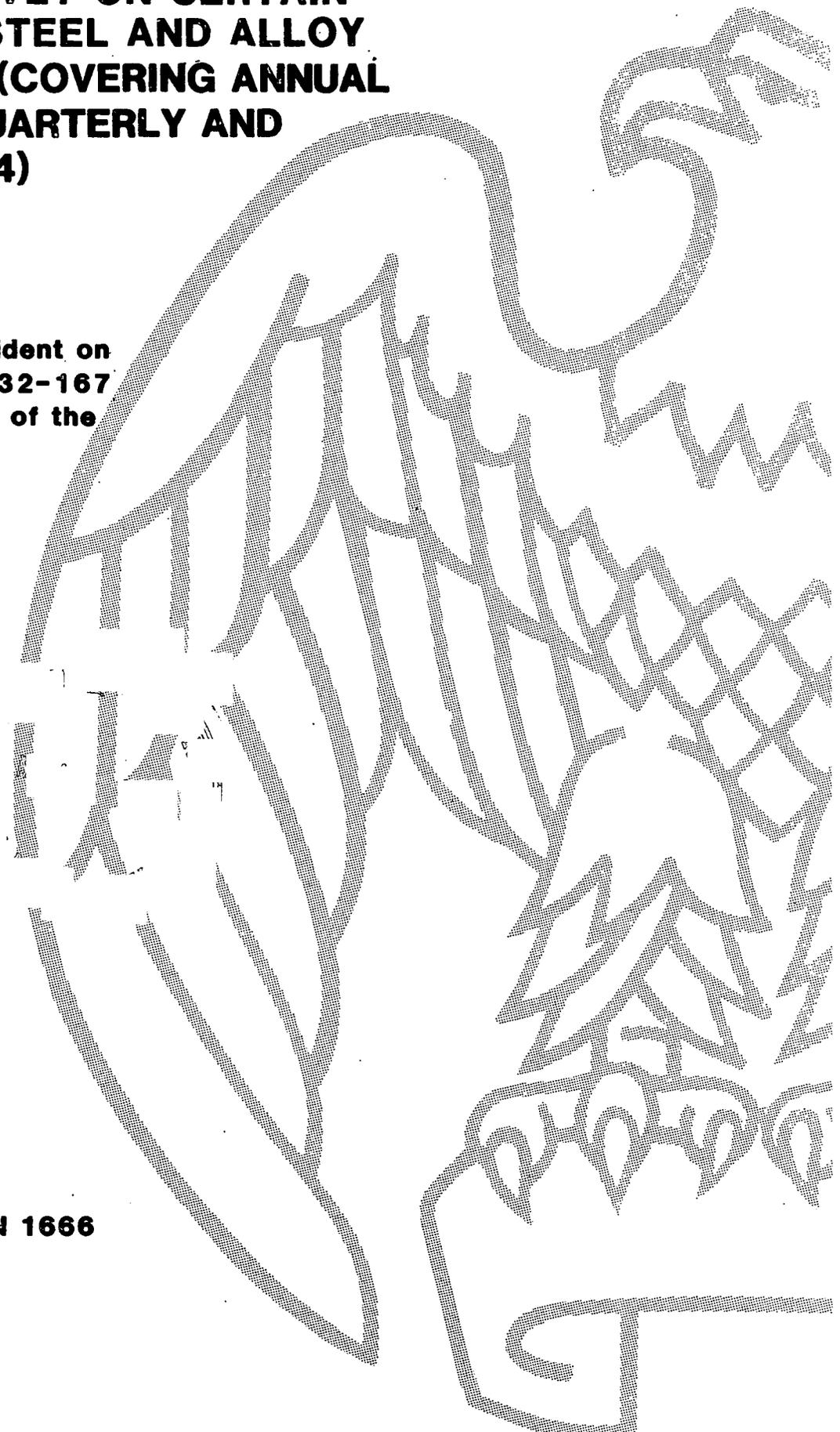


**ANNUAL SURVEY ON CERTAIN
STAINLESS STEEL AND ALLOY
TOOL STEEL (COVERING ANNUAL
1983, AND QUARTERLY AND
ANNUAL 1984)**

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

USITC PUBLICATION 1666

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UNITED STATES INTERNATIONAL TRADE COMMISSION

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ANNUAL REPORT ON CERTAIN STAINLESS STEEL AND ALLOY TOOL STEEL

Highlights

- o U.S. PRODUCERS' CAPACITY decreased 4 percent from 1,643,452 tons in 1983 to 1,580,700 tons in 1984.
- o U.S. PRODUCERS' UNFILLED ORDERS decreased *** percent from 242,076 tons on December 31, 1983 to *** tons on December 31, 1984.
- o U.S. PRODUCERS' END-OF-PERIOD INVENTORIES increased 4 percent from 244,861 tons on December 31, 1983 to 253,988 tons on December 31, 1984.
- o U.S. PRODUCERS' SALES increased 7 percent from \$3.0 billion during 1983 to \$3.2 billion during 1984, while NET PROFIT BEFORE TAXES rose to \$264.6 million during 1984 compared to \$102.8 million during 1983.
- o U.S. CAPITAL EXPENDITURES equaled \$140 million 1/ in 1983 and fell to \$86 million in 1984. These expenditures are projected to rise to \$157 million in 1985, fall to \$151 million in 1986, then rise to \$160 million in 1987.
- o U.S. EXPENDITURES ON RESEARCH AND DEVELOPMENT equaled \$23 million in 1983 and increased to \$25 million in 1984. These expenditures are projected to fall to \$23 million in 1985, then rise in 1986 and 1987 to \$24 million and \$25 million, respectively.

1/ Includes *** million purchase by Jones & Laughlin of Crucible's Midland, PA plant.

U.S. producers' capacity

Data on producers' capacity indicate decreases in capacity for the production of stainless flat rolled products and bar between 1983 and 1984, but increases in capacity for stainless wire rod and alloy tool steel production.

U.S. producers' unfilled orders and inventories

Data on producers' unfilled orders indicate increases in such orders for stainless steel plate and alloy tool steel products between December 31, 1983 and December 31, 1984. There were decreases of at least 25 percent in orders for stainless steel sheets and strip, bar, and wire rod during this period.

Data on inventories showed increasing inventories for all products between December 31, 1983 and December 31, 1984, except for stainless steel sheets and strip.

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

Data on U.S. producers' sales indicate that the primary factor behind the sales increase for 1984 was an increase in sales of stainless steel sheet and strip, which accounted for almost 44 percent of total net sales. Sales of all products improved during this period. The net profit increase for producers was primarily attributable to increased profits among producers of stainless sheet and strip, bar, and alloy tool steel products. Four product groupings showed profits in 1984, and wire rod producers narrowed net losses.

