FEDERAL RESERVE statistical release

G.12.3

For release at 9:15 a.m.(EDT)
May 15, 1989

INDUSTRIAL PRODUCTION

Industrial production increased 0.4 percent in April after being unchanged in March and declining a revised 0.3 percent in February. The April rise resulted from further gains in business equipment and increases in the output of durable consumer goods, mainly motor vehicles, and materials. In contrast, production of construction supplies declined in April and, on balance, has weakened noticeably since January. At 141.1 percent of the 1977 average, the total index in April was 4.2 percent higher than a year earlier. Manufacturing output also rose 0.4 percent in April; capacity utilization in manufacturing edged up to 84.0 percent, but was still 0.7 percentage point below the January rate. Detailed data for capacity utilization are shown separately in release G.3.

Market Groupings

Within consumer goods, auto assemblies increased to an annual rate of 7.4 million units from a rate of 7.1 million units in March; the output of light trucks for consumer use also advanced. Most other consumer goods posted moderate gains. Business equipment rose again reflecting continued strength in most sectors and a rebound in transit equipment, primarily motor vehicles. Materials production rose 0.6 percent in April, but was only slightly above the January level. During the first quarter, most major material sectors weakened; however, by April, output of these sectors, except basic metals, had rebounded, and in some industries, notably chemicals, output in April was considerably above their first-quarter averages.

Industry Groupings

Within manufacturing, most industries, except primary metals and the construction-related sectors, posted gains in April; the largest increases occurred in motor vehicles, paper, and petroleum products. Outside manufacturing, mining output increased 1.2 percent owing, in part, to a sharp increase in coal. Production at utilities was essentially unchanged.

Industrial Production: Summary

Seasonally adjusted

Item	Index, 1977 = 100		Monthly percent change					Current month from a year ago
	1989 MAR	1989 APR	DEC	JAN	FEB.	MAR	APR	
Total	140.5	141.1	.4	.3	-0.3	.0	.4	4.2
Market Groupings								
Products, total	150.0	150.6	.6	.5	-0.1	.1	.3	4.5
Final products	148.2	149.1	.7	.3	.2	-0.1	.5	4.6
Consumer goods	137.8	138.6	1.0	.2	.1	-0.6	.5	5.0
Durable goods	129.2	130.3	2.1	-0.4	.1	-1.8	.9	5.7
Nondurable goods	141.0	141.6	.6	.4	.1	-0.2	.4	4.8
Business equipment	165.4	166.3	.8	.8	.5	.4	.6	7.6
Defense and space	178.5	178.7	-0.9	-0.3	-0.4	-0.5	.1	-4.9
Intermediate products	156.3	155.8	.6	1.0	-0.9	.7	-0.3	4.1
Construction supplies	140.7	140.3	.5	.6	-1.9	.9	-0.3	2.0
Materials	127.4	128.2	.0	-0.1	-0.6	.0	.6	3.8
Industry Groupings								
Manufacturing	146.7	147.3	.3	.6	-0.3	.0	.4	4.6
Durable	145.5	146.1	.3	.3	-0.3	-0.2	.4	4.6
Nondurable	148.3	148.9	.3	.9	-0.3	.2	.4	4.6
Mining	102.1	103.3	.2	-1.8	-1.9	1.0	1.2	-1.4
Utilities	115.9	116.0	1.5	-1.3	2.2	-0.5	.1	4.5

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Revisions

Total Industrial Production
(Estimates as shown last month and current estimates)

Month	Index (1977 = 100)		Percentage change from previous month	
	Previous	Current	Previous	Current
January	141.0	140.8	.4	.3
February	141.0	140.4	.0	-.3
March	141.0	140.5	.0	.0
April	NA	141.1	NA	.4

