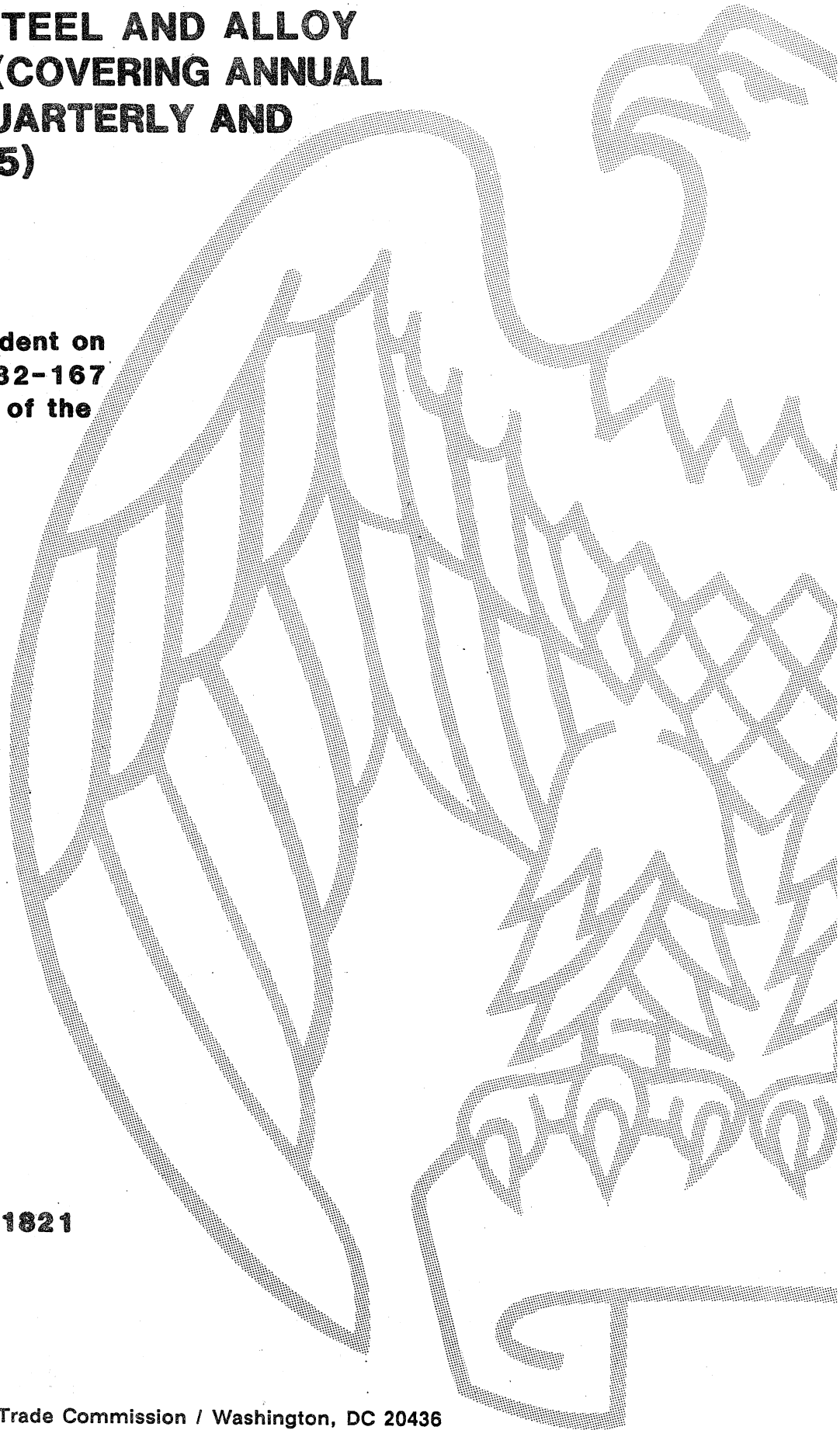


**ANNUAL SURVEY ON CERTAIN
STAINLESS STEEL AND ALLOY
TOOL STEEL (COVERING ANNUAL
1984, AND QUARTERLY AND
ANNUAL 1985)**

**Report to the President on
Investigation No. 332-167
Under Section 332 of the
Tariff Act of 1930**

USITC PUBLICATION 1821

MARCH 1986



UNITED STATES INTERNATIONAL TRADE COMMISSION

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NOTICE

The whole of the Commission's report to the President may not be made public since it contains certain information that has been classified by the United States Trade Representative or would result in the disclosure of the operations of individual concerns. This published report is the same as the report to the President, except that the above-mentioned information has been omitted (as indicated by asterisks).

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ANNUAL REPORT ON CERTAIN STAINLESS STEEL AND ALLOY TOOL STEEL

Highlights

- o U.S. PRODUCERS' CAPACITY increased 1 percent from 1,522,507 tons in 1984 to 1,537,288 tons in 1985.
- o U.S. PRODUCERS' UNFILLED ORDERS increased *** percent from *** tons on December 31, 1984 to 184,698 tons on December 31, 1985.
- o U.S. PRODUCERS' END-OF-PERIOD INVENTORIES increased *** percent from 253,988 tons on December 31, 1984 to *** tons on December 31, 1985.
- o U.S. PRODUCERS' SALES decreased 3 percent from \$3.23 billion during 1984 to \$3.15 billion during 1985, while NET PROFIT BEFORE TAXES fell to \$50.1 million during 1985 compared to \$264.6 million during 1984.
- o U.S. CAPITAL EXPENDITURES were \$86 million in 1984 and increased to \$106 million in 1985. A comparison of projections made by respondents early in 1984, 1985, and 1986 for capital expenditures in 1986 and 1987 shows a distinct downward trend in projected spending in successive years.
- o U.S. EXPENDITURES ON RESEARCH AND DEVELOPMENT were \$25 million in 1984 and decreased to \$24 million in 1985. These expenditures are projected to fall slightly to \$23-\$24 million in 1986-87.

U.S. producers' capacity

Data on producers' capacity indicate almost no changes in the total capacity for operations producing certain stainless steel and alloy tool steel products between 1984 and 1985. Among product categories, stainless steel wire rod showed the greatest percentage change in capacity, declining 7 percent during the period. The decrease reflects the negative financial performance of the stainless rod industry in 1985.

U.S. producers' unfilled orders and inventories

Data on producers' unfilled orders indicate decreases in such orders for stainless steel plate, bar, and alloy tool steel products and increases for

stainless sheets and strip and wire rod between December 31, 1984 and December 31, 1985. Data on inventories showed increasing inventories for stainless sheets and strip and bar between December 31, 1984 and December 31, 1985, and decreasing inventories for stainless plate, wire rod, and alloy tool steel. The changes in inventories generally paralleled those in shipments.

U.S. producers' sales and net profit before taxes

While quantity shipped in 1985 was comparable to that in 1984, lower prices contributed to decreased sales value for all products during this period. The sales decline led to reduced net profits before taxes on overall operations, and the lower prices tended to reduce profit margins among producers of stainless sheets and strip, plate, bar, and alloy tool steel products. Producers of stainless sheet and strip and alloy tool steel showed profits in 1985, whereas wire rod producers narrowed net losses. Importantly, stainless plate and bar producers moved from profit to loss positions on operations during 1984-85. ^{1/} The loss in bar operations was partly because of weakened demand in bar markets for oil exploration and chemical processing.