U.S. capital expenditures

Data on capital expenditures indicate that these expenditures fell between 1983 and 1984 due principally to reduced spending for machinery, equipment, and fixtures. Capital expenditures for the production of stainless sheets and strip, plate, bar and alloy tool steel experienced decreases in 1984, while spending on wire rod operations rose in 1984. Capital expenditures are projected to rise between 1985 and 1987, with the largest expenditures to be centered on rolling and finishing operations for stainless bar, and sheets and strip. 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.

For 1984, four of the five product areas covered in the survey realized positive capital expenditures/cash flow ratios; this is an improvement over 1983, when three of five product categories showed negative ratios.

U.S. research and development expenditures

U.S. expenditures on research and development for products subject to relief rose between 1983 and 1984 as such spending for stainless sheets and strip, wire rod, and alloy tool steel increased, while spending for stainless plate and bar declined in 1984. Research and development expenditures are projected to fall in 1985, then rise in 1986 and 1987. Most R & D expenditures have been, and will be made, for the production of new and improved products.

In 1984, research and development expenditures as a share of net sales increased for stainless steel sheets and strip from that reported in 1983; the ratio for all other product categories fell, however, from the 1983 level.

Table 1.—Certain stainless steel and alloy tool steel: U.S. producers' capacity, by products, 1983-84

(In short tons)

Item	1983	1984
Certain stainless steel and alloy tool steel products—	1,643,452	1,580,700
Stainless steel plate—	225,139	170,900
Stainless steel sheets and strip—	974,700	879,100
Stainless steel bar—	234,600	201,500
Stainless steel wire rod—	46,600	63,800
Alloy tool steel, all forms—	162,413	265,400

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, 1983 and 1984

(In short tons)

Period	Stainless steel plate	Stainless steel sheets and strip	Stainless steel bar	Stainless steel wire rod	Alloy tool steel, all forms
1983:					
Dec. 31—	10,008	189,249	20,730	16,262	5,827
1984:					
March 31—	14,113	166,962	18,357	***	7,921
June 30—	11,590	123,705	18,326	***	8,122
Sept. 30—	13,684	109,537	17,381	***	7,286
Dec. 31—	17,987	120,157	15,495	***	6,746

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, 1983 and 1984

(In short tons)