NA--not applicable.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

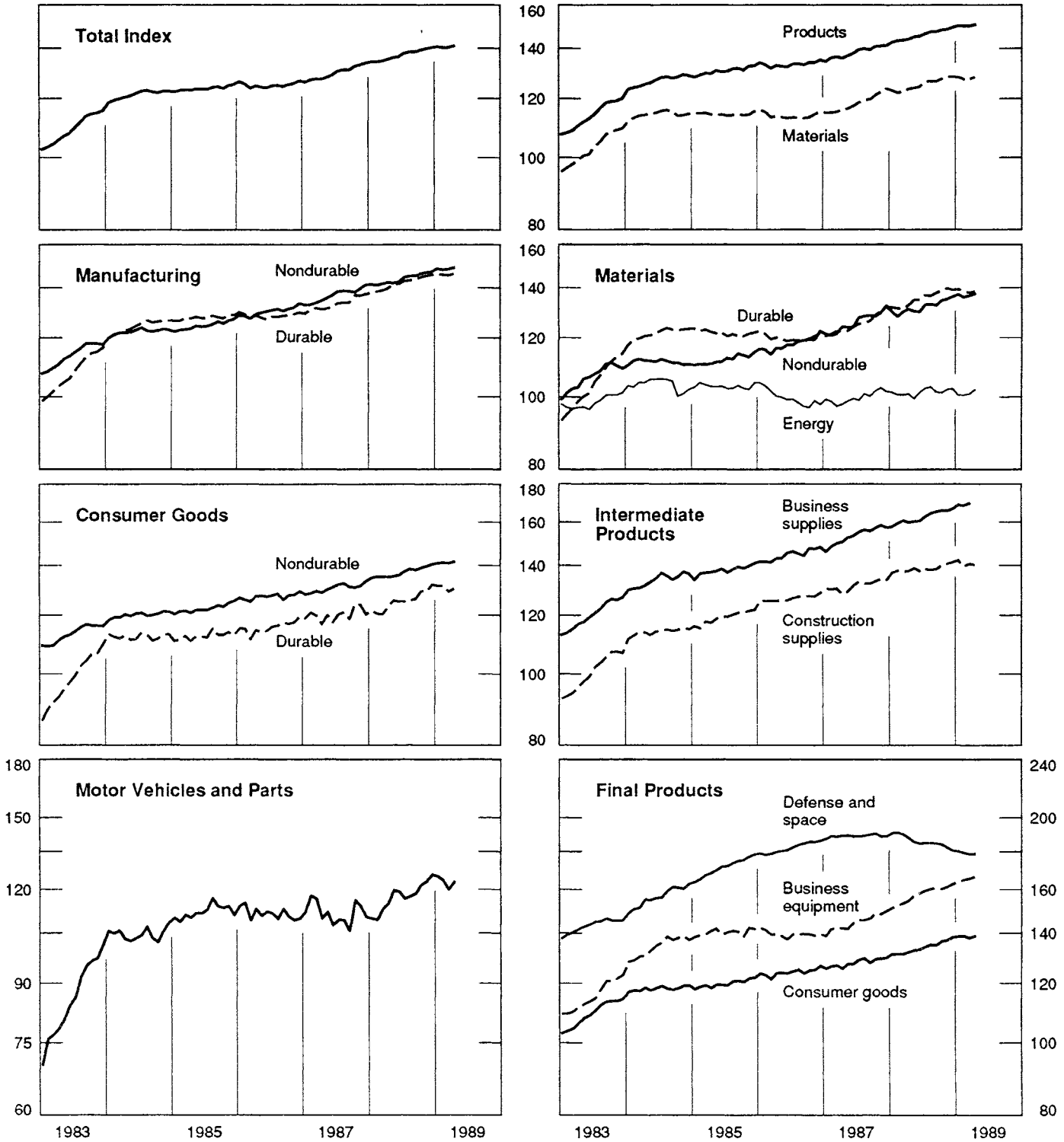
FEDERAL RESERVE

Industrial Production

INDUSTRIAL PRODUCTION

APRIL DATA

Seasonally adjusted, ratio scale, 1977=100



Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 1A

INDUSTRIAL PRODUCTION: MARKET GROUPINGS

Seasonally adjusted, 1977 = 100

Major Market Groupings	1977 Proportion	1988 Ann. Avg.	1988 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR	APR
TOTAL INDEX	100.00	137.2	135.4	136.1	136.5	138.0	138.5	138.6	139.4	139.9	140.4	140.8	140.4	140.5	141.1
PRODUCTS, TOTAL	57.72	145.9	144.1	145.0	145.3	146.5	147.3	147.4	148.1	148.4	149.4	150.1	150.0	150.0	150.6
FINAL PRODUCTS	44.77	144.3	142.5	143.5	144.0	145.0	145.8	145.8	146.4	146.8	147.7	148.2	148.5	148.2	149.1
CONSUMER GOODS	25.52	133.9	131.9	132.7	133.0	134.2	135.0	134.8	136.4	136.8	138.2	138.5	138.6	137.8	138.6
EQUIPMENT, TOTAL	19.25	158.2	156.5	157.7	158.5	159.4	160.1	160.4	159.7	159.9	160.4	161.1	161.5	162.1	162.9
INTERMEDIATE PRODUCTS	12.94	151.5	149.6	150.4	150.0	151.6	152.3	152.9	154.0	154.2	155.0	156.6	155.2	156.3	155.8
MATERIALS	42.28	125.2	123.6	123.9	124.5	126.4	126.5	126.5	127.5	128.3	128.3	128.1	127.4	127.4	128.2
CONSUMER GOODS	25.52	133.9	131.9	132.7	133.0	134.2	135.0	134.8	136.4	136.8	138.2	138.5	138.6	137.8	138.6
DURABLE CONSUMER GOODS	6.89	125.3	123.3	125.6	125.3	125.3	125.7	126.3	129.3	129.2	131.9	131.5	131.5	129.2	130.3
Automotive products	2.98	124.9	121.9	127.1	127.1	124.4	124.2	126.4	128.9	129.5	134.5	132.5	131.6	128.6	130.8
Autos and trucks,consumer	1.79	122.7	118.0	126.9	125.3	120.8	123.1	124.8	128.3	129.5	138.0	135.6	133.1	127.9	131.7
Autos, consumer	1.16	93.4	91.0	98.9	99.0	93.8	93.0	97.7	101.3	101.0	105.1	99.6	96.0	94.4	98.8
Trucks, consumer	.63	177.0	168.2	178.9	174.1	170.8	179.0	175.3	178.4	182.4	199.1	202.3	201.9	190.0	
Auto parts & allied gds	1.19	128.2	127.8	127.4	129.7	129.9	125.9	128.8	129.8	129.5	129.3	127.9	129.4	129.7	129.4
Home goods	3.91	125.6	124.3	124.4	123.9	125.9	126.8	126.2	129.7	128.9	130.0	130.7	131.5	129.6	129.9
Appliances,TV & air-cond	1.24	144.1	143.2	142.2	138.0	143.3	146.5	144.9	154.4	150.4	151.0	151.0	153.9	147.9	148.7
Appliances and TV	1.19	143.6	142.2	143.0	137.1	143.8	146.1	143.7	151.9	148.9	150.0	149.5	153.0	148.4	
Carpeting & furniture	.96	136.2	133.1	135.8	135.9	136.6	137.2	137.1	138.8	139.8	140.5	141.1	140.6	141.1	
Misc. home goods	1.71	106.3	105.7	105.2	107.0	107.4	106.8	106.6	106.7	107.3	108.9	110.1	110.2	109.9	
NONDURABLE CONSUMER GOODS	18.63	137.1	135.1	135.4	135.8	137.5	138.5	138.0	139.0	139.7	140.5	141.1	141.3	141.0	141.6
Clothing	3.34	101.3	101.6	100.1	100.8	101.7	101.2	102.2	102.3	102.2	101.7	102.9	102.8	102.2	
Consumer staples	15.29	144.9	142.5	143.1	143.5	145.3	146.6	145.8	147.0	147.9	148.9	149.4	149.7	149.5	150.1
Consumer foods & tobacco	7.80	140.9	138.3	139.2	139.3	141.1	141.3	141.1	142.4	143.7	144.5	144.8	144.7	143.8	
Nonfood staples	7.49	149.1	146.8	147.0	147.9	149.6	152.1	150.7	151.8	152.2	153.6	154.2	154.8	155.5	156.6
Consumer chem. products	2.75	180.0	175.6	177.9	179.5	181.8	183.8	185.0	186.1	185.7	186.8	187.6	186.7	188.4	
Consumer paper products	1.88	163.4	161.4	162.4	162.8	164.0	165.3	166.3	167.1	167.8	169.0	174.2	176.5	178.1	
Consumer energy	2.86	110.0	109.6	107.3	107.7	109.3	113.0	107.6	108.9	109.8	111.6	109.1	110.1	109.0	
Consumer fuel	1.44	95.4	98.9	94.3	93.0	94.6	95.5	92.7	95.3	94.1	96.3	96.7	95.0	94.2	
Residential utilities	1.42	124.8	120.5	120.6	122.6	124.4	130.9	122.8	122.7	125.8	127.1	121.7	125.4		
EQUIPMENT, TOTAL	19.25	158.2	156.5	157.7	158.5	159.4	160.1	160.4	159.7	159.9	160.4	161.1	161.5	162.1	162.9
BUSINESS & DEFENSE EQUIP.	18.01	163.3	161.4	162.7	163.5	164.6	165.2	165.6	165.1	165.5	166.2	167.1	167.7	168.0	168.8
BUSINESS EQUIPMENT	14.34	157.6	154.6	156.9	158.1	159.3	160.2	160.8	160.2	161.2	162.6	163.8	164.7	165.4	166.3
Constr, mining, & farm	2.09	71.9	70.8	71.8	72.4	73.6	73.1	74.3	74.2	74.5	74.6	74.3	74.7	75.9	76.3
Manufacturing equipment	3.27	131.3	127.7	128.3	130.3	132.4	134.0	135.8	136.2	136.2	137.0	136.3	137.6	138.1	139.2
Power equipment	1.27	89.4	87.0	87.4	88.3	89.8	90.9	92.2	91.5	92.1	91.8	92.8	92.7	92.7	93.2
Commercial equipment	5.22	245.2	241.5	245.7	247.1	248.2	249.8	248.7	245.4	247.0	248.9	252.4	254.1	255.9	256.1
Transit equipment	2.49	115.1	112.3	115.3	115.7	115.9	115.2	116.8	120.3	122.3	124.9	125.7	125.2	123.4	126.4
DEFENSE & SPACE EQUIPMENT	3.67	185.8	187.9	185.5	184.6	184.9	184.9	184.5	184.0	182.2	180.5	180.0	179.3	178.5	178.7
INTERMEDIATE PRODUCTS	12.94	151.5	149.6	150.4	150.0	151.6	152.3	152.9	154.0	154.2	155.0	156.6	155.2	156.3	155.8
Construction supplies	5.95	138.6	137.6	138.8	137.6	138.4	138.1	138.4	140.0	140.7	141.4	142.3	139.5	140.7	140.3
Business supplies	6.99	162.5	159.9	160.3	160.6	162.8	164.4	165.2	165.9	165.7	166.7	168.8	168.5	169.6	
Gen. business supplies	5.67	168.5	165.7	165.5	165.9	168.6	170.6	171.8	172.3	172.9	173.8	175.9	175.5	176.8	
Commercial energy prod.	1.31	136.3	134.6	137.8	137.5	137.6	137.7	136.7	138.2	134.3	135.8	138.2	138.3	138.4	
MATERIALS	42.28	125.2	123.6	123.9	124.5	126.4	126.5	126.5	127.5	128.3	128.3	128.1	127.4	127.4	128.2
DURABLE GOODS MATERIALS	20.50	135.4	132.7	134.8	134.9	136.8	136.6	137.8	138.9	139.8	139.0	139.4	138.5	138.0	138.4
Consumer durable parts	4.92	108.9	106.2	110.0	110.3	110.1	109.8	111.0	111.4	113.9	112.5	111.7	111.6	110.1	111.0
Equipment parts	5.94	171.6	168.9	170.8	171.6	174.1	173.5	174.0	174.9	175.0	174.1	175.2	175.2	175.3	176.0
Durable materials nec	9.64	126.7	124.0	125.3	124.8	127.5	127.6	129.2	130.8	131.3	130.9	131.5	129.5	129.2	129.3
Basic metal materials	4.64	95.9	91.6	94.8	93.7	98.4	97.3	100.3	101.1	101.4	99.8	100.8	98.5	97.3	96.9
NONDURABLE GOODS MATERIALS	10.10	132.0	131.1	130.1	130.1	132.8	133.1	132.6	134.7	135.1	136.3	137.1	135.9	136.7	137.5
Textile,paper,&chem.mater.	7.53	134.4	133.3	131.9	132.1	135.3	135.7	134.9	137.4	137.9	139.1	139.9	138.7	140.0	141.1
Textile materials	1.52	110.0	111.9	107.5	107.5	108.5	110.1	109.2	109.5	110.1	110.0	112.1	111.1	113.6	
Pulp & paper materials	1.55	147.3	145.8	146.4	145.4	150.3	148.3	148.1	148.4	147.2	150.3	150.4	147.6	146.4	
Chemical materials	4.46	138.2	136.2	135.1	135.8	139.2	140.0	139.0	143.1	144.2	145.1	145.7	145.0	146.7	
Misc. nondurable materials	2.57	125.0	124.6	125.1	124.2	125.6	125.6	125.9	126.6	127.0	128.0	129.1	127.9		
ENERGY MATERIALS	11.69	101.5	101.0	99.5	101.3	102.7	103.2	101.5	101.3	102.3	102.6	100.5	100.6	100.9	102.2
Primary energy	7.57	106.3	106.7	104.0	105.6	106.8	106.2	106.8	106.0	108.6	107.6	105.2	104.6	104.6	
Converted fuel materials	4.12	92.7	90.5	91.2	93.5	95.3	97.7	91.8	92.6	90.7	93.3	92.0	93.3	94.1	