U.S. capital expenditures

Data on capital expenditures indicate that these expenditures increased between 1984 and 1985 due principally to increased spending for machinery, equipment, and fixtures. Capital expenditures for the production of stainless sheets and strip, plate, and wire rod experienced decreases in 1985, while spending on stainless bar and alloy tool steel operations rose in 1985. The

^{1/} * * *

bulk of spending was for additional finishing equipment, and improvements to melting equipment, rolling mills, and annealing, pickling, and coating facilities. Capital expenditures are principally designed to lower costs and increase productivity, according to questionnaire responses, in order to make specialty steel products more competitive both in domestic and foreign markets. Actual capital expenditures of \$110.3 million in 1985 were about 27 percent less than the level of expenditures projected for 1985 by respondents to last year's questionnaire. A lack of funds due to lower than anticipated product prices and/or inadequate profits was the reason most frequently given for the shortfall. Capital expenditures are projected to rise to \$111 million in 1986 and decline to \$105 million in 1987. A comparison of projections made by respondents early in 1984, 1985, and 1986 for capital expenditures in 1986 and 1987 shows a distinct downward trend in projected spending in successive years.

For 1985, capital expenditures exceeded cash flow in two product areas, stainless steel bar and wire rod. In the case of wire rod, cash flow was negative for the fifth consecutive year. In the remaining three product areas, capital expenditures represented 35 to 63 percent of cash flow.

U.S. research and development expenditures

U.S. expenditures on research and development for products subject to relief decreased between 1984 and 1985 as such spending for stainless plate, sheets and strip, and wire rod decreased, while spending for stainless bar and alloy tool steel increased in 1985. Actual research and development expenditures of \$24.1 million were slightly above the \$23.0 million projected for 1985. Such expenditures are projected to fall slightly to about \$23

million in each of 1986 and 1987. As with capital expenditures, companies have lowered their projections for 1986 and 1987 research and development spending since 1984. Most research and development expenditures have been, and will be made, for the production of new and improved products, including stainless grades for automotive use.

In 1985, research and development expenditures as a share of net sales increased for stainless steel sheets and strip, bar, and alloy tool steel from that reported in 1984. The ratio for stainless wire rod fell, however, from the 1984 level, and remained stable for stainless plate.

Modifications in specialty steel import relief

Presidential Proclamation 5074 of July 19, 1983, provided for the temporary imposition of increased tariffs and quantitative restrictions on certain stainless and alloy tool steel imported into the United States. On September 18, 1984, the President established a national policy for the steel industry and directed the U.S. Trade Representative to coordinate and direct the implementation of that policy, including the negotiation of new arrangements and the reaffirmation of existing measures limiting steel exports into the United States, such as those applicable to specialty steel. Pursuant to this, the U.S. Trade Representative concluded agreements with 17 countries and the EC, 1/ which, among other provisions, replace the increased tariffs on imports of stainless steel sheets, strip, and plate with quotas. However, the additional tariffs remain in effect on imports of stainless sheets, strip, and

1/ The countries with which agreements have been reached are Australia, Austria, Brazil, Czechoslovakia, the German Democratic Republic, Finland, Hungary, Japan, Mexico, Poland, Portugal, the Republic of Korea, Romania, South Africa, Spain, Venezuela, Yugoslavia, and the European Communities (Belgium, Denmark, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, the United Kingdom, and West Germany).

plate from countries which have not participated in import restraint agreements. In addition, the EC countries are removed from the quantitative restrictions imposed on the non-flat-rolled specialty products (i.e., bar, wire rod, and alloy tool steel) and appropriate reductions in the quota quantities are made for the foregoing items.

In December 1985, the U.S. Specialty Tubing Group and the stainless steel wire task force of the Specialty Steel Industry of the United States filed a petition under Section 301 of the Trade Act of 1974 with the U.S. Trade Representative. The petition, which was withdrawn but subsequently refiled, alleges that two Swedish steelmakers are receiving government subsidies and recommends that quotas be imposed on steel imports from Sweden.

In July 1985, the U.S. International Trade Commission dismissed a request to review an affirmative dumping decision on stainless steel plate from Sweden.

Table 1.--Certain stainless steel and alloy tool steel: U.S. producers' capacity, by products, 1984-85

(In short tons)

Item	1984 1/	1985
Raw steel capacity for all operations producing stainless steel and/or alloy tool steel products 2/-----	2,162,478	2,173,359
Certain stainless steel and alloy tool steel products 3/-----	1,522,507	1,537,288
Stainless steel plate 3/-----	185,900	182,900
Stainless steel sheets and strip 3/-----	879,100	897,600
Stainless steel bar 3/-----	201,500	205,600
Stainless steel wire rod 3/-----	63,800	59,200
Alloy tool steel, all forms 3/-----	192,207	191,988

1/ Revised.

2/ Melt capacity.

3/ Finishing capacity.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 2.--Certain stainless steel and alloy tool steel: U.S. producers' unfilled orders, by products, by specified periods, 1984 and 1985

(In short tons)

Period	Stainless steel plate	Stainless steel sheets and strip	Stainless steel bar	Stainless steel wire rod	Alloy tool steel, all forms	All products subject to investigation
1984:						
Dec. 31---	17,987	120,157	15,495	***	6,746	***
1985:						
March 31---	13,421	141,458	17,263	9,022	6,527	187,691
June 30---	12,369	133,403	14,688	7,638	5,789	173,887
Sept. 30---	9,323	120,685	14,649	11,536	6,641	162,834
Dec. 31---	8,257	142,093	15,180	12,830	6,338	184,698

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 3.--Certain stainless steel and alloy tool steel: U.S. producers' end-of-period inventories, by products, by specified periods, 1984 and 1985

(In short tons)

Period	Stainless steel plate	Stainless : steel sheets and strip	Stainless : steel bar	Stainless : steel wire rod	Alloy tool steel, all forms	All products subject to investigation
1984:						
Dec. 31-----	23,429	134,878	47,141	7,334	41,206	253,988
1985:						
March 31-----	23,671	135,296	50,523	***	43,652	***
June 30-----	25,940	142,426	51,997	***	40,471	***
Sept. 30-----	22,229	143,099	50,772	***	39,831	***
Dec. 31-----	20,052	140,852	51,498	***	39,073	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 4.--Selected financial data of U.S. producers on their overall stainless steel and/or alloy tool steel operations, 1984-85, and by specified periods, 1985

(In thousands of dollars)