Period	Stainless steel plate	Stainless steel sheets and strip	Stainless steel bar	Stainless steel wire rod	Alloy tool steel, all forms
1983:					
Dec. 31—	20,118	139,813	42,931	4,892	37,107
1984:					
March 31—	17,341	154,354	44,002	9,131	39,743
June 30—	19,732	153,008	45,303	9,026	39,147
Sept. 30—	19,578	126,832	45,497	8,931	40,882
Dec. 31—	23,429	134,878	47,141	7,334	41,206

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, 1983-84, and by specified periods, 1984

(In thousands of dollars)

Line No. :	Item :	Year : 1983	Jan-Mar. : 1984	Apr-June : 1984	July-Sept. : 1984	Oct-Dec. : 1984	Year : 1984
:	NET SALES:	:	:	:	:	:	:
1 :	Excluding intracompany and intercompany transfers—	3,017,642	862,572	875,780	711,077	721,282	3,170,711
2 :	Intracompany and intercompany transfers—	30,094	18,761	15,887	17,669	11,666	63,983
3 :	Total net sales (lines 1 and 2)—	3,047,736	881,333	891,667	728,746	732,948	3,234,694
4 :	COST OF GOODS SOLD (including intracompany and intercompany transfers)—	2,689,641	731,619	733,510	622,268	620,039	2,707,436
5 :	GROSS PROFIT OR (LOSS) (line 3 less line 4)—	358,095	149,714	158,157	106,478	112,909	527,258
6 :	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES—	225,235	52,652	54,769	53,667	56,567	216,029
7 :	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)—	132,860	97,062	103,388	52,811	56,342	311,229
:	OTHER INCOME OR (EXPENSE):	:	:	:	:	:	:
8 :	Net interest income or (expense)—	(31,808)	(9,651)	(10,759)	(10,591)	(10,284)	(41,285)
9 :	All other income or (expense)—	1,776	1,738	292	(2,424)	(3,324)	(5,344)
10 :	Total other income or (expense) (lines 8 and 9)—	(30,032)	(7,913)	(10,467)	(13,015)	(13,608)	(46,629)
11 :	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)—	102,828	89,149	92,921	39,796	42,734	264,600
12 :	Depreciation and amortization—	78,425	17,602	18,052	17,459	18,140	71,253

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, 1983-84, and by specified periods, 1984

(In thousands of dollars)

Line No.	Item	Year 1983	Jan-Mar. 1984	Apr-June 1984	July-Sept. 1984	Oct-Dec. 1984	Year 1984
	NET SALES:						
1	Excluding intracompany and intercompany transfers—	207,069	56,053	59,012	53,020	53,820	221,905
2	Intracompany and intercompany transfers—	—	—	—	—	—	—
3	Total net sales (lines 1 and 2)—	207,069	56,053	59,012	53,020	53,820	221,905
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)—	199,051	50,795	51,938	50,046	47,536	200,315
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)—	8,018	5,258	7,074	2,974	6,284	21,590
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES—	13,884	2,696	2,640	2,760	2,772	10,868
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)—	(5,866)	2,562	4,434	214	3,512	10,722
	OTHER INCOME OR (EXPENSE):						
8	Net interest income or (expense)—	(4,301)	(972)	(981)	(1,029)	(1,062)	(4,044)
9	All other income or (expense)—	(2,324)	(769)	(759)	(760)	(361)	(2,649)
10	Total other income or (expense) (lines 8 and 9)—	(6,625)	(1,741)	(1,740)	(1,789)	(1,423)	(6,693)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)—	(12,491)	821	2,694	(1,575)	2,089	4,029
12	Depreciation and amortization—	1,897	1,120	1,234	1,054	915	4,323

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, 1983-84, and by specified periods, 1984

(In thousands of dollars)

Line No.	Item	Year 1983	Jan-Mar. 1984	Apr-June 1984	July-Sept. 1984	Oct-Dec. 1984	Year 1984
	NET SALES:						
1	Excluding intracompany and intercompany transfers—	1,236,493	408,295	392,763	307,332	296,979	1,405,369
2	Intracompany and intercompany transfers—	9,563	3,403	3,263	1,868	2,825	11,359
3	Total net sales (lines 1 and 2)—	1,246,056	411,698	396,026	309,200	299,804	1,416,728
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)—	1,100,239	341,980	326,917	262,606	261,596	1,193,099
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)—	145,817	69,718	69,109	46,594	38,208	223,629
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES—	41,711	12,201	11,805	10,927	11,345	46,278
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)—	104,106	57,517	57,304	35,667	26,893	177,351
	OTHER INCOME OR (EXPENSE):						
8	Net interest income or (expense)—	(6,178)	(4,524)	(4,284)	(3,459)	(3,531)	(15,798)
9	All other income or (expense)—	3,528	(933)	(829)	(1,502)	(1,938)	(5,202)
10	Total other income or (expense) (lines 8 and 9)—	(2,650)	(5,457)	(5,113)	(4,961)	(5,469)	(21,000)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)—	101,456	52,060	52,191	30,706	21,394	156,351
12	Depreciation and amortization—	16,006	5,555	5,475	5,062	5,300	21,420