NOTE: Two components--oil and gas well drilling and manufactured homes--are included in total equipment but not shown here. They are shown in Tables 4A and 4B on page 8 and 9.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 1B

INDUSTRIAL PRODUCTION: MARKET GROUPINGS

Not seasonally adjusted, 1977 = 100

Major Market Groupings	1977 Proportion	1988 Ann. Avg.	1988 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR	APR
TOTAL INDEX	100.00	137.2	133.9	135.0	139.3	136.3	141.7	143.0	142.2	139.3	136.4	137.1	140.1	139.4	139.7
PRODUCTS, TOTAL	57.72	145.9	141.2	143.2	149.1	146.1	152.6	154.5	152.4	147.9	144.4	144.9	147.7	147.0	148.0
FINAL PRODUCTS	44.77	144.3	139.4	141.7	147.5	143.8	150.6	152.5	150.5	146.3	143.0	144.0	146.9	145.6	146.5
CONSUMER GOODS	25.52	133.9	128.8	130.8	137.3	133.2	141.3	142.9	141.7	135.7	131.4	133.4	136.5	134.4	135.6
EQUIPMENT, TOTAL	19.25	158.2	153.5	156.0	161.1	158.0	162.8	165.3	162.1	160.2	158.3	158.0	160.7	160.5	160.8
INTERMEDIATE PRODUCTS	12.94	151.5	147.2	148.6	154.5	153.9	159.8	161.6	159.0	153.5	149.6	148.0	150.3	151.6	153.2
MATERIALS	42.28	125.2	124.0	123.7	126.0	122.8	126.8	127.3	128.2	127.6	125.4	126.6	129.8	129.2	128.5
CONSUMER GOODS	25.52	133.9	128.8	130.8	137.3	133.2	141.3	142.9	141.7	135.7	131.4	133.4	136.5	134.4	135.6
DURABLE CONSUMER GOODS	6.89	125.3	126.0	127.5	129.5	110.2	122.8	130.2	139.7	130.7	121.0	128.1	135.0	129.7	134.8
Automotive products	2.98	124.9	127.0	132.3	136.4	99.8	115.0	130.5	138.2	129.7	119.8	130.8	139.0	131.5	140.6
Autos and trucks,consumer	1.79	122.7	126.3	136.9	140.9	82.9	105.8	128.5	138.5	131.2	116.2	134.9	145.9	133.3	147.9
Autos, consumer	1.16	93.4	98.8	107.9	113.5	59.9	74.6	97.6	110.2	102.4	90.2	100.5	105.6	98.1	113.0
Trucks, consumer	.63	177.0	177.4	190.6	191.7	125.7	163.7	185.8	191.1	184.6	164.5	198.8	220.7	198.6	
Auto parts & allied gds	1.19	128.2	128.0	125.4	129.5	125.2	128.9	133.6	137.7	127.4	125.3	124.5	128.5	128.8	129.6
Home goods	3.91	125.6	125.2	123.9	124.3	118.1	128.7	130.0	140.9	131.4	121.9	126.0	132.0	128.4	130.4
Appliances,TV & air-cond	1.24	144.1	146.6	143.5	134.5	130.7	146.6	144.5	178.0	155.7	132.6	149.7	157.7	143.1	151.4
Appliances and TV	1.19	143.6	141.1	142.2	132.1	132.1	149.9	146.8	179.6	156.8	133.1	145.9	154.6	141.2	
Carpeting & furniture	.96	136.2	134.7	133.7	139.4	128.4	140.5	143.3	145.4	142.1	134.1	130.8	142.4	142.7	
Misc. home goods	1.71	106.3	104.4	104.4	108.5	103.3	109.1	112.0	111.4	107.9	107.3	106.3	107.6	109.7	
NONDURABLE CONSUMER GOODS	18.63	137.1	129.8	132.0	140.1	141.7	148.2	147.5	142.5	137.6	135.2	135.3	137.1	136.1	135.9
Clothing	3.34	101.3	100.4	99.7	104.5	99.0	106.3	106.6	104.5	101.7	97.5	97.4	101.8	101.9	
Consumer staples	15.29	144.9	136.3	139.1	147.9	151.0	157.4	156.5	150.8	145.5	143.5	143.6	144.8	143.5	143.4
Consumer foods & tobacco	7.80	140.9	133.2	137.2	144.7	143.5	150.6	151.3	149.7	143.0	137.7	136.9	137.9	138.1	
Nonfood staples	7.49	149.1	139.4	141.1	151.3	158.9	164.4	161.9	152.0	148.0	149.5	150.6	151.9	149.2	148.3
Consumer chem. products	2.75	180.0	166.9	174.1	188.0	194.8	197.2	201.6	191.1	182.3	177.6	175.7	176.6	180.5	
Consumer paper products	1.88	163.4	155.2	157.4	165.8	172.4	182.0	180.3	170.9	163.1	162.2	165.7	171.3	171.1	
Consumer energy	2.86	110.0	102.8	98.7	106.7	115.6	121.4	111.6	102.0	105.2	114.3	116.7	115.4	104.7	
Consumer fuel	1.44	95.4	95.1	95.0	95.9	96.5	97.5	94.5	94.4	96.8	100.6	96.2	91.8	89.4	
Residential utilities	1.42	124.8	110.7	102.4	117.7	135.0	145.7	129.1	109.7	113.8	128.2	137.6	139.4		
EQUIPMENT, TOTAL	19.25	158.2	153.5	156.0	161.1	158.0	162.8	165.3	162.1	160.2	158.3	158.0	160.7	160.5	160.8
BUSINESS & DEFENSE EQUIP.	18.01	163.3	158.5	161.2	166.5	163.3	168.1	170.8	167.4	165.5	163.7	163.7	166.9	166.7	166.8
BUSINESS EQUIPMENT	14.34	157.6	151.2	155.1	161.8	158.3	164.3	167.2	163.5	161.0	158.3	159.2	163.6	163.6	163.8
Constr, mining, & farm	2.09	71.9	70.1	71.1	73.3	73.4	73.5	76.9	74.1	72.9	74.2	72.0	75.9	75.0	74.7
Manufacturing equipment	3.27	131.3	125.9	126.4	132.5	132.2	136.6	140.5	137.8	135.2	134.5	131.7	138.3	138.4	137.1
Power equipment	1.27	89.4	84.3	85.9	90.5	89.0	90.8	95.5	93.5	92.8	92.5	90.6	92.0	92.1	90.7
Commercial equipment	5.22	245.2	232.6	240.7	251.6	255.7	263.8	260.2	250.6	246.9	242.7	244.1	248.3	250.1	247.8
Transit equipment	2.49	115.1	115.7	118.9	122.8	95.1	105.8	119.6	125.4	123.2	116.9	125.4	129.6	126.3	135.2
DEFENSE & SPACE EQUIPMENT	3.67	185.8	186.9	185.4	184.6	182.7	183.1	184.8	182.3	183.2	184.5	181.3	179.7	178.4	178.3
INTERMEDIATE PRODUCTS	12.94	151.5	147.2	148.6	154.5	153.9	159.8	161.6	159.0	153.5	149.6	148.0	150.3	151.6	153.2
Construction supplies	5.95	138.6	138.3	140.3	143.1	138.3	141.9	144.1	144.7	140.5	136.1	134.1	134.9	138.1	141.0
Business supplies	6.99	162.5	154.8	155.7	164.2	167.3	175.1	176.5	171.2	164.5	161.0	159.9	163.5	163.2	
Gen. business supplies	5.67	168.5	161.5	161.8	169.0	172.0	181.2	183.3	179.1	172.6	168.0	165.2	169.0	171.0	
Commercial energy prod.	1.31	136.3	126.0	129.2	143.3	146.8	149.0	147.1	137.2	129.8	130.8	136.9	139.7	129.5	
MATERIALS	42.28	125.2	124.0	123.7	126.0	122.8	126.8	127.3	128.2	127.6	125.4	126.6	129.8	129.2	128.5
DURABLE GOODS MATERIALS	20.50	135.4	133.9	135.8	137.3	133.0	136.5	139.4	140.4	139.2	136.1	135.4	139.2	140.1	139.4
Consumer durable parts	4.92	108.9	108.0	110.0	110.9	103.8	107.7	112.0	113.6	114.4	111.4	109.7	113.3	113.0	112.8
Equipment parts	5.94	171.6	167.4	169.4	172.9	171.0	173.4	175.3	174.6	176.8	177.1	175.2	174.9	175.9	174.3
Durable materials nec	9.64	126.7	126.4	128.2	128.9	124.4	128.5	131.3	132.9	128.8	123.3	124.0	130.5	131.8	131.5
Basic metal materials	4.64	95.9	98.4	101.0	96.7	92.0	93.0	97.5	99.8	97.0	91.8	98.2	101.2	103.0	103.0
NONDURABLE GOODS MATERIALS	10.10	132.0	132.8	130.4	132.1	128.0	133.4	134.3	137.3	134.4	129.1	134.9	138.8	138.8	139.3
Textile,paper,&chem.mater.	7.53	134.4	135.2	132.7	134.0	130.1	135.5	136.4	138.5	137.4	132.8	138.1	141.8	142.2	143.0
Textile materials	1.52	110.0	111.3	110.8	110.1	96.3	116.8	112.2	114.9	110.7	99.2	109.4	114.0	116.4	
Pulp & paper materials	1.55	147.3	146.8	145.5	147.1	144.9	149.5	147.7	148.4	146.2	142.7	153.4	150.4	148.7	
Chemical materials	4.46	138.2	139.2	135.7	137.7	136.4	137.0	140.8	143.1	143.5	140.9	142.7	148.3	148.8	
Misc. nondurable materials	2.57	125.0	125.9	123.5	126.4	122.1	127.2	128.0	133.9	125.5	118.2	125.6	130.1		
ENERGY MATERIALS	11.69	101.5	98.9	96.8	100.9	100.5	104.3	99.9	99.0	101.3	103.5	104.0	105.5	101.8	99.9
Primary energy	7.57	106.3	106.3	103.0	105.2	103.0	106.6	105.4	105.0	107.6	107.4	107.3	108.5	106.8	
Converted fuel materials	4.12	92.7	85.4	85.5	93.0	96.0	99.9	90.0	88.0	89.7	96.3	97.9	100.0	92.7	