Line No.	Item	Year 1984 1/	Jan-Mar. 1985 1/	Apr-June 1985 1/	July-Sept. 1985 1/	Oct-Dec. 1985 1/	Year 1985 1/
	NET SALES:						
1	Excluding intracompany and intercompany transfers	3,170,711	784,988	***	676,705	670,159	3,092,282
2	Intracompany and intercompany transfers	63,983	14,952	***	14,442	15,005	57,957
3	Total net sales (lines 1 and 2)	3,234,694	799,940	***	691,147	685,164	3,150,239
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)	2,707,436	680,482	***	610,523	598,124	2,798,847
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)	527,258	119,358	***	80,624	87,040	351,391
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES	216,029	57,934	***	53,650	59,884	237,651
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)	311,229	61,424	***	26,974	27,156	113,740
	OTHER INCOME OR (EXPENSE):						
8	Net interest income or (expense)	(41,285)	(7,982)	***	(7,235)	(7,170)	(40,502)
9	All other income or (expense)	(5,344)	(4,263)	***	(5,413)	(5,831)	(23,093)
10	Total other income or (expense) (lines 8 and 9)	(46,629)	(12,245)	***	(12,648)	(13,001)	(63,595)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)	264,600	49,179	***	14,326	14,155	50,145
12	Depreciation and amortization	71,253	18,248	***	18,802	18,141	79,020

1/ [***] did not provide quarterly data, only annual data.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 5.--Selected financial data of U.S. producers on their stainless steel plate operations, 1984-85, and by specified periods, 1985

(In thousands of dollars)							
Line No.	Item	Year 1984 1/	Jan-Mar. 1985 1/	Apr-June 1985 1/	July-Sept. 1985 1/	Oct-Dec. 1985 1/	Year 1985 1/
NET SALES:							
1	Excluding intracompany and intercompany transfers	221,905	49,465	***	47,119	43,595	299,599
2	Intracompany and intercompany transfers	0	0	***	0	0	0
3	Total net sales (lines 1 and 2)	221,905	49,465	***	47,119	43,595	299,599
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)	200,315	45,014	***	40,717	38,274	295,789
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)	21,590	4,451	***	6,402	5,321	3,810
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES	10,868	2,998	***	2,619	2,307	15,642
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)	10,722	1,453	***	3,783	3,014	(11,832)
OTHER INCOME OR (EXPENSE):							
8	Net interest income or (expense)	(4,044)	(605)	***	(341)	***	(2,994)
9	All other income or (expense)	(2,649)	(757)	***	(799)	***	(1,341)
10	Total other income or (expense) (lines 8 and 9)	(6,693)	(1,362)	***	(1,140)	(839)	(4,335)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)	4,029	91	***	2,643	2,175	(16,167)
12	Depreciation and amortization	4,323	773	***	804	765	4,515
1/ [***] did not provide quarterly data, only annual data.							

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 6.--Selected financial data of U.S. producers on their stainless steel sheet and strip operations, 1984-85, and by specified periods, 1985

(In thousands of dollars)									
Line No.	Item	Year : 1984 1/	Jan-Mar. : 1985 1/	Apr-June : 1985 1/	July-Sept. : 1985 1/	Oct-Dec. : 1985 1/	Year : 1985 1/		
NET SALES:									
1	Excluding intracompany and intercompany transfers----	1,405,369	***	***	***	***	***		
2	Intracompany and intercompany transfers-----	11,359	***	***	***	***	***		
3	Total net sales (lines 1 and 2)-----	1,416,728	336,644	***	316,130	287,811	1,342,336		
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)-----	1,193,099	294,028	***	277,406	253,472	1,212,090		
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)-----	223,629	42,616	***	38,724	34,339	130,246		
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES-----	46,278	14,404	***	12,996	12,789	56,305		
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)-----	177,351	28,212	***	25,728	21,550	73,941		
OTHER INCOME OR (EXPENSE):									
8	Net interest income or (expense)-----	(15,798)	(3,365)	***	(3,008)	(2,689)	(21,558)		
9	All other income or (expense)-----	(5,202)	(3,036)	***	(3,003)	(2,477)	(9,045)		
10	Total other income or (expense) (lines 8 and 9)-----	(21,000)	(6,401)	***	(6,011)	(5,166)	(30,603)		
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)-----	156,351	21,811	***	19,717	16,384	43,338		
12	Depreciation and amortization-----	21,420	5,424	***	5,740	5,519	25,697		
1/ [***] did not provide quarterly data, only annual data.									

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 7.--Selected financial data of U.S. producers on their stainless steel bar operations, 1984-85, and by specified periods, 1985

(In thousands of dollars)

Line No.	Item	Year 1984 1/	Jan-Mar. 1985 1/	Apr-June 1985 1/	July-Sept. 1985 1/	Oct-Dec. 1985 1/	Year 1985 1/
	NET SALES:						
1	Excluding intracompany and intercompany transfers---	507,633	***	***	***	***	***
2	Intracompany and intercompany transfers-----	3,808	***	***	***	***	***
3	Total net sales (lines 1 and 2)-----	511,441	127,888	***	***	104,602	479,228
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)-----	438,104	109,485	***	***	91,779	424,812
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)-----	73,337	18,403	***	***	12,823	54,416
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES-----	52,307	12,517	***	***	13,326	51,738
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)-----	21,030	5,885	***	***	(503)	2,678
	OTHER INCOME OR (EXPENSE):						
8	Net interest income or (expense)-----	(9,484)	***	***	***	***	***
9	All other income or (expense)-----	1,651	***	***	***	***	***
10	Total other income or (expense) (lines 8 and 9)-----	(7,833)	(2,201)	***	***	(2,504)	(12,508)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)-----	13,197	3,684	***	***	(3,007)	(9,830)
12	Depreciation and amortization-----	16,541	4,101	***	***	3,953	16,814
1/	*** did not provide quarterly data, only annual data.						

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 8.--Selected financial data of U.S. producers on their stainless steel wire rod operations, 1984-85, and by specified periods, 1985

(In thousands of dollars)							
Line No.	Item	Year 1984	Jan-Mar. 1985	Apr-June 1985	July-Sept. 1985	Oct-Dec. 1985	Year 1985
NET SALES:							
1	Excluding intracompany and intercompany transfers	109,896	22,437	16,256	13,133	17,193	69,019
2	Intracompany and intercompany transfers	0	0	0	0	0	0
3	Total net sales (lines 1 and 2)	109,896	22,437	16,256	13,133	17,193	69,019
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)	107,369	21,090	15,644	13,938	16,020	66,692
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)	2,527	1,347	612	(805)	1,173	2,327
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES	9,741	1,941	1,636	1,400	2,101	7,078
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)	(7,214)	(594)	(1,024)	(2,205)	(928)	(4,751)
OTHER INCOME OR (EXPENSE):							
8	Net interest income or (expense)	(2,958)	(506)	(397)	***	(455)	***
9	All other income or (expense)	1,416	84	***	***	***	***
10	Total other income or (expense) (lines 8 and 9)	(1,542)	(422)	***	(306)	***	(1,934)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)	(8,756)	(1,016)	***	(2,511)	***	(6,685)
12	Depreciation and amortization	3,310	858	776	749	834	3,217
Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.							