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, 1983–84, and by specified periods, 1984

(In thousands of dollars)

Line No.	Item	Year 1983	Jan-Mar. 1984	Apr-June 1984	July-Sept. 1984	Oct-Dec. 1984	Year 1984
	NET SALES:						
1	Excluding intracompany and intercompany transfers—	385,814	127,602	136,400	118,979	124,652	507,633
2	Intracompany and intercompany transfers—	924	798	1,231	934	845	3,808
3	Total net sales (lines 1 and 2)—	386,738	128,400	137,631	119,913	125,497	511,441
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)—	342,462	110,969	116,394	104,250	106,491	438,104
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)—	44,276	17,431	21,237	15,663	19,006	73,337
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES—	56,935	12,303	13,299	13,262	13,443	52,307
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)—	(12,659)	5,128	7,938	2,401	5,563	21,030
	OTHER INCOME OR (EXPENSE):						
8	Net interest income or (expense)—	(6,229)	(1,923)	(2,343)	(2,643)	(2,575)	(9,484)
9	All other income or (expense)—	1,055	1,037	790	72	(248)	1,651
10	Total other income or (expense) (lines 8 and 9)—	(5,174)	(886)	(1,553)	(2,571)	(2,823)	(7,833)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)—	(17,833)	4,242	6,385	(170)	2,740	13,197
12	Depreciation and amortization—	15,014	4,124	4,218	4,230	3,969	16,541

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, 1983-84, and by specified periods, 1984

(In thousands of dollars)

Line No.	Item	Year 1983	Jan-Mar. 1984	Apr-June 1984	July-Sept. 1984	Oct-Dec. 1984	Year 1984
	NET SALES:						
1	Excluding intracompany and intercompany transfers—	61,454	27,100	31,212	24,443	27,141	109,896
2	Intracompany and intercompany transfers—	-	-	-	-	-	-
3	Total net sales (lines 1 and 2)—	61,454	27,100	31,212	24,443	27,141	109,896
4	COST OF GOODS SOLD (including intracompany and intercompany transfers)—	64,968	27,146	30,254	24,415	25,554	107,369
5	GROSS PROFIT OR (LOSS) (line 3 less line 4)—	(3,514)	(46)	958	28	1,587	2,527
6	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES—	7,594	2,235	2,495	2,358	2,653	9,741
7	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)—	(11,108)	(2,281)	(1,537)	(2,330)	(1,066)	(7,214)
	OTHER INCOME OR (EXPENSE):						
8	Net interest income or (expense)—	(1,967)	***	***	(897)	(802)	(2,958)
9	All other income or (expense)—	49	***	***	(133)	(54)	1,416
10	Total other income or (expense) (lines 8 and 9)—	(1,918)	860	(516)	(1,030)	(856)	(1,542)
11	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)—	(13,026)	(1,421)	(2,053)	(3,360)	(1,922)	(8,756)
12	Depreciation and amortization—	2,509	825	861	834	790	3,310

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, 1983-84,
and by specified periods, 1984

(In thousands of dollars)

Line No. :	Item :	Year : 1983	Jan-Mar. : 1984	Apr-June : 1984	July-Sept. : 1984	Oct-Dec. : 1984	Year : 1984
:	NET SALES:	:	:	:	:	:	:
1 :	Excluding intracompany and intercompany transfers—	247,639	87,852	94,072	78,739	81,688	342,351
2 :	Intracompany and intercompany transfers—	2,272	492	860	561	478	2,391
3 :	Total net sales (lines 1 and 2)—	249,911	88,344	94,932	79,300	82,166	344,742
4 :	COST OF GOODS SOLD (including intracompany and intercompany transfers)—	203,263	65,032	70,563	60,107	61,879	257,581
5 :	GROSS PROFIT OR (LOSS) (line 3 less line 4)—	46,648	23,312	24,369	19,193	20,287	87,161
6 :	GENERAL, SELLING, AND ADMINISTRATIVE EXPENSES—	38,712	10,893	10,987	10,874	11,657	44,411
7 :	NET OPERATING PROFIT OR (LOSS) (line 5 less line 6)—	7,936	12,419	13,382	8,319	8,630	42,750
:	OTHER INCOME OR (EXPENSE):	:	:	:	:	:	:
8 :	Net interest income or (expense)—	(1,727)	(558)	(717)	(755)	(702)	(2,732)
9 :	All other income or (expense)—	(866)	(266)	(186)	(390)	(357)	(1,199)
10 :	Total other income or (expense) (lines 8 and 9)—	(2,593)	(824)	(903)	(1,145)	(1,059)	(3,931)
11 :	NET PROFIT OR (LOSS) BEFORE TAXES (line 7 plus line 10)—	5,343	11,595	12,479	7,174	7,571	38,819
12 :	Depreciation and amortization—	8,172	2,183	2,264	2,200	2,089	8,736