NOTE: Two components--oil and gas well drilling and manufactured homes--are included in total equipment but not shown here. They are shown in Tables 4A and 4B on page 8 and 9.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 2A

INDUSTRIAL PRODUCTION: INDUSTRY GROUPINGS

Seasonally adjusted, 1977 = 100

Major Industry Groupings	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR	APR
MINING AND UTILITIES		15.79	107.5	107.1	106.0	106.8	108.1	109.0	107.2	107.2	108.1	108.9	107.2	106.9	107.3	108.1
MINING		9.83	103.4	104.7	102.6	103.0	104.3	103.8	103.7	103.1	104.7	104.9	103.0	101.0	102.1	103.3
UTILITIES		5.96	114.3	111.0	111.6	113.2	114.4	117.8	113.0	113.9	113.7	115.4	114.0	116.5	115.9	116.0
MANUFACTURING		84.21	142.7	140.8	141.8	142.1	143.6	144.0	144.4	145.3	145.8	146.3	147.2	146.7	146.7	147.3
NONDURABLE		35.11	143.9	142.3	142.1	142.6	144.6	145.1	145.3	146.3	146.7	147.1	148.5	148.1	148.3	148.9
DURABLE		49.10	141.9	139.7	141.5	141.7	142.9	143.2	143.8	144.6	145.2	145.7	146.2	145.8	145.5	146.1
MINING																
Metal mining	10	.50	93.2	86.9	86.0	82.2	94.0	96.6	99.1	101.6	104.6	111.9	106.9	98.5		
Coal	11,12	1.60	137.9	136.0	127.8	126.9	141.5	137.2	142.2	138.5	149.7	155.1	144.7	134.7	137.7	141.1
Oil & gas extraction	13	7.07	92.9	95.5	94.6	95.8	93.3	93.2	92.0	91.5	90.8	88.9	88.9	89.7	90.1	
Stone & earth minerals	14	.66	139.9	141.2	140.1	137.4	140.2	141.3	139.7	142.8	144.0	149.4	150.8	142.9	144.0	
NONDURABLE MANUFACTURES																
Foods	20	7.96	142.7	140.3	141.0	141.3	143.3	143.3	143.2	144.0	145.7	145.8	146.6	146.4	145.9	
Tobacco products	21	.62	105.2	107.2	107.2	104.5	100.6	105.1	105.0	105.4	102.4	107.0	105.0			
Textile mill products	22	2.29	116.2	117.3	114.6	114.3	117.1	116.4	116.2	117.0	117.2	117.9	120.2	119.2	121.3	
Apparel products	23	2.79	109.1	109.2	108.6	109.3	109.4	108.9	109.9	109.5	110.1	108.8	110.2	110.2		
Paper & products	26	3.15	150.3	149.2	149.5	148.6	152.3	151.0	150.9	151.8	150.7	151.7	153.8	151.6	150.1	
Printing & publishing	27	4.54	184.2	181.8	180.7	182.3	184.9	186.7	188.0	188.1	188.5	188.0	193.0	194.5	196.4	196.0
Chemicals & products	28	8.05	151.9	148.9	149.1	150.5	153.4	154.8	155.3	156.7	157.5	158.1	159.0	158.1	159.5	
Petroleum products	29	2.40	96.0	98.5	95.2	94.1	95.0	96.0	93.7	96.3	95.0	98.0	98.0	96.3	95.4	97.1
Rubber & plastics prod.	30	2.80	174.4	172.3	173.4	174.4	175.4	175.3	175.3	176.9	177.5	177.5	175.9	175.6	174.8	
Leather & products	31	.53	59.5	58.0	57.1	58.9	59.1	59.4	59.9	61.0	61.5	60.2	62.9	63.1	62.7	
DURABLE MANUFACTURES																
Lumber & products	24	2.30	137.3	138.0	139.8	136.4	136.6	133.8	133.5	137.5	139.4	143.0	139.9	133.4	136.6	
Furniture & fixtures	25	1.27	162.1	159.2	160.5	161.2	162.9	164.9	164.9	164.5	165.4	165.4	166.3	164.2	164.9	
Clay, glass, stone prod.	32	2.72	122.6	121.4	121.5	123.4	122.2	122.6	122.6	123.3	124.7	125.1	126.6	125.3	125.8	
Primary metals	33	5.33	89.2	85.3	89.2	87.5	91.5	90.8	93.1	94.2	92.7	90.0	93.2	91.1	89.3	88.6
Iron & steel	331,2	3.49	78.1	74.5	78.6	74.2	80.2	78.9	81.4	83.1	80.8	77.6	82.2	79.1	76.2	
Fabricated metal prod.	34	6.46	120.9	118.8	119.8	120.4	121.7	122.1	122.5	122.6	124.6	125.1	124.5	124.5	124.2	124.4
Nonelectrical machinery	35	9.54	170.8	167.2	170.3	171.2	173.1	174.1	174.8	173.8	175.4	177.8	178.7	180.2	181.5	182.5
Electrical machinery	36	7.15	180.1	178.7	179.1	179.5	181.5	182.2	181.8	183.0	182.2	180.9	180.9	181.5	180.8	181.7
Transportation equip.	37	9.13	132.1	130.4	133.1	132.8	131.9	131.8	132.7	134.8	135.2	136.8	136.7	136.4	134.4	136.4
Motor vehicles & pts.	371	5.25	117.2	114.8	119.6	119.1	116.6	117.5	118.5	121.7	122.9	125.5	124.9	123.4	119.9	122.7
Aerospace & misc.	372-6,9	3.87	152.4	151.5	151.5	151.4	152.7	151.3	151.9	152.7	151.9	152.2	152.7	154.0	154.1	155.0
Instruments	38	2.66	154.3	150.5	151.3	153.0	156.4	156.8	157.8	159.9	160.4	159.1	161.0	161.3	161.2	161.2
Miscellaneous mfrs.	39	1.46	107.1	105.9	106.0	107.6	107.8	108.3	108.5	107.7	109.0	110.9	112.2	110.0	110.3	
UTILITIES																
Electric		4.17	132.0	127.6	129.7	132.1	134.6	138.8	132.2	132.8	131.6	132.9	131.0	135.3	134.5	