Table 9.--Selected financial data of U.S. producers on their alloy tool steel products operations, 1984-85, and by specified periods, 1985

(In thousands of dollars)									
Line No.	Item	Year 1984 1/	Jan-Mar. 1985 1/	Apr-June 1985 1/	July-Sept. 1985 1/	Oct-Dec. 1985 1/	Year 1985 1/		
NET SALES:									
1	Excluding intracompany and intercompany transfers----	342,351	***	***	66,533	***	***		
2	Intracompany and intercompany transfers-----	2,391	***	***	661	***	***		
3	Total net sales (lines 1 and 2)-----	344,742	89,586	***	67,194	70,902	314,426		
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)-----	257,581	68,805	***	54,632	55,626	247,638		
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)-----	87,161	20,781	***	12,562	15,276	66,788		
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES-----	44,411	11,382	***	10,082	10,993	44,100		
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)-----	42,750	9,399	***	2,480	4,283	22,688		
OTHER INCOME OR (EXPENSE):									
8	Net interest income or (expense)-----	(2,732)	(359)	***	(275)	(335)	(1,296)		
9	All other income or (expense)-----	(1,199)	(208)	***	(284)	(742)	(1,822)		
10	Total other income or (expense) (lines 8 and 9)-----	(3,931)	(567)	***	(559)	(1,077)	(3,118)		
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)-----	38,819	8,832	***	1,921	3,206	19,570		
12	Depreciation and amortization-----	8,736	2,369	***	2,380	2,240	9,453		
1/ [***] did not provide quarterly data, only annual data.									

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 10.--Capital expenditures by U.S. producers for their operations producing stainless steel and alloy tool steel, by products, 1984-85

(In thousands of dollars)

Item	1984	1985
All operations producing stainless steel and alloy tool steel products:		
Land and land improvement-----	2,655	***
Building or leasehold improvements-----	18,743	***
Machinery, equipment, and fixtures-----	123,396	119,111
Total-----	146,044	138,575
All operations producing stainless steel and alloy tool steel products subject to relief:		
Land and land improvement-----	1,552	631
Building or leasehold improvements-----	11,939	12,311
Machinery, equipment, and fixtures-----	72,784	93,103
Total-----	86,275	106,045
Stainless steel plate:		
Land and land improvement-----	7	***
Building or leasehold improvements-----	985	***
Machinery, equipment, and fixtures-----	3,855	4,219
Total-----	4,847	4,469
Stainless steel sheets and strip:		
Land and land improvement-----	357	***
Building or leasehold improvements-----	2,958	***
Machinery, equipment, and fixtures-----	37,896	33,986
Total-----	41,211	35,875
Stainless steel bar:		
Land and land improvement-----	720	***
Building or leasehold improvements-----	4,354	***
Machinery, equipment, and fixtures-----	15,877	***
Total-----	20,951	***
Stainless steel wire rod:		
Land and land improvement-----	312	***
Building or leasehold improvements-----	2,557	***
Machinery, equipment, and fixtures-----	8,136	***
Total-----	11,005	***
Alloy tool steel, all forms:		
Land and land improvement-----	156	***
Building or leasehold improvements-----	1,085	***
Machinery, equipment, and fixtures-----	7,020	16,064
Total-----	8,261	18,121

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 11.--Research and development expenses by U.S. producers for their operations producing stainless steel and alloy tool steel, by products, 1984-85

(In thousands of dollars)

Item	1984	1985
All operations producing stainless steel and alloy tool steel products-----	35,153	33,873
All operations producing stainless steel and alloy tool steel products subject to relief-----	25,468	24,068
Stainless steel plate-----	106	***
Stainless steel sheets and strip-----	11,087	***
Stainless steel bar-----	7,334	***
Stainless steel wire rod-----	3,747	***
Alloy tool steel, all forms-----	3,194	4,159

Sources: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 12.--Projected capital expenditures and expenditures on research and development by U.S. producers for their operations producing stainless steel and alloy tool steel products subject to relief, 1986-87

(In thousands of dollars)

Item	1986	1987
Capital expenditures:		
Projections made in February 1984-----	152,655	168,385
Projections made in February 1985-----	151,110	160,062
Projections made in February 1986-----	110,545	104,945
Research and development expenditures: 1/		
Projections made in February 1984-----	27,613	28,939
Projections made in February 1985-----	24,192	25,491
Projections made in February 1986-----	22,957	23,553

1/ Research and development includes the further development of present products, development of new or improved products, manufacturing methods, testing of new materials, and pure research.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 13.--Capital expenditures as a share of cash flow, and research and development expenditures as a share of total net sales, by product, 1979-85

(In percent)

Item/year	Stainless steel				Alloy tool steel, all forms
	Plate	Sheets and Strip	Bar	Wire rod	
Capital expenditures as a share of cash flow: 1/					
1979-----	12.6	9.3	30.3	61.3	17.5
1980-----	20.4	36.4	27.4	419.6	24.0
1981-----	47.8	180.3	51.0	2/ (791.5)	38.1
1982-----	2/ (24.7)	108.2	2/ (278.6)	2/ (100.4)	2/ (187.6)
1983-----	2/ (47.1)	60.5	2/ (1,594.5)	2/ (93.1)	65.0
1984-----	58.0	23.2	73.8	2/ (174.2)	17.4
1985-----	39.5	34.6	357.6	2/ (317.0)	62.5
Research and development expenditures as a share of total net sales:					
1979-----	0.09	0.30	1.42	1.75	0.58
1980-----	0.15	0.43	1.38	2.21	0.72
1981-----	0.20	0.43	1.48	2.50	0.87
1982-----	0.26	1.45	2.11	4.64	1.15
1983-----	0.17	0.30	3.36	4.12	1.20
1984-----	0.05	0.78	1.43	3.41	0.93
1985-----	0.05	0.82	1.59	2.60	1.33

1/ Stainless steel plate, sheet and strip, and alloy tool steel data may be somewhat overstated for 1979-81, and stainless wire rod and alloy tool steel data may be somewhat overstated for 1985, due to failure of some companies to provide depreciation expenses.

2/ Parentheses signify that companies reported negative cash flow for the period indicated.

Source: For 1979-81, Stainless Steel and Alloy Tool Steel: Determinations of the Commission in Investigations No. TA-201-48 under Section 201 of The Trade Act of 1974, Together with the Information Obtained in the Investigation, USITC Publication 1377, May 1983. For 1982-85, compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Efforts of Domestic Stainless and Alloy Tool Steel Producers to
Adjust to Import Competition

Note.—This section consists of data which would disclose confidential operations of individual concerns, and therefore may not be published.

Major Foreign Suppliers of Stainless and Alloy Tool Steel to the United States

Stainless steel and alloy tool steel are produced in at least 20 countries (although not all of the countries produce both kinds of steel). The following table presents production (on a raw steel basis) and capacity data on the major foreign suppliers of such specialty steel to the United States. The industries in these countries are discussed in the remainder of this section.

Table 14.—Stainless and alloy tool steel production, capacity, and capacity utilization for certain foreign producing countries, 1984–85

Country	Production		Capacity		Capacity utilization	
	1984	1985	1984	1985	1984	1985
	Thousand short tons				Percent	
Austria	1/ 235	1/ 220	1/ 248	1/ 248	1/ 94.8	1/ 88.7
Belgium	120	121	166	154	72.3	78.6
Brazil	97	2/	180	2/	53.9	2/
Finland	174	181	3/ 220	3/ 220	79.1	82.3
France	712	4/ 528	2/	2/	2/	2/
Japan	2,547	2,551	2/	2/	2/	2/
Republic of Korea	159	153	215	215	74.0	71.2
Spain	322	3/ 309	2/	2/	2/	2/
Sweden	486	3/ 463	3/ 720	3/ 660	67.5	70.2
United Kingdom	282	3/ 287	2/	2/	2/	2/
West Germany	968	3/ 976	3/ 1,130	3/ 1,130	85.7	86.4

1/ The Austrian industry's definition of specialty steel is believed to include a greater range of products than stainless and alloy tool steel.