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, 1983–84

(In thousands of dollars)

Item	1983 ^{1/}	1984
All operations producing stainless steel and alloy tool steel products:		
Land and land improvement	2,348	2,655
Building or leasehold improvements	22,904	18,743
Machinery, equipment, and fixtures	150,324	123,396
Total	175,576	146,044
All operations producing stainless steel and alloy tool steel products subject to relief:		
Land and land improvement	1,839	1,552
Building or leasehold improvements	17,637	11,939
Machinery, equipment, and fixtures	120,068	72,784
Total	139,544	86,275
Stainless steel plate:		
Land and land improvement	0	7
Building or leasehold improvements	1,070	985
Machinery, equipment, and fixtures	3,917	3,855
Total	4,987	4,847
Stainless steel sheets and strip:		
Land and land improvement	1,113	357
Building or leasehold improvements	9,867	2,958
Machinery, equipment, and fixtures	60,102	37,896
Total	71,082	41,211
Stainless steel bar:		
Land and land improvement	411	720
Building or leasehold improvements	4,517	4,354
Machinery, equipment, and fixtures	40,021	15,877
Total	44,949	20,951
Stainless steel wire rod:		
Land and land improvement	186	312
Building or leasehold improvements	1,463	2,557
Machinery, equipment, and fixtures	8,145	8,136
Total	9,794	11,005
Alloy tool steel, all forms:		
Land and land improvement	129	156
Building or leasehold improvements	720	1,085
Machinery, equipment, and fixtures	7,939	7,020
Total	8,788	8,261

^{1/} Revised.

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

Table 11.—Projected capital expenditures as compared with actual capital expenditures, by producer, 1984

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

Table 12.—Research and development expenses by U.S. producers for their operations producing stainless steel and alloy tool steel, by products, 1983-84

(In thousands of dollars)

Item	1983 ^{1/}	1984
All operations producing stainless steel and alloy tool steel products—	29,476	35,153
All operations producing stainless steel and alloy tool steel products subject to relief—	22,654	25,468
Stainless steel plate—	343	106
Stainless steel sheets and strip—	3,794	11,087
Stainless steel bar—	12,976	7,334
Stainless steel wire rod—	2,531	3,747
Alloy tool steel, all forms—	3,010	3,194

^{1/} Revised.

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

Table 13.—Projected research and development expenditures as compared with actual research and development expenditures, by producer, 1984

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

Table 14.—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, 1985-87

(In thousands of dollars)

Item	1985	1986	1987
Capital expenditures:			
1984 projections	137,028	152,655	168,385
1985 projections	156,712	151,110	160,062
Research and development expenditures: ^{1/}			
1984 projections	26,958	27,613	28,939
1985 projections	23,015	24,192	25,491

^{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 15.—Capital expenditures as a share of cash flow, and research and development expenditures as a share of total net sales, by product, 1979–84

Item/year	(In percent)				Alloy tool steel, all forms
	Stainless steel				
	Plate	Sheets and strip	Bar	Wire rod	
Capital expenditures as a share of cash flow: <u>1/</u>					
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	<u>2/</u> (791.5)	38.1
1982	<u>2/</u> (24.7)	108.2	<u>2/</u> (278.6)	<u>2/</u> (100.4)	<u>2/</u> (187.6)
1983	<u>2/</u> (47.1)	60.5	<u>2/</u> (1,594.5)	<u>2/</u> (93.1)	65.0
1984	58.0	23.2	73.8	<u>2/</u> (174.2)	17.4
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

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

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, 1983, and 1984, 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

Brazil

There were six Brazilian producers of stainless and alloy tool steel products in 1984. 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 1984.

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/

Brazilian production of stainless and alloy tool steel products increased from 94,000 short tons in 1983 to approximately 97,000 short tons in 1984, increasing capacity utilization to almost 54 percent from 52 percent. Production increased in response to increased demand for Brazilian exports by foreign automotive industries. 2/

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

2/ Journal of Commerce, July 9, 1984, p. 23B.