Table 3A

INDUSTRIAL PRODUCTION: PERCENT CHANGES

Based on seasonally adjusted indexes

Series	1988 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR	APR
	CHANGE FROM PREVIOUS MONTH												
TOTAL INDEX	.5	.5	.3	1.1	.3	.1	.6	.4	.4	.3	-0.3	.0	.4
Final products	.5	.7	.3	.7	.5	.0	.4	.2	.7	.3	.2	-0.1	.5
Consumer goods	.6	.6	.2	.9	.6	-0.1	1.2	.3	1.0	.2	.1	-0.6	.5
Durable consumer goods	2.4	1.9	-0.3	.0	.3	.5	2.4	-0.1	2.1	-0.4	.1	-1.8	.9
Nondurable consumer goods	.0	.2	.4	1.2	.7	-0.3	.7	.5	.6	.4	.1	-0.2	.4
Business equipment	.8	1.5	.8	.8	.5	.4	-0.4	.6	.8	.8	.5	.4	.6
Construction Supplies	.2	.9	-0.9	.6	-0.2	.2	1.2	.5	.5	.6	-1.9	.9	-0.3
Materials	.8	.3	.4	1.6	.1	.0	.8	.6	.0	-0.1	-0.6	.0	.6
Durable goods materials	1.1	1.6	.1	1.4	-0.1	.9	.8	.6	-0.6	.3	-0.7	-0.3	.3
Nondurable goods materials	.8	-0.7	-0.1	2.1	.2	-0.4	1.6	.4	.8	.6	-0.9	.5	.6
Manufacturing	.6	.7	.2	1.1	.3	.3	.6	.4	.3	.6	-0.3	.0	.4
Durable manufacturing	.6	1.3	.1	.9	.2	.4	.6	.4	.3	.3	-0.3	-0.2	.4
Nondurable manufacturing	.4	-0.2	.4	1.4	.3	.1	.7	.3	.3	.9	-0.3	.2	.4
Mining and utilities	.4	-1.0	.8	1.2	.9	-1.7	-0.1	.8	.7	-1.6	-0.3	.4	.8
	CHANGE FROM SAME MONTH A YEAR EARLIER												
TOTAL INDEX	6.3	6.2	5.7	5.7	5.5	5.7	5.2	5.1	4.9	4.8	4.5	4.3	4.2
Final products	5.9	5.9	5.7	5.2	5.4	5.8	5.1	5.4	5.6	5.0	4.8	4.5	4.6
Consumer goods	5.1	4.2	4.5	4.1	4.3	5.6	5.7	5.7	6.5	5.5	5.6	5.1	5.0
Durable consumer goods	5.6	4.5	6.7	4.1	3.7	6.5	4.0	4.3	9.7	8.0	9.1	7.3	5.7
Nondurable consumer goods	5.0	4.1	3.8	4.1	4.5	5.3	6.3	6.2	5.4	4.7	4.4	4.4	4.8
Business equipment	8.8	10.8	9.7	9.5	10.0	9.9	7.8	8.7	8.5	8.4	8.1	7.9	7.6
Construction Supplies	7.3	7.5	4.7	4.0	4.2	4.6	5.0	4.8	5.7	4.0	1.3	2.5	2.0
Materials	6.6	6.6	6.2	6.7	6.0	5.7	5.2	4.8	3.7	4.2	4.3	4.0	3.8
Durable goods materials	8.6	10.0	8.8	9.3	8.8	9.1	7.9	7.4	5.3	5.7	5.4	5.1	4.3
Nondurable goods materials	5.6	5.0	4.8	4.1	3.8	3.1	5.1	4.3	2.9	5.6	6.1	5.1	4.9
Manufacturing	6.3	6.5	6.0	6.0	6.0	6.4	5.8	5.7	5.3	5.6	5.2	4.7	4.6
Durable manufacturing	6.7	7.7	7.4	7.0	7.0	7.5	5.7	6.2	6.1	6.0	5.3	4.8	4.6
Nondurable manufacturing	5.8	4.7	4.2	4.5	4.6	4.8	5.9	5.1	4.2	5.0	5.0	4.7	4.6
Mining and utilities	5.6	2.8	3.7	4.2	3.4	1.7	.3	.2	1.5	-0.6	.1	.5	1.0

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 2B

INDUSTRIAL PRODUCTION: INDUSTRY GROUPINGS

Not seasonally adjusted, 1977 = 100

Major Industry Groupings	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR	APR
MINING AND UTILITIES		15.79	107.5	103.5	101.3	106.5	108.3	112.6	107.9	105.1	106.6	109.4	110.2	111.2	106.2	104.6
MINING		9.83	103.4	103.4	100.9	102.0	100.6	104.3	103.4	104.3	105.9	105.1	103.5	103.2	102.7	102.7
UTILITIES		5.96	114.3	103.7	102.1	114.0	121.1	126.4	115.4	106.4	107.8	116.6	121.2	124.3	112.0	107.8
MANUFACTURING		84.21	142.7	139.6	141.3	145.5	141.5	147.2	149.6	149.1	145.4	141.4	142.2	145.5	145.5	146.3
NONDURABLE		35.11	143.9	139.8	140.7	146.4	145.1	151.7	152.8	151.2	146.0	141.1	141.6	145.0	145.4	146.4
DURABLE		49.10	141.9	139.4	141.6	144.8	138.9	144.0	147.3	147.6	145.0	141.6	142.7	145.8	145.5	146.2
MINING																
Metal mining	10	.50	93.2	92.4	94.8	90.4	93.8	96.3	97.7	100.2	97.6	98.0	98.9	99.4		
Coal	11,12	1.60	137.9	136.2	126.1	131.9	128.1	147.5	145.3	143.0	146.3	141.2	138.8	140.0	144.2	140.0
Oil & gas extraction	13	7.07	92.9	93.2	91.8	92.4	90.9	91.1	90.3	91.4	93.2	93.6	93.0	92.7	90.1	
Stone & earth minerals	14	.66	139.9	141.8	142.5	140.7	143.3	146.1	145.7	151.8	150.2	145.8	134.2	130.1	135.9	
NONDURABLE MANUFACTURES																
Foods	20	7.96	142.7	134.7	138.8	145.4	146.1	151.5	152.7	151.2	145.7	141.7	139.1	139.5	139.8	
Tobacco products	21	.62	105.2	104.0	102.5	112.8	87.0	113.4	109.2	117.9	106.3	83.1	104.1			
Textile mill products	22	2.29	116.2	118.0	117.0	118.9	109.4	123.6	121.1	123.7	117.4	104.8	111.2	118.4	121.3	
Apparel products	23	2.79	109.1	107.6	107.4	111.3	105.9	112.4	113.9	111.2	110.2	108.1	106.8	109.4		
Paper & products	26	3.15	150.3	151.1	148.2	150.3	146.8	152.0	151.8	155.4	148.5	143.1	155.5	154.7	153.6	
Printing & publishing	27	4.54	184.2	173.8	175.4	186.1	194.8	206.0	206.3	197.1	187.1	182.4	177.7	183.6	185.5	187.8
Chemicals & products	28	8.05	151.9	148.3	149.0	155.1	156.0	157.6	161.5	158.6	155.2	151.5	152.6	156.5	157.6	
Petroleum products	29	2.40	96.0	94.7	95.6	98.2	99.4	100.9	97.3	96.8	96.8	98.7	94.1	89.9	89.5	93.5
Rubber & plastics prod.	30	2.80	174.4	173.8	173.0	178.4	166.2	177.9	181.0	183.1	176.0	167.9	166.0	181.3	179.1	
Leather & products	31	.53	59.5	57.9	58.0	59.5	51.0	62.0	61.6	64.8	63.5	56.3	60.9	65.2	64.2	
DURABLE MANUFACTURES																
Lumber & products	24	2.30	137.3	139.2	141.3	143.4	134.2	139.2	140.6	145.6	135.0	129.6	131.2	130.5	135.9	
Furniture & fixtures	25	1.27	162.1	156.0	154.7	162.8	155.6	170.9	172.1	169.4	165.9	161.3	159.4	170.0	165.0	
Clay, glass, stone prod.	32	2.72	122.6	121.7	123.8	127.5	123.4	127.6	127.6	129.0	124.7	119.1	118.2	118.6	122.7	
Primary metals	33	5.33	89.2	92.3	94.8	90.6	85.4	85.9	90.5	92.6	89.4	82.6	90.8	93.4	94.3	94.4
Iron & steel	331,2	3.49	78.1	82.7	85.6	77.8	76.7	73.7	78.0	80.6	76.2	69.9	79.0	80.6	81.0	
Fabricated metal prod.	34	6.46	120.9	118.4	119.3	122.6	119.4	122.3	125.4	124.8	125.3	124.0	120.5	124.9	124.8	124.4
Nonelectrical machinery	35	9.54	170.8	162.0	167.3	175.0	176.7	182.3	182.6	176.1	173.6	171.8	171.7	177.6	178.8	177.3
Electrical machinery	36	7.15	180.1	176.5	177.1	179.1	176.1	182.2	184.0	189.4	185.9	181.7	179.9	181.4	179.1	179.0
Transportation equip.	37	9.13	132.1	133.1	136.1	137.9	116.3	123.8	134.1	138.1	136.7	132.8	137.7	140.6	136.8	142.0
Motor vehicles & pts.	371	5.25	117.2	119.7	125.3	128.7	93.2	106.2	120.9	127.3	123.7	114.9	124.9	130.4	123.4	131.9
Aerospace & misc.	372-6,9	3.87	152.4	151.3	150.7	150.5	147.7	147.8	152.0	152.9	154.4	157.2	155.0	154.5	155.1	155.6
Instruments	38	2.66	154.3	147.9	148.8	155.8	158.5	161.0	162.4	161.1	159.6	157.7	157.5	158.8	159.3	158.3
Miscellaneous mfrs.	39	1.46	107.1	104.0	104.2	109.8	107.1	113.9	116.0	111.8	107.0	105.1	106.4	110.1	110.2	
UTILITIES																
Electric		4.17	132.0	117.6	117.3	135.0	146.0	152.9	137.2	123.5	123.4	131.6	137.2	143.5	127.4	