2/ Not available.

3/ Estimated by the staff of the U.S. International Trade Commission.

4/ Data cover stainless steel plates, sheets and strip, hot-rolled bars, wire rod, and alloy tool steel.

Source: Data compiled from Alloy Metals and Steel Market Research, as published in Metal Bulletin, February 8, 1985, and from U.S. Department of State telegrams.

Austria

There were two known producers of specialty steel in Austria in 1985: Voest-Alpine (VA), a nationalized company which produces and consumes small quantities of stainless products; and its subsidiary Vereinigte Edelstahlwerke (VEW), a producer of various specialty steel products including stainless bar and rod. Voest is not active in the wide strip stainless product area; however, in June 1985, the company began talks with the German stainless producer, Krupp Stahl, concerning the acquisition of technology for possible entry into this sector. 1/

In 1985, VEW announced a plan to reduce its specialty steelmaking capacity from the existing 248,000 short tons to approximately 193,000 short tons by the end of 1986. The intended reduction in VEW's capacity is to be achieved by closing the Ternitz steel plant in the summer of 1986, and concentrating production at the Kapfenberg steel mill. In addition to capacity reductions, VEW has also announced plans for the restructuring and modernization of manufacturing facilities, and the expansion of the company's finishing operations. The commercial goal of these efforts is to reach the break-even point by 1988. The restructuring will also result in a workforce reduction of approximately 25 percent between 1984 and 1988. 2/

The Austrian government enforces a number of trade policy measures designed principally to enable authorities to exercise better control over low-priced imports and permit corrective action with minimum delay. The two mainstays of this program are the monitoring procedures applicable to a large

1/ Metal Bulletin, June 28, 1985.

2/ U.S. Department of State telegram, February 1986.

number of steel mill products and the setting of reference prices below which imports may not be sold. 1/

In 1985, Austria's holding company for nationalized industries, OIAG, provided VEW with financial contributions totaling approximately \$72.5 million. Such funds are generally raised through borrowing and bond issues, with a federal government guarantee. Because VEW is not expected to make any profits prior to 1988, the year the reorganization is scheduled to be completed, most of the direct costs for the reorganization program will have to be financed by the federal government through OIAG, in addition to losses anticipated in the years ahead. 2/

Production of specialty steel in Austria fell from 235,000 short tons in 1984 to 220,000 short tons in 1985, reflecting, in part, reduced activity at the Ternitz plant in preparation for complete closure of the mill. There was a corresponding decline in capacity utilization, from 94.8 percent in 1984 to 88.7 percent in 1985.

Specialty steel 1/ - Austria

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons-- <u>2/</u>	235	<u>3/</u> 220
Capacity-----do-----	248	248
Capacity utilization-----percent--	94.8	88.7

1/ The Austrian industry's definition of specialty steel is believed to include a greater range of products than stainless and alloy tool steel.

2/ Of this amount, approximately 86,000 short tons were stainless steel.

3/ Of this amount, an estimated 72,000-84,000 short tons were stainless steel.

Source: Production data compiled from U.S. Department of State telegram and Alloy Metals and Steel Market Research, as published in Metal Bulletin, February 8, 1985. Capacity data from U.S. Department of State telegram.

1/ Ibid.

2/ Ibid.

Belgium

There were two producers of stainless steel products in Belgium in 1985; ALZ NV and S.A. Fabrique de Fer de Charleroi both made stainless steel sheet, strip, and (in trial volumes) plate. The sole producer of stainless bar and wire rod, Henricot, ceased production at the end of 1984. There were no producers of alloy tool steel. 1/

Over the next three years, ALZ is planning investments intended to finance the modernization of its cold rolling mill, with an order for a new cold-roll mill expected to be placed during 1986. ALZ is also planning to invest in continuous casting. 2/

According to industry sources, Fabrique de Fer is attempting to diversify its product range and is heavily involved in high grade material. The company is making investments designed to improve its financial results and to secure its market position. 3/

Belgium's production of stainless steel sheets, strip, and wire rod remained relatively stable from 1984 to 1985, at about 120,000 short tons. Capacity fell from 166,000 short tons in 1984 to 154,000 short tons in 1985, reflecting the termination of wire rod production at the end of 1984. Capacity utilization rose from 72.3 percent in 1984 to 78.6 percent in 1985.

Stainless steel sheets, strip, and wire rod -- Belgium

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons--	120	121
Capacity-----do-----	166	154
Capacity utilization-----percent--	72.3	78.6

Source: U.S. Department of State telegram, February 1986.

1/ U.S. Department of State telegram, February 1986.

2/ Metal Bulletin, August 23, 1985, p. 25.

3/ Op. cit., telegram.

Brazil

There were six Brazilian producers of stainless and alloy tool steel products in 1985. Acos Anhanguera S.A. (Anhanguera) produced stainless wire rod; Acos Villares S.A. produced stainless wire rod, bars, and tool steel; Companhia Acos Especiales Itabira (Acesita) produced stainless bar, sheet and strip, and tool steel; Acos Finos Piratini S.A. (Piratini) produced stainless bar, rod, and tool steel; Siderurgica Nossa Senhora da Aparecida S.A. (Aparecida) produced stainless bar, rod, and tool steel; and Electrometal Acos Finos S.A. produced stainless bar and rod. Acesita and Anhanguera were Brazil's two leading producers of stainless and alloy tool steel in 1985.

In 1984, Acesita began work for the installation of a new Sendzimir mill and annealing and pickling facilities to raise capacity for alloy and stainless sheets at its Timoteo works from 129,000 short tons to 183,000 short tons per year. The expansion is scheduled to be completed in 1987. 1/ In 1985, Acesita announced that it would join with another company in investing in the construction of Plaminox in Timoteo, Minas Gerais. The company will start producing about 220 short tons per month of flat steel, principally stainless steel plates. 2/

Brazil's state-owned steel sector also revealed plans to invest in capacity expansion for special steel flat-rolled products and special steel long products and tubes over the next several years. 3/

1/ Metal Bulletin, August 31, 1984, p. 27.

2/ U.S. Department of State Airgram on the Brazilian Iron and Steel Industry, CERP 539, drafted December 26, 1985.

3/ Metal Bulletin, February 12, 1985. Note: the term special steel, as used regarding the Brazilian industry, includes a much broader range of products than stainless steel and alloy tool steel.

Brazilian production of stainless and alloy tool steel products totaled approximately 94,000 short tons in 1984, with capacity utilization of 53.9 percent. Data for 1985 are not available.

Stainless and alloy tool steel - Brazil

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons--	<u>1/</u> 97	<u>2/</u>
Capacity-----do-----	180	<u>2/</u>
Capacity utilization-----percent--	53.9	<u>2/</u>

1/ Annualized from 11 month data.

2/ Not available.