Stainless and alloy tool steel - Brazil

	<u>1983</u>	<u>1984</u>
Production-----1,000 short tons--	94	<u>1/</u> 97
Capacity-----do-----	180	180
Capacity utilization-----percent--	52.2	53.9

1/ Annualized from 11 month data.

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 conversations with officials of Metal Bulletin.

France

In 1984, there were about 8 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 1984 included Sacilor, a state-owned producer of slabs and bars; Forge de Guegnon, a firm which is majority-owned by Sacilor and produces stainless steel sheets and strip; and Usinor, a state-owned producer of hot- and cold-rolled sheets, plate, and bar.

In April 1984, Sacilor and Usinor announced a joint venture to produce specialty steel bars and rods. The new company will include Sacilor's Safe and Pompey works and Usinor's Le Marais and Les Dunes works. 1/ 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

1/ Metal Bulletin, April 17, 1984.

and will be the second largest French producer of stainless steel sheets. 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 stainless strip. Usinor also announced an increase in production and a profit for its specialty sheet operations in 1984 compared to a loss in 1983. 2/ Sacilor announced several improvements in its operations in 1984 including: modernization of hot-rolling at Sollac, modernization of the Ugine-Savoie rolling facilities, and modernization of Safe, the company's specialty steel bar subsidiary.

In June 1984, Creusot-Loire, once a leading French producer of stainless steel, declared bankruptcy and was placed in receivership. In recent years Creusot-Loire had sold many of its unprofitable stainless steel divisions in an effort to restore the firm's financial health. Creusot-Loire now produces stainless steel plate, its only remaining stainless operation, at Le Creusot and Chateauneuf. 3/

France's production of stainless and alloy tool steel increased from 461,000 short tons in 1983 to 519,000 short tons in 1984 as demand for flat-rolled products increased rapidly.

1/ Ibid., December 28, 1984, p. 23.

2/ Ibid., January 11, 1985, p. 25.

3/ Ibid., July 31, 1984, p. 21.

Stainless and alloy tool steel - France

	<u>1983</u>	<u>1984</u>
Production-----1,000 short tons—	<u>1/</u> 461	<u>1/</u> 519
Capacity-----do-----	<u>2/</u> 554	<u>3/</u>
Capacity utilization-----percent—	83.2	<u>3/</u>

1/ Excludes cold-rolled bars.

2/ Stainless steel capacity only.

3/ Not available.

Source: Production information obtained from U.S. Department of State telegram. Capacity information for 1983 was estimated from data supplied in Metal Bulletin Stainless Survey 1982, published by Metal Bulletin, Ltd.

Japan

There were approximately 20 producers of stainless and alloy tool steel in Japan in 1984. The largest producers were Nippon Steel Corp., the only stainless and alloy tool steel producer in Japan producing both flat and round products; Nisshin Steel Co., the largest flat-rolled products producer in Japan; Daido Steel Co., the largest round products producer in Japan; and Nippon Kokan, K.K. (NKK), the third largest integrated steel producer in Japan, and a producer of stainless steel ingots, billets, pipes and tubes, and plates.

Nippon Steel, which accounts for nearly 25 percent of all Japanese stainless production, announced a major reorganization of its steel operations in 1984. Under the reorganization, Nippon's Muroran facility will concentrate on producing stainless steel bar and rod, while the Hikari facility will concentrate on stainless sheet, wire rod and welded tube production. At the same time, two other facilities producing stainless steel will close in 1984. The moves are designed to reduce surplus and inefficient capacity. 1/ No

1/ Metal Bulletin, January 27, 1984, p. 23.

other Japanese companies planned major capital spending plans in the specialty steel sector in 1984. 1/

Japanese production of stainless and alloy tool steel products increased from 2,161,000 short tons in 1983 to an estimated 3,533,000 short tons in 1984.

Stainless and alloy tool steel - Japan

	<u>1983</u>	<u>1984</u>
Production—————1,000 short tons—	2,161	3,533
Capacity—————do————	<u>1/</u>	<u>1/</u>
Capacity utilization—————percent—	<u>1/</u>	<u>1/</u>

1/ Not available.

Source: Production information obtained from Department of State telegram.

Republic of Korea

Sammi Steel Co., South Korea's only stainless and alloy tool steel producer, produces steel primarily for export markets, with the EC, the United States, Canada, and South East Asia, its major markets. Press reports indicate that in 1984 Sammi encountered stiff competitive pressures in its major markets for stainless sheet from Spanish and French sheet. However, Sammi experienced booming domestic and foreign demand by foreign automobile industries for its stainless steel bars. 2/

Beginning in 1983 Sammi shifted its focus from carbon steel production to a greater concentration on stainless and tool steel production. In March 1984,

1/ American Metal Market, March 12, 1984, p. 7A.