Table 3B

INDUSTRIAL PRODUCTION: HISTORICAL DATA

Seasonally adjusted, 1977 = 100

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	Q I	Q II	Q III	Q IV	ANNUAL
INDEX																	
72	83.8	84.4	85.1	86.5	86.3	86.5	86.4	87.6	88.5	89.8	90.9	91.8	84.4	86.4	87.5	90.8	87.3
73	91.8	93.1	93.1	93.4	93.8	94.5	95.1	95.1	95.8	96.1	96.2	94.7	92.7	93.9	95.3	95.7	94.4
74	93.3	93.0	93.4	93.2	94.3	94.6	94.2	93.9	94.2	93.6	90.9	87.1	93.2	94.1	94.1	90.5	93.0
75	84.8	83.5	82.0	82.7	82.5	83.6	84.1	85.6	86.4	86.9	87.7	88.4	83.4	82.9	85.3	87.6	84.8
76	89.3	90.9	90.7	91.1	92.1	92.2	92.7	93.2	93.5	93.9	95.4	96.2	90.3	91.8	93.2	95.2	92.6
77	96.5	97.2	98.0	99.0	99.6	100.4	100.7	101.0	101.4	101.8	102.1	102.1	97.3	99.7	101.0	102.0	100.0
78	101.6	101.6	103.0	105.5	105.8	106.9	107.5	107.7	108.3	109.2	109.9	110.8	102.1	106.1	107.9	110.0	106.5
79	110.3	110.9	111.2	109.9	110.9	110.9	110.5	110.2	110.4	111.0	111.0	111.0	110.8	110.6	110.4	111.0	110.7
80	111.3	111.4	111.4	109.1	106.2	105.0	104.8	106.3	107.7	108.5	110.7	111.0	111.4	106.8	106.3	110.1	108.6
81	111.0	111.2	111.6	110.6	111.2	112.0	113.4	112.8	111.5	110.4	109.0	107.4	111.2	111.3	112.5	108.9	111.0
82	105.4	107.0	105.8	104.5	103.6	103.0	102.5	102.0	101.3	100.5	100.6	100.5	106.1	103.7	102.0	100.6	103.1
83	102.5	103.3	104.2	105.6	106.9	107.8	109.8	111.6	113.7	114.4	114.8	115.5	103.3	106.8	111.7	114.9	109.2
84	118.5	119.3	119.9	120.5	121.0	121.9	122.8	123.0	122.4	122.1	122.7	122.7	119.3	121.1	122.7	122.5	121.4
85	122.4	122.9	123.3	123.1	123.7	123.5	123.4	124.1	124.4	123.7	124.8	125.4	122.9	123.4	124.0	124.7	123.7
86	126.4	125.5	123.9	124.7	124.3	124.1	124.8	124.9	124.5	125.3	125.7	126.8	125.2	124.4	124.8	125.9	125.1
87	126.2	127.1	127.4	127.4	128.2	129.1	130.6	131.2	131.0	132.5	133.2	133.9	126.9	128.2	131.0	133.2	129.8
88	134.4	134.4	134.7	135.4	136.1	136.5	138.0	138.5	138.6	139.4	139.9	140.4	134.5	136.0	138.4	139.9	137.2
CHANGE*																	
72	2.2	0.7	0.8	1.6	-0.2	0.2	-0.1	1.4	1.0	1.5	1.2	1.0	3.8	2.4	1.3	3.8	9.7
73	0.0	1.4	0.0	0.3	0.4	0.7	0.6	0.0	0.7	0.3	0.1	-1.6	2.1	1.3	1.5	0.4	8.1
74	-1.5	-0.3	0.4	-0.2	1.2	0.3	-0.4	-0.3	0.3	-0.6	-2.9	-4.2	-2.6	1.0	0.0	-3.8	-1.5
75	-2.6	-1.5	-1.8	0.9	-0.2	1.3	0.6	1.8	0.9	0.6	0.9	0.8	-7.8	-0.6	2.9	2.7	-8.8
76	1.0	1.8	-0.2	0.4	1.1	0.1	0.5	0.5	0.3	0.4	1.6	0.8	3.1	1.7	1.5	2.1	9.2
77	0.3	0.7	0.8	1.0	0.6	0.8	0.3	0.3	0.4	0.4	0.3	0.0	2.2	2.5	1.3	1.0	8.0
78	-0.5	0.0	1.4	2.4	0.3	1.0	0.6	0.2	0.6	0.8	0.6	0.8	0.1	3.9	1.7	1.9	6.5
79	-0.5	0.5	0.3	-1.2	0.9	0.0	-0.4	-0.3	0.2	0.5	0.0	0.0	0.7	-0.2	-0.2	0.5	3.9
80	0.3	0.1	0.0	-2.1	-2.7	-1.1	-0.2	1.4	1.3	0.7	2.0	0.3	0.4	-4.1	-0.5	3.6	-1.9
81	0.0	0.2	0.4	-0.9	0.5	0.7	1.2	-0.5	-1.2	-1.0	-1.3	-1.5	1.0	0.1	1.1	-3.2	2.2
82	-1.9	1.5	-1.1	-1.2	-0.9	-0.6	-0.5	-0.5	-0.7	-0.8	0.1	-0.1	-2.6	-2.3	-1.6	-1.4	-7.1
83	2.0	0.8	0.9	1.3	1.2	0.8	1.9	1.6	1.9	0.6	0.3	0.6	2.7	3.4	4.6	2.9	5.9
84	2.6	0.7	0.5	0.5	0.4	0.7	0.7	0.2	-0.5	-0.2	0.5	0.0	3.8	1.5	1.3	-0.2	11.2
85	-0.2	0.4	0.3	-0.2	0.5	-0.2	-0.1	0.6	0.2	-0.6	0.9	0.5	0.3	0.4	0.5	0.6	1.9
86	0.8	-0.7	-1.3	0.6	-0.3	-0.2	0.6	0.1	-0.3	0.6	0.3	0.9	0.4	-0.6	0.3	0.9	1.1
87	-0.5	0.7	0.2	0.0	0.6	0.7	1.2	0.5	-0.2	1.1	0.5	0.5	0.8	1.0	2.2	1.7	3.8
88	0.4	0.0	0.2	0.5	0.5	0.3	1.1	0.4	0.1	0.6	0.4	0.4	1.0	1.1	1.8	1.1	5.7