Source: Production information obtained from the U.S. Department of State through the Brazilian Iron and Steel Institute. Capacity information was estimated from data supplied in Metal Bulletin Stainless Survey 1982, published by Metal Bulletin, Ltd., and from discussions with officials of Metal Bulletin.

Finland

The sole producer of stainless steel mill products in Finland in 1985 was Outokumpu Oy, a state-controlled company. The single producer of specialty steel, Oy Ovako, does not produce the type of alloy tool steel which is subject to investigation. The company had produced very small quantities of stainless steel bars, but production was terminated in 1985 due to low profitability. 1/

Industry sources indicate that Outokumpu Oy does not plan any significant changes in production, capacity, or capacity utilization for its stainless steel production facilities in 1986-87, nor does it plan any restructuring of production. However, by 1987, the company will build a hot-rolling mill at its Tornio stainless works designed to improve the works' operational

1/ U.S. Department of State telegram, February 1986.

flexibility (by improving its integrated processes) and enhance its ability to produce new steel grades. 1/

Because the Tornio stainless steel plant of Outokumpu Oy is located in Finland's northern developing area, certain benefits are available to it under regional policy legislation. Special laws provide for the payment of interest support by the government on company borrowing. Under this legislation, \$1.72 million are designated in Finland's 1986 national budget for the payment of interest support to the Tornio stainless steel works. Furthermore, because the Tornio plant is located in Finland's developing area, it is entitled to certain tax reliefs which are available when a new plant is established or an existing plant is expanded or modernized. Upon its completion, Outokumpu Oy's new hot-rolling mill in Tornio will obtain depreciation allowances, investment tax deductions, and exemption from property stamp taxes. 2/

Finland's production of stainless steel rose by 4 percent from 174,000 short tons in 1984 to 181,000 short tons in 1985. There was a corresponding increase in capacity utilization from 79.1 percent to 82.3 percent.

Stainless steel - Finland

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons---	174	181
Capacity-----do-----	<u>1/</u> 220	<u>1/</u> 220
Capacity utilization-----percent---	79.1	82.3

1/ Estimated by staff of the U.S. International Trade Commission.

Source: Production data are from Metal Bulletin, February 8, 1985, and from U.S. Department of State telegram. Capacity data estimated on the basis of telegram.

1/ Ibid.

2/ Ibid.

France

In 1985, there were at least five producers of stainless and alloy tool steel products in France. Almost 70 percent of French production of these steel products was accounted for by production of stainless sheets and strip. The largest producers of stainless and alloy tool steel products in 1985 included Sacilor, a state-owned producer of flat-rolled products and bars; Ugine-Gueugnon and Ugine-Savoie, companies which are majority-owned by Sacilor and are each the second largest producer worldwide of their particular products, stainless sheets and strip and stainless bar and rod, respectively; Usinor, a state-owned producer of sheets, plate, and bar; and Ascometal, a company which is jointly owned by Sacilor and Usinor and produces specialty steel bars and rods.

In December 1984, Usinor announced a reorganization of its stainless sheet business. Usinor's Chatillon division was merged with its Usinor Inox subsidiary (formerly Peugeot-Loire). The new group is called Usinor Chatillon and is the second largest French producer of stainless steel sheets, with annual production of about 100,000 metric tons per year. ^{1/} At the same time, Usinor announced plans to rationalize Chatillon's operations with improvements in its strip mill at Pont-de-Roide, to enable the plant to make a full range of sizes of stainless strip. ^{2/} In May 1985, Usinor Chatillon began efforts at its Isbergues works designed to enable the production of better quality steels. The move is in line with the company's policy of becoming more of a specialized producer of sophisticated products such as ferritic stainless grades, as opposed to involvement in the high-volume, standard grade stainless

^{1/} Metal Bulletin, December 28, 1984, p. 23, and May 10, 1985.

^{2/} Ibid., January 11, 1985, p. 25.

flat products market dominated by Sacilor's Ugine-Gueugnon. 1/ In October 1985, Usinor announced plans for a major reorganization making all of its operating divisions into separate subsidiaries, leaving Usinor itself as strictly a holding company. The most important of these subsidiary companies is Usinor Aciers, which will take over Usinor's flat product and stainless steel works effective January 1, 1986. 2/

Sacilor announced several improvements in its operations in 1985 including: inauguration of a new bar and rod mill for Ugine-Savoie, which completed the company's modernization plan; and modernization of casting operations at Ugine-Gueugnon's Ardoise works. 3/ Sacilor also created a new holding company for its stainless steel interests. The company, called Ugine SA, will be wholly-owned by Sacilor and will include Ugine-Gueugnon and Ugine-Savoie. The charges are designed to simplify the organization and management structure of Sacilor's stainless steel activities. 4/

Further rationalization plans aimed at the redistribution of production were mapped out in 1985 for Ascometal, France's specialty steel producer. Higher productivity is a priority, accompanied by reductions in employment over the next two years. After the restructuring is completed, Ascometal will be producing about one million metric tons per year at three main groups of specialty steel works. One of these works is intended to be closed eventually. Investments under way at the other works include expenditures on continuous casting operations and a new steelmaking plant. 5/

1/ Ibid., May 10, 1985.

2/ Ibid., October 8, 1985, p. 29 and December 24, 1985, p. 25.

3/ Ibid., September 27, 1985 and October 29, 1985, p. 22.

4/ Ibid., September 27, 1985.

5/ Ibid., April 2, 1985.

France's production of stainless steel is believed to have decreased from 1984 to 1985 as a result of weakness in its domestic market for stainless steel. 1/ Although specific data on capacity are not available, no mill closures were reported in 1985. 2/

Stainless steel - France

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons— <u>1/</u>	712	<u>2/</u> 528
Capacity-----do----- <u>3/</u>	<u>3/</u>	<u>3/</u>
Capacity utilization-----percent— <u>3/</u>	<u>3/</u>	<u>3/</u>

1/ Revised. Includes all stainless steel products.

2/ Includes stainless steel plates, sheets and strip, hot-rolled bars, wire rod, and alloy tool steel.

3/ Not available.

Source: Production data for 1984 compiled from Alloy Metals and Steel Market Research, as published in Metal Bulletin, February 8, 1985. Production data for 1985 compiled from U.S. Department of State telegram.

Japan

There were approximately 20 producers of stainless and alloy tool steel products in Japan in 1985, many of which produce a variety of the specialty steel products subject to investigation, as follows: stainless plate, 9 companies; stainless sheets and strip, 13 companies; stainless bar, 9 companies; stainless wire rod, 11 companies; alloy tool steel and high-speed steel products, 13 companies. 3/ The largest producers include Nippon Metal Industry Co., Nippon Yakin Kogyo Co., and Nippon Stainless Co.

In 1985, one company, Nigata Nyodo Metal Co., ceased production of stainless steel plate and applied for restructuring, and another company which produced stainless bar in 1984 did not produce in 1985. Modernization work

1/ Ibid., June 25, 1985.

2/ U.S. Department of State telegram, February 1986.