2/ Metal Bulletin, August 31, 1984, pp. 23-4.

Sammi commissioned the third Sendzimir mill at its Changwon works, boosting stainless cold rolling capacity there to 130,000 short tons per year. ^{1/}

South Korean production of stainless steel bar, rod, sheets and strip increased from an estimated 95,000 short tons in 1983 to 144,000 short tons in 1984. Almost 91 percent of production in 1984 was accounted for by sheet and strip production. South Korean capacity to produce stainless steel bar, rod, sheets and strip rose to 195,000 short tons in 1984 compared with an estimated 132,000 short tons in 1983. Capacity utilization rose to 73.8 percent in 1984 from 72.0 percent in 1983.

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

	<u>1983</u>	<u>1984</u>
Production-----1,000 short tons—	^{1/} 95	144
Capacity-----do-----	^{1/} 132	195
Capacity utilization-----percent—	72.0	73.8

^{1/} Estimated by ITC staff from conversations with Metal Bulletin, Ltd.

Source: Information for 1984 obtained from U.S. Department of State telegram.

Spain

There were six Spanish producers of stainless and alloy tool steel products exporting to the United States in 1984. Major producers included Acerinox SA, a producer of a wide variety of finished steel products, including sheet and strip; SA Echevarria, a producer of bar and rod, Aceros Inoxidables Roldan SA, a producer of bar and sheet; and La Calibradora Mecanica SA, a producer of bar.

^{1/} Ibid.

In 1984, Acerinox continued the modernization of its Algeciras works. Acerinox will install new equipment for the Algeciras temper mill to allow product width to be broadened from 1,280 mm to 1,500 mm and coil weight to be increased from 18 short tons to 32 short tons. Acerinox produces 130,000 tons of continuously cast slab per year, most of which was rolled into finished products at various European mills prior to its modernization efforts. 1/ Acerinox produced 33 percent more stainless products in 1984 than in 1983, and expects to produce 25 percent more in 1985. The company exported more to EC and Asian nations in 1984 but less to the United States. 2/

Also in 1984, the Aceriales group, which includes Olarra and Echevarria, continued the restructuring plan for the specialty steel industry in the Basque region, announced in 1983. This plan includes major investments in improved rolling, melting, and continuous casting capability and integration of specialty steel production, all to be completed by 1986. 3/ In June 1984, Aceriales announced that Echevarria and two other specialty steel producers would combine to form Aceros Especiales del Norte SA (Acenor). The agreement calls for the rationalization of Acenor's specialty steel operations through work force reductions, elimination of inefficient capacity, and plant modernization. The agreement also calls for increased specialty steel sales activities by Acenor's marketing subsidiary.

Spanish production of stainless steel increased from 217,000 short tons in 1983 to 303,000 short tons in 1984 as a result of recovery in the consumer goods and food equipment sectors. Total capacity equaled 455,000 short tons in 1983 while capacity utilization equaled 47.7 percent.

1/ Metal Bulletin, May 4, 1984, p. 25.

2/ Ibid., February 1, 1985, p. 25.

3/ Ibid., September 13, 1983, p. 29.

Stainless and alloy tool steel - Spain

	<u>1983</u>	<u>1984</u>
Production-----1,000 short tons--	<u>1/</u> 217	<u>1/</u> 303
Capacity-----do-----	455	<u>2/</u>
Capacity utilization-----percent--	47.7	<u>2/</u>

1/ Stainless steel production only.

2/ Not available.

Source: Production information is from Annual Stainless Steel Statistics, 1984, published by Inco-Europe, Ltd. and from Alloy Metals and Steel Market Research, published in West Germany. Capacity information for 1983 is estimated from data found in Metal Bulletin Stainless Survey 1982, published by Metal Bulletin, Ltd.

Sweden

In 1984, there were approximately nine producers of stainless and alloy tool steel products in Sweden. Major producers include Avesta AB, a producer of stainless flat-rolled products; Sandvik AB, a producer of specialty tubes, strip, and wire; and Uddeholm AB, a leading alloy tool steel producer.