*CHANGE IS THE PERCENT CHANGE FROM THE PRECEDING LIKE PERIOD.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 4A

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR
METAL MINING	10	.50	93.2	84.9	86.9	86.0	82.2	94.0	96.6	99.1	101.6	104.6	111.9	106.9	98.5	
Iron ore	101	.15	100.6	83.9	86.4	81.2	81.1	100.3	99.2	107.8	113.8	125.7	141.3	143.9	101.2	
Nonferrous ores	102-6,8,9	.35	90.1	81.8	85.9	89.3	86.7	94.7	96.6	95.4	99.8	95.8	100.2	96.4	96.7	
Copper ore	102	.15	104.1	99.4	100.4	106.4	97.5	108.4	114.3	105.7	108.2	105.9	112.1	110.3	112.8	
Lead and zinc ores	103	.05	65.8	64.9	68.7	67.1	74.3	69.5	75.0	68.0	65.9	67.7	64.1	66.3	64.0	
Gold and silver ores	104	.02	327.9	260.1	289.3	305.4	292.0	337.5	320.4	380.9	402.7	382.1	421.9	377.1		
Ferroalloy ores	106	.04	79.6	64.9	80.3	83.4	85.4	92.9	87.0	84.1	96.2	86.0	90.2	93.8		
ANTHRACITE	11	.02	69.8	70.9	83.1	80.1	71.1	63.9	76.4	74.9	66.7	56.0	51.8	54.6	58.4	55.8
BITUMINOUS	12	1.58	138.7	129.8	135.9	127.1	128.0	143.1	136.2	141.2	138.6	151.3	154.7	152.0	138.5	136.1
OIL AND GAS EXTRACTION	13	7.07	92.9	94.8	95.5	94.6	95.8	93.3	93.2	92.0	91.5	90.8	88.9	88.9	89.7	90.1
Crude oil & natural gas	131	5.62	93.9	95.2	95.2	94.7	95.6	93.2	93.2	92.1	92.7	93.9	92.4	91.4	92.9	92.1
Crude oil, total		3.46	98.5	100.9	101.4	99.4	100.5	98.3	97.7	97.1	95.9	96.9	95.8	95.6	95.3	94.7
Texas crude		1.34	64.4	65.6	65.6	65.0	65.9	64.5	63.9	63.2	62.5	63.4	62.5	62.7	62.4	61.3
Alaska, Calif. crude		.57	210.3	214.5	219.6	210.8	212.5	206.4	207.3	208.8	207.7	211.8	207.5	203.3	203.2	202.2
La. and other crude		1.54	86.5	89.4	88.5	88.0	89.0	87.7	86.3	85.1	83.4	83.3	83.2	84.1	83.8	83.8
Natural gas		2.16	86.6	86.1	85.4	87.2	87.7	84.9	86.0	84.1	87.4	89.2	87.0	84.8		
Natural gas liquids	132	.47	100.3	100.8	100.9	101.8	101.0	99.8	100.9	102.2	104.2	100.9	100.3	102.8	99.0	
Propane		.05	99.1	102.2	101.7	99.2	98.1	99.1	99.7	98.3	101.8	98.4	96.9	93.2		
Liquefied petroleum		.42	100.4	100.7	100.8	102.1	101.3	99.9	101.0	102.7	104.5	101.2	100.7	103.9	99.9	
Oil & gas well drilling	138	.99	84.0	88.1	87.1	86.3	86.5	86.9	86.8	85.3	82.7	77.3	73.2	70.9	69.2	74.9
FOODS	20	7.96	142.7	141.1	140.3	141.0	141.3	143.3	143.3	143.2	144.0	145.7	145.8	146.6	146.4	145.9
Meat products	201	1.06	126.1	126.9	121.8	123.5	127.8	126.6	127.0	128.3	125.7	127.6	127.2	126.2	130.4	127.1
Beef		.43	93.4	92.5	94.6	91.8	94.6	98.0	95.4	94.2	92.3	90.8	90.4	89.1	93.3	90.7
Pork		.25	119.4	116.4	112.6	112.0	116.8	120.7	120.6	124.7	124.4	126.9	125.8	119.5	123.6	117.9
Poultry		.20	171.7	180.1	166.9	173.6	174.3	161.8	167.0	173.8	163.4	173.0	173.4	180.5	183.4	184.3
Misc. meats		.18	163.2	165.2	149.6	160.3	171.3	164.4	167.8	164.8	165.7	166.9	166.3	164.4	170.1	163.6
Dairy products	202	.80	131.5	133.0	132.3	130.4	129.8	129.1	129.6	131.6	131.5	132.4	134.5	137.0	137.6	135.6
Butter	2021	.01	109.9	111.1	111.2	109.1	103.6	104.1	99.7	108.5	112.7	107.9	115.3	118.4	126.0	129.5
Cheese	2022	.13	164.3	165.1	160.6	158.7	159.1	161.1	162.7	172.5	170.1	169.8	171.7	167.0	166.2	166.6
Concentrated milk	2023	.11	128.2	138.5	137.3	129.5	130.6	114.2	118.7	126.1	118.6	123.3	128.5	143.9	145.8	143.3
Frozen desserts	2024	.09	152.5	150.4	153.6	154.2	156.5	157.5	154.4	147.9	152.1	150.6	153.4	157.9	156.2	151.0
Canned and frozen food	203	1.09	166.5	163.5	163.3	166.2	167.1	166.6	167.9	167.3	165.4	173.1	172.6	173.0	168.6	170.3
Grain mill products	204	.94	146.0	139.3	140.9	147.6	144.9	149.3	147.5	144.7	150.4	153.5	154.4	152.2	149.9	152.8
Flour	2041	.12	131.0	114.3	126.3	134.9	129.3	147.2	132.1	128.4	146.1	141.0	135.5	135.6	126.7	122.9
Bakery products	205	1.00	139.7	138.5	134.2	136.4	138.8	138.0	140.7	142.0	142.4	142.7	146.5	146.6	144.2	143.7
Beverages	208	1.41	136.2	133.8	135.6	137.4	131.5	138.3	136.3	136.3	138.5	136.9	135.5	136.8	136.6	134.5
Beer and ale	2082,3	.38	115.7	112.0	115.4	114.7	109.7	116.1	111.5	114.0	123.2	117.9	114.9	122.1	119.0	
Wine and brandy	2084	.07	204.1	187.5	207.8	211.7	213.6	224.7	197.7	193.9	189.7	193.2	205.5	200.6		
Soft drinks	2086,7	.79	151.3	150.5	147.9	153.4	147.5	153.5	155.0	153.0	155.0	151.1	147.8	148.6	149.1	151.3
Liquors	2085	.16	81.6	80.3	92.4	80.7	69.1	79.6	77.1	82.5	72.6	88.0	94.0	86.4		
Fats and oils	207	.27	128.6	131.6	131.8	129.8	132.5	138.1	129.4	128.3	120.9	124.0	121.6	122.1	122.3	121.4
Coffee & misc. foods	209	.79	160.8	163.2	157.1	156.0	160.7	159.9	155.1	155.0	164.0	164.6	164.2	169.6	170.4	167.0
TOBACCO PRODUCTS	21	.62	105.2	107.2	107.2	107.2	104.5	100.6	105.1	105.0	105.4	102.4	107.0	105.0	105.6	
Cigarettes	211	.54	104.7	107.0	109.1	110.8	101.2	99.3	108.1	104.4	105.5	100.9	109.0	98.9		
Cigars	212	.02	54.0	56.7	56.1	54.5	48.2	47.4	58.6	50.7	54.0	50.7	54.1	56.1		
TEXTILE MILL PRODUCTS	22	2.29	116.2	117.0	117.3	114.6	114.3	117.1	116.4	116.2	117.0	117.2	117.9	120.2	119.2	121.3
Fabrics	221-4	.77	104.0	107.8	105.0	102.2	104.1	102.7	105.4	104.4	99.6	99.9	102.6	105.7	102.5	108.4
Cotton fabrics	221	.28	120.9	130.0	123.3	119.5	120.3	114.1	121.2	120.5	113.4	114.1	116.8	124.8	123.7	
Synthetic fabrics	222	.40	92.1	93.7	93.2	90.6	93.4	94.6	94.7	92.8	88.0	88.1	90.7	90.9	86.1	92.1
Knit goods	225	.55	117.3	116.6	119.0	112.4	112.5	116.9	118.4	119.2	123.3	119.9	124.5	123.5	124.2	122.7
Hosiery	2251,2	.12	165.1	151.2	169.9	155.1	148.3	162.7	181.3	170.8	181.3	175.2	179.9			
Knit garments	2253,4,7-9	.43	103.6	106.7	104.4	100.2	102.2	103.8	100.4	104.4	106.8	104.1	108.7	110.4	111.8	110.2
Carpeting	227	.22	158.2	146.2	152.2	162.1	158.2	166.5	164.2	149.1	160.0	162.9	160.3	168.4	164.7	153.4
Yarns & misc. text.	228,9	.55	124.6	126.7	126.2	121.1	116.8	126.6	125.0	120.3	126.0	130.1	121.4	134.9	125.5	126.6
APPAREL PRODUCTS	23	2.79	109.1	108.7	109.2	108.6	109.3	109.4	108.9	109.9	109.5	110.1	108.8	110.2	110.2	
LUMBER AND PRODUCTS	24	2.30	137.3	137.8	138.0	139.8	136.4	136.6	133.8	133.5	137.5	139.4	143.0	139.9	133.4	136.6
Logging and lumber	241,2	1.05	128.8	125.2	131.1	133.8	124.4	130.9	119.8	121.8	133.9	126.3	134.3	132.4	119.4	118.9
Lumber products	243-5,9	1.25	144.5	144.7	142.6	146.0	146.2	143.9	144.6	143.6	142.1	148.7	148.7	147.6	144.1	
Millwork & plywood	243	.67	179.2	182.7	177.4	181.7	181.7	178.0	178.8	175.5	172.6	182.8	182.5	180.2	179.6	
Manufactured homes	245	.25	80.6	78.4	79.3	80.1	83.6	78.9	80.2	83.6	82.7	83.8	84.7	85.5	78.9	77.8
FURNITURE AND FIXTURES	25	1.27	162.1	159.4	159.2	160.5	161.2	162.9	164.9	164.9	164.5	165.4	165.4	166.3	164.2	164.9
Household furniture	251	.74	129.7	129.2	126.9	127.5	129.8	129.2	131.1	131.8	133.0	135.1	133.9	133.5	132.6	135.6
Fixt., office furn.	252,4,9	.47	214.1	212.0	212.7	212.7	215.0	216.7	217.9	217.2	214.6	216.6	214.1	214.7	207.3	212.9
PAPER AND PRODUCTS	26	3.15	150.3	149.1	149.2	149.5	148.6	152.3	151.0	150.9	151.8	150.7	151.7	153.8	151.6	150.1
Pulp and paper	261-3	1.33	135.6	132.8	133.2	134.1	131.9	141.4	136.6	135.0	135.0	133.6	144.6	141.0	134.0	131.6
Wood pulp	261	.44	130.1	126.5	127.6	125.4	125.8	137.7	132.3	130.5	126.9	128.3	141.9	137.9	129.0	
Paper	262	.44	140.4	138.3	139.9	141.5	137.4	143.9	142.3	142.1	141.7	139.6	142.1	144.4	136.9	134.9
Paperboard	263	.44	136.2	133.6	131.9	135.2	132.4	142.7	135.1	132.4	136.3	132.8	149.8	140.6	136.0	131.7
Converted paper prod.	264	1.03	182.0	179.6	176.7	179.4	180.6	187.7	186.5	188.0	183.5	182.7	185.5	186.3	181.8	179.8
Paperboard containers	265	.75	135.9	135.0	137.4	135.0	132.9	138.5	133.8	133.9	138.0	138.7	139.6	140.4	137.0	132.6