3/ Ibid.

was also announced in 1985 by four of Japan's leading producers. Nippon Steel is implementing plans to replace a 40-metric ton electric furnace at its Hikari works with a new 60-metric ton unit, which when teamed with the existing 60-metric ton furnace, will lift monthly output from 24,000 metric tons to 28,000 metric tons. Nippon Metal Industry Co. announced plans to install new equipment at its Steckel mill, reducing the minimum thickness from 4mm to 2.5mm. Present output at the mill is about 12,000 metric tons per month. Nippon Yakin planned to redesign part of its continuous caster at the Kawasaki City works, and Kawasaki Steel planned to install a new method of making chrome additions to the converter at its Chiba plant. 1/

In May 1985, 31 Japanese special steelmakers and 28 trading companies formed an organization to monitor special steel exports to the United States as a result of the import restraint agreement limiting Japan's steel shipments to the United States to 5.8 percent of the U.S. market. The new group is called the Japan Special Steel Export Association and is the counterpart to an existing group which regulates carbon steel shipments to the United States. 2/

Japan's production of stainless and alloy tool steel products remained fairly stable at 2.5 million short tons in 1984 and 2.6 million short tons in 1985, reflecting the slower pace of activity in principal domestic markets (automotive, chemical, consumer electronics, and kitchenware) and in export markets. 3/

1/ Metal Bulletin, July 12, 1985.

2/ Ibid., May 31, 1985, p. 33.

3/ American Metal Market, October 30, 1985.

Stainless and alloy tool steel - Japan

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons--	<u>1/</u> 2,547	2,551
Capacity-----do-----	<u>2/</u>	<u>2/</u>
Capacity utilization-----percent--	<u>2/</u>	<u>2/</u>

1/ Revised.

2/ Not available.

Source: Data compiled from U.S. Department of State telegrams, February 1985, February 1986, March 1986.

Republic of Korea

There were six producers of stainless and/or alloy tool steel products in South Korea in 1985. They included Sammi Steel Co., a producer of stainless steel sheet, strip, bar, rod, and alloy and tool steel products; Samyang Metal Co., Tong Yang Mulsan, Daiyang Metal Co., and Poongsan Specialty Steel Co., all producers of stainless steel sheet and strip; and Korea Heavy Machinery, a maker of alloy steel and tool steel products. Korean industry representatives indicate that in 1985 there was no significant change in South Korea's capacity, that no firms began or terminated production, and no programs to restructure the Korean special steel industries were announced. 1/

There is a system of non-tariff restrictions on certain of South Korea's imports. Under the plan, the import of restricted items may be approved if recommended by the relevant ministry or trade association. During 1985, the South Korea government eliminated the prior import requirement of recommendation by the concerned association for the import of bar, rod, and hollow drill steel. Effective July 1, 1986, the government plans to eliminate all such import restrictions for various specialty steel products including

1/ U.S. Department of State telegram, February 1986.

bar and wire rod of stainless steel and heat-resisting steel, stainless steel sheets and plates not more than 4.75mm in thickness, and stainless steel hoop and strips. ^{1/}

South Korea's production of stainless steel bar, rod, and sheets and strip decreased 4 percent from 159,000 short tons in 1984 to 153,000 short tons in 1985, in response to declining exports. Almost 85 percent of production in 1985 was accounted for by sheet and strip production. South Korea's capacity to produce stainless bar, rod, sheets and strip remained stable, resulting in a decline in capacity utilization from 74.0 percent in 1984 to 71.2 percent in 1985.

Stainless steel bar, rod, sheets and strip – South Korea

	<u>1984</u>	<u>1985</u>
Production—————1,000 short tons—	159	153
Capacity—————do————	215	215
Capacity utilization—————percent—	74.0	71.2

Source: Production and capacity data compiled from U.S. Department of State telegram.

Spain

There were at least five Spanish producers of stainless and alloy tool steel products in 1985. Major producers included Acerinox SA, a producer of a wide variety of finished stainless steel products and Spain's only producer of stainless flat-rolled products; SA Echevarria, a producer of bar and rod; Olarra SA, a producer of stainless ingots, billets, and bar; and Roldan SA, a producer of stainless billets, bar, rod, and wire.

In September 1985, Acerinox, which has undertaken numerous recent modernization efforts, began production of plate ranging in thickness from 10

^{1/} Ibid.

to 15mm, with plans underway to progressively increase plate thickness to 60mm in order to serve more diverse markets. In October 1985 a Steckel hot strip mill came on stream, and the company planned to start up an annealing and pickling line in December 1985. The addition of this line is expected to raise Acerinox's capacity for cold-rolled sheet from 150,000 tons per year to 180,000 tons per year, as well as making the company Europe's first integrated stainless producer. 1/

In June 1984, the Aceriales group, which included Olarra and Echevarria, announced that Echevarria and two other specialty steel producers would combine to form Aceros Especiales del Norte SA (Acenor). During 1985, Acenor acquired additional specialty steel producers, including Olarra (October 1985). Acenor's goal is the rationalization and modernization of Spain's special steels sector through work force reductions, elimination of inefficient capacity, and plant modernization. The restructuring program is designed to enable Spain's specialty steelmakers to become internationally competitive, and is expected to be completed by 1989. 2/

Acenor's newest acquisitions now enable it to control 65-70 percent of Spain's specialty steel production. A spokesman for Acenor indicated that the weak demand for specialty steel in the Spanish domestic market is expected to continue for a few years, making it necessary for Acenor to continue exporting at least 50 percent of its production. 3/

Spain's production of stainless steel decreased from 322,000 short tons in 1984 to an estimated 309,000 short tons in 1985 as a result of increased production costs (e.g., the costs of scrap and electricity) and sluggish export demand.

1/ Metal Bulletin, May 31, 1985 and November 12, 1985.

2/ Ibid., October 18, 1985 and August 13, 1985.

3/ Ibid.

Stainless steel - Spain

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons--	<u>1/</u> 322	<u>2/</u> 309
Capacity-----do-----	<u>3/</u>	<u>3/</u>
Capacity utilization-----percent--	<u>3/</u>	<u>3/</u>

1/ Revised.

2/ Estimated by staff of the U.S. International Trade Commission.

3/ Not available.

Source: Production data compiled from Alloy Metals and Steel Market Research, as published in Metal Bulletin, February 8, 1985.

Sweden

In 1985, Sweden's stainless steel industry consisted of two major groups: Avesta AB, a producer of stainless flat-rolled products; and Sandvik AB, a producer of specialty tubes, strip, and wire. The leading alloy tool steel producer was Uddeholm AB.

In January 1984, the Swedish specialty steel industry announced a reorganization leaving Avesta and Sandvik as the leading stainless producers. Under terms of the reorganization, Sandvik agreed to concentrate on specialty steel tubes, strip, and wire; Avesta agreed to concentrate on flat-rolled products; and Uddeholm, once a producer of a full range of stainless steel products, agreed to concentrate on alloy tool steel products and to sell its other operations to Avesta. Fagersta AB, once a leading producer of hot- and cold-rolled stainless steel strip and wire rod, began to diversify out of steel in 1984, and most of its stainless operations were absorbed by Avesta. The industry intended to combine these operations to eliminate duplication and inefficiency. 1/

1/ Metal Bulletin, January 13, 1984, p. 32.