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 hoped that by combining operations it would eliminate duplication and inefficiency. 1/

In August 1984, Avesta announced, as part of its reorganization efforts, that it would shut the melt shop and continuous caster at Fagersta by 1985, thereby idling about 120,000 short tons of annual melting capacity. The company also announced the closing, by 1985, of its 34,000 ton cold-rolling mill at Avesta. Some production will be transferred to other Avesta facilities. 2/ Because overcapacity in the Swedish specialty steel industry is considered to be high, the plant closings were not expected to affect production. 3/ Avesta also announced the first in a series of new investments, which will include improvements in stainless platemaking and cold rolling operations at its facility in Torshalla. In October, Avesta announced plans to install a new temper mill in an effort to penetrate stainless steel markets for brewing and dairy equipment with its 2 meter wide cold-rolled sheet. The new mill will enable Avesta to increase its capacity for this product from 47,000 short tons to 64,000 short tons per year. 4/

Uddeholm reported that demand for its tool steel products increased significantly in 1984 and that its Hagfors tool steel works operated at close to full capacity. 5/

Swedish production of stainless steel increased from 410,000 short tons in 1983 to 474,000 short tons in 1984 due to increased domestic demand for

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

2/ Ibid., August 31, 1984, p. 23.

3/ Financial Times, January 13, 1984, p. 25.

4/ Metal Bulletin, October 5, 1984, p. 31.

5/ Ibid., March 16, 1984, p. 33.

consumer products. Swedish capacity to produce stainless and alloy tool steel declined from an estimated 750,000 short tons in 1983 to an estimated 720,000 short tons in 1984, as the Swedish industry continued to reorganize, while capacity utilization rose from 54.7 percent in 1983 to 65.8 percent in 1984.

Stainless and alloy tool steel - Sweden

	<u>1983</u>	<u>1984</u>
Production-----1,000 short tons--	<u>1/</u> 410	<u>1/</u> 474
Capacity-----do-----	<u>2/</u> 750	<u>2/</u> 720
Capacity utilization-----percent--	54.7	65.8

1/ Stainless steel only.

2/ Estimated by ITC staff.

Source: Production information is from Annual Stainless Steel Statistics, 1984, published by Inco-Europe, Ltd. and from Alloy Metals and Steel Market Research, published in West Germany. Capacity information was estimated from data supplied in Metal Bulletin, Ltd. and from conversations 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 small quantities by a limited number of small firms. Many stainless and alloy tool steel producers have discontinued operations in recent years citing the competitive pressures of foreign competition. 1/ Industry sources indicate there was no significant change in

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

British capacity in 1984, that no firms began or terminated production in 1984, and no programs to restructure the British industry were announced in 1984. 1/

Total UK production of stainless steel products increased from 252,000 short tons in 1983 to 282,000 short tons in 1984 due to general improvement in the economic climate and due to the falling value of the British pound relative to other key currencies. 2/ Production of flat-rolled products has increased almost 20 percent from 1983 levels.

Stainless steel - United Kingdom

	<u>1983</u>	<u>1984</u>
Production-----1,000 short tons—	252	282
Capacity-----do-----	<u>1/</u>	<u>1/</u>
Capacity utilization-----percent—	<u>1/</u>	<u>1/</u>

1/ Not available.

Source: Production information is from Annual Stainless Steel Statistics, 1984, published by Inco-Europe, Ltd. and from Alloy Metals and Steel Market Research, published in West Germany.

West Germany

There were two major producers of stainless and alloy tool steel in West Germany in 1984; 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 in the world. In May 1984, Thyssen Edelstahlwerke announced the closing of its bar

1/ Department of State Telegram, February 1985.

2/ Metal Bulletin, May 11, 1984, p. 25.

and rod mill at Witten with the loss of 650 jobs and approximately 70,000 short tons of capacity. 1/

West German production of stainless steel products increased to 968,000 short tons in 1984 from 823,000 short tons in 1983 due to stronger international and domestic demand for flat-rolled products. Capacity declined from 1.2 million short tons in 1983 to an estimated 1.1 million short tons in 1984, resulting from the closing of Thyssen Edelstahlwerke's bar and rod mill, while capacity utilization increased from 68.6 percent in 1983 to 85.7 percent in 1984.

Stainless Steel - West Germany

	<u>1983</u>	<u>1984</u>
Production-----1,000 short tons---	823	968
Capacity-----do-----	1,200	<u>1/</u> 1,130
Capacity utilization-----percent---	68.6	85.7

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

Source: Production information is from Annual Stainless Steel Statistics, 1984, published by Inco-Europe, Ltd. and from Alloy Metals and Steel Market Research, published in West Germany. Capacity information is estimated from data supplied in Metal Bulletin Stainless Survey 1982, published by Metal Bulletin, Ltd. and from conversations with officials of Metal Bulletin.

1/ Metal Bulletin, May 15, 1984, p. 37.

APPENDIX A

TOTAL CAPITAL EXPENDITURES, BY PRODUCER, BY TYPE OF OPERATION, 1983

Table A-1.—Total capital expenditures, by producer, by type of operation, 1983

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