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 4B

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Not seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR
METAL MINING	10	.50	93.2	87.6	92.4	94.8	90.4	93.8	96.3	97.7	100.2	97.6	98.0	98.9	99.4	
Iron ore	101	.15	100.6	90.1	103.7	106.7	93.9	108.3	106.5	104.3	104.4	101.8	100.1	103.9	98.5	
Nonferrous ores	102-6,8,9	.35	90.1	86.6	87.5	89.7	89.0	87.6	91.9	94.9	98.4	95.9	97.7	96.7	99.9	
Copper ore	102	.15	104.1	103.9	101.7	107.2	101.6	101.7	107.0	104.6	108.0	108.0	110.3	111.1	114.8	
Lead and zinc ores	103	.05	65.8	71.7	69.6	65.6	69.9	61.6	71.1	67.6	68.0	64.9	62.8	69.4	71.0	
Gold and silver ores	104	.02	327.9	275.4	298.7	304.4	316.0	329.1	319.8	392.1	389.6	369.9	386.7	362.4		
Ferroalloy ores	106	.04	79.6	70.5	82.6	84.9	84.7	76.0	83.5	83.4	96.7	88.8	92.4	91.6		
ANTHRACITE	11	.02	69.8	68.4	70.3	74.9	71.5	65.2	86.9	79.6	77.7	61.8	52.0	46.9	51.9	53.8
BITUMINOUS	12	1.58	138.7	138.5	136.9	126.6	132.6	128.8	148.2	146.1	143.8	147.2	142.2	139.8	140.9	145.2
OIL AND GAS EXTRACTION	13	7.07	92.9	94.4	93.2	91.8	92.4	90.9	91.1	90.3	91.4	93.2	93.6	93.0	92.7	90.1
Crude oil & natural gas	131	5.62	93.9	95.9	94.9	93.2	94.0	91.7	91.5	90.5	91.6	94.0	94.5	94.7	95.9	92.8
Crude oil, total		3.46	98.5	101.4	101.1	99.3	100.3	98.2	97.1	96.9	95.9	96.6	95.5	96.0	96.4	95.1
Texas crude		1.34	64.4	66.3	66.0	64.9	65.5	64.1	63.4	63.1	62.3	63.6	62.5	62.5	62.8	61.9
Alaska, Calif. crude		.57	210.3	215.3	217.0	210.3	213.5	207.8	205.9	208.3	207.7	209.7	206.6	205.0	205.8	202.9
La. and other crude		1.54	86.5	89.5	88.5	87.9	88.5	87.2	85.9	84.8	83.6	83.2	82.8	84.2	85.0	83.8
Natural gas		2.16	86.6	87.2	85.0	83.5	83.8	81.3	82.5	80.3	84.7	89.9	93.9	92.6		
Natural gas liquids	132	.47	100.3	99.8	98.7	100.7	100.0	100.2	101.4	101.5	103.5	103.4	101.1	103.7	100.3	
Propane		.05	99.1	102.3	101.0	98.4	95.7	96.5	96.3	95.5	100.0	101.0	100.0	97.4		
Liquefied petroleum		.42	100.4	99.5	98.4	101.0	100.5	100.6	101.9	102.1	103.8	103.7	101.2	104.4	101.0	
Oil & gas well drilling	138	.99	84.0	83.8	81.2	79.3	80.2	82.0	84.0	84.2	84.2	84.2	85.1	77.9	70.9	70.4
FOODS	20	7.96	142.7	135.2	134.7	138.8	145.4	146.1	151.5	152.7	151.2	145.7	141.7	139.1	139.5	139.8
Meat products	201	1.06	126.1	125.5	122.1	123.3	127.9	120.9	128.1	131.6	135.4	128.5	123.8	125.0	126.2	125.7
Beef		.43	93.4	88.3	89.9	91.7	96.7	96.7	99.2	97.6	97.9	89.6	87.6	90.6	90.9	86.7
Pork		.25	119.4	119.6	118.2	112.8	112.9	106.0	112.7	124.6	135.0	134.0	127.8	120.0	120.4	121.2
Poultry		.20	171.7	171.3	168.1	176.4	183.6	163.9	177.8	179.7	179.3	167.7	157.9	169.9	172.2	175.3
Misc. meats		.18	163.2	172.4	153.7	154.6	161.4	152.0	164.0	169.7	177.4	170.7	167.6	164.9	167.8	170.7
Dairy products	202	.80	131.5	135.5	140.6	142.3	144.3	134.8	129.8	127.4	123.3	121.8	125.2	128.4	135.2	138.2
Butter	2021	.01	109.9	122.7	125.2	118.4	100.6	85.1	78.2	91.1	103.4	101.2	119.6	141.6	149.3	143.0
Cheese	2022	.13	164.3	169.7	171.4	171.9	171.9	159.3	154.9	162.5	163.9	164.5	169.2	160.3	162.9	171.3
Concentrated milk	2023	.11	128.2	141.8	156.8	152.4	156.2	124.2	113.6	109.9	100.8	101.4	118.6	136.8	145.3	146.7
Frozen desserts	2024	.09	152.5	151.4	158.0	172.6	199.9	194.4	183.6	159.4	135.7	121.0	113.7	117.2	138.1	151.9
Canned and frozen food	203	1.09	166.5	153.4	149.1	156.1	167.0	170.0	186.0	199.0	189.0	172.1	158.8	155.5	157.5	159.8
Grain mill products	204	.94	146.0	135.6	136.7	143.8	146.1	149.0	153.5	150.4	152.7	152.5	154.4	151.0	148.4	148.8
Flour	2041	.12	131.0	115.3	122.5	132.2	128.9	135.7	136.9	134.1	150.0	142.5	129.2	132.3	135.9	124.0
Bakery products	205	1.00	139.7	127.6	126.6	132.0	146.4	151.0	156.7	158.0	146.5	139.9	137.9	135.0	132.5	132.5
Beverages	208	1.41	136.2	126.7	133.8	139.1	144.6	149.4	149.9	145.9	139.9	131.0	121.9	124.1	125.9	127.5
Beer and ale	2082,3	.38	115.7	115.2	126.8	128.3	130.2	130.0	119.2	108.3	111.7	98.2	91.4	111.2	116.9	
Wine and brandy	2084	.07	204.1	189.0	211.6	213.8	240.3	210.1	214.0	192.9	216.0	206.0	194.0	156.7		
Soft drinks	2086,7	.79	151.3	136.7	139.1	150.1	157.1	169.6	174.3	171.0	158.0	147.9	138.1	137.0	135.0	137.4
Liquors	2085	.16	81.6	78.4	90.4	78.7	76.7	71.0	76.3	92.4	85.7	93.2	83.4	77.5		
Fats and oils	207	.27	128.6	134.6	128.4	128.3	129.3	125.8	120.0	124.4	128.7	131.6	127.7	125.0	125.8	124.2
Coffee & misc. foods	209	.79	160.8	152.2	148.5	153.0	160.3	165.0	168.9	161.3	166.6	166.2	171.1	162.6	162.1	155.7
TOBACCO PRODUCTS	21	.62	105.2	109.6	104.0	102.5	112.8	87.0	113.4	109.2	117.9	106.3	83.1	104.1	110.1	
Cigarettes	211	.54	104.7	112.2	104.5	102.7	113.4	86.1	113.6	107.4	117.0	104.3	82.4	104.5		
Cigars	212	.02	54.0	57.4	55.8	57.3	51.7	38.7	62.6	54.5	62.5	50.8	40.1	55.3		
TEXTILE MILL PRODUCTS	22	2.29	116.2	117.2	118.0	117.0	118.9	109.4	123.6	121.1	123.7	117.4	104.8	111.2	118.4	121.3
Fabrics	221-4	.77	104.0	110.7	106.4	105.6	104.8	89.4	108.9	106.5	106.0	101.2	89.9	105.4	106.9	111.3
Cotton fabrics	221	.28	120.9	133.6	125.8	124.7	119.8	98.0	127.3	122.4	121.8	115.1	100.3	125.3	128.9	
Synthetic fabrics	222	.40	92.1	96.7	94.3	93.5	94.2	81.5	97.1	94.5	93.9	89.8	77.9	91.5	91.3	95.0
Knit goods	225	.55	117.3	113.0	117.3	113.6	124.3	122.3	128.7	129.1	127.4	117.3	109.7	105.1	118.6	119.1
Hosiery	2251,2	.12	165.1	158.2	180.8	155.6	158.5	175.8	171.3	163.5	182.1	169.4	154.3			
Knit garments	2253,4,7-9	.43	103.6	100.1	99.2	101.6	114.6	107.0	116.5	119.3	111.8	102.4	97.0	88.0	103.3	103.4
Carpeting