During 1985 Avesta announced several projects designed to improve its annual earnings. Early in the year the company implemented a project to rationalize cold-rolled strip production and to expand its wide cold-rolled coil facilities. The narrow cold-rolled strip mill at the Avesta site was closed in the spring, and production transferred to the operations in Torshälla. In September 1985, a decline in the market for stainless flat products prompted the announcement of new cutbacks at Avesta's Degerfors works. 1/

Other restructuring efforts were undertaken by Sweden's steel industry in 1985. Sandvik continued to reduce its workforce while maintaining production levels and investing heavily in new continuous casting operations. Marginal products have been eliminated and production streamlined. 2/ In mid-1985 the steel melting plant within Fagersta Stainless (a joint subsidiary of Sandvik and Avesta) was closed, and production transferred to the two controlling companies. 3/ In addition, new companies producing stainless steel bars and seamless tubes were established, taking over the production of existing works. Avesta was to acquire a controlling share in a new company which will take stainless billets and heavy round bars from Avesta's Degerfors works and have them hot-rolled and finished at the Hagfors works of Uddeholm. Sandvik and Avesta are equal partners (50 percent each) in a new seamless tube company called Ansab, which is operating the Storfors works to produce cold-finished stainless tubes from seamless hollow bars and tube hollows. 4/

1/ Ibid., September 6, 1985.

2/ Ibid., February 15, 1985.

3/ American Metal Market, October 30, 1985.

4/ Metal Bulletin, September 27, 1985.

Two of Sweden's specialty steel producers entered into business agreements with U.S. firms during 1985. Avesta was granted an exclusive agency by Armco's special steel division for certain grades of cold-finished stainless steel bars. Armco will continue to serve some customers direct from its mills; however, Avesta will become Armco's exclusive mill depot for smooth-turned cold-finished round bar products of certain stainless grades. Avesta Stainless is based in New Jersey and serves over 400 steel service center depots in the United States. 1/

In another venture, Uddeholm, one of Europe's largest tool and high-speed steel producers and exporters, entered into partnership with the Ellwood City Forge Corp. to produce tool steel ingots in a new mini-mill at New Castle, Pennsylvania. The new company, Ellwood Uddeholm Steel Corp., is owned 80 percent by the U.S. firm and 20 percent by the Swedish company. Steel production at the plant was begun in December 1985. Initial capacity is about 60,000 tons per year of tool and other specialty steels as well as carbon and other alloy steels. Ellwood City Forge Corp. hire-forges and machines steel from the new plant on Uddeholm's behalf. Finished products will be marketed in the United States through Uddeholm's existing sales network which is based in New Jersey. According to industry sources, Uddeholm's venture is partly in response to the U.S. import restrictions on certain alloy tool steel. 2/

1/ Ibid., December 17, 1985.

2/ Metal Bulletin, January 18, 1985, p. 23, and * * *.

Sweden's production of stainless steel decreased from 486,000 short tons in 1984 to an estimated 463,000 short tons in 1985 due to reduced domestic demand for stainless steel flat products. Sweden's capacity to produce stainless steel products declined from an estimated 720,000 short tons in 1984 to an estimated 660,000 short tons in 1985 as the industry continued to reorganize, while capacity utilization rose from 67.5 percent in 1984 to 70.2 percent in 1985.

Stainless steel - Sweden

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons—	<u>1/</u> 486	<u>2/</u> 463
Capacity-----do-----	<u>2/</u> 720	<u>2/</u> 660
Capacity utilization-----percent—	67.5	70.2

1/ Revised.

2/ Estimated by staff of the U.S. International Trade Commission.

Source: Production data compiled from Annual Stainless Steel Statistics, 1985, published by Inco-Europe, Ltd. and from Alloy Metals and Steel Market Research, as published in Metal Bulletin, February 8, 1985. Capacity data estimated from data supplied in Metal Bulletin and from discussions with officials of Metal Bulletin.

United Kingdom

The British stainless and alloy tool steel industry consists of British Stainless Corporation, a division of state-owned British Steel Corporation, and approximately six private sector firms, which are members of the British Independent Steel Producers Association (BISPA). British Stainless is by far the largest producer of stainless steel in the United Kingdom, while alloy tool steel is produced in smaller quantities by a limited number of firms. Many stainless and alloy tool steel producers have discontinued operations in recent years citing the competitive pressures of foreign competition. 1/ In

1/ Financial Times, March 26, 1984, p. 26.

1985, several years of negotiations between British Steel Corp. and engineering group Guest, Keen, and Nettlefold (GKN) resulted in an agreement to merge their special-steelmaking activities into a new jointly owned company called United Engineering Steels Ltd. (UES), which is scheduled to begin operations on April 1, 1986. The government intends UES to be an independent private sector company. During the course of the merger negotiations, much excess production capacity was eliminated, with further rationalization of operations targeted. 1/ The plan for the new venture, drawn up under the code name "Project Phoenix," is the biggest initiative taken in the United Kingdom's steel industry since 1980. 2/

Total U.K. production of stainless steel products increased 2 percent from 282,000 short tons in 1984 to an estimated 287,000 short tons in 1985. The data reflect a continuation of the positive trend in flat products demand which resulted from growth in demand for consumer goods and an improvement in capital investment in the nuclear industry and the petro-chemicals industry. 3/

Stainless steel - United Kingdom

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons-----	282	<u>1/</u> 287
Capacity-----do-----	<u>2/</u>	<u>2/</u>
Capacity utilization-----percent-----	<u>2/</u>	<u>2/</u>

1/ Estimated by staff of the U.S. International Trade Commission.

2/ Not available.

Source: Production data compiled from Alloy Metals and Steel Market Research, as published in Metal Bulletin, February 8, 1985.

1/ Metal Bulletin, January 17, 1986, p. 19.

2/ U.S. Department of State telegram, February 1986.

3/ Metal Bulletin, January 8, 1985.

West Germany

There were two major producers of stainless and alloy tool steel in West Germany in 1985; Krupp Stahl AG, a producer of a full range of specialty steel products and Thyssen Edelstahlwerke AG, a subsidiary of Thyssen AG and a producer of a wide range of specialty steel products. Thyssen and Krupp are among the world's largest stainless and alloy tool steel producers. Krupp accounts for about 8 percent of total flat-rolled stainless production, making it the world's largest producer of stainless steel flat-rolled products. 1/ In May 1984, Thyssen Edelstahlwerke announced the closing of its bar and rod mill at Witten with the loss of 650 jobs and approximately 70,000 short tons of capacity. 2/

West Germany's production of stainless steel products increased to 976,000 short tons in 1985 from 968,000 short tons in 1984 due to continued strength of demand in both domestic and export markets. Capacity remained stable, and capacity utilization rose from 85.7 percent in 1984 to 86.4 percent in 1985.

Stainless steel - West Germany

	<u>1984</u>	<u>1985</u>
Production-----1,000 short tons-----	968	<u>1/</u> 976
Capacity-----do-----	<u>1/</u> 1,130	<u>1/</u> 1,130
Capacity utilization-----percent-----	85.7	86.4

1/ Estimated by staff of the U.S. International Trade Commission.

Source: Production data compiled from Alloy Metals and Steel Market Research, as published in Metal Bulletin, February 8, 1985; capacity data estimated on the basis of information in Metal Bulletin.

1/ Metal Bulletin, September 27, 1985.

2/ Ibid., May 15, 1984, p. 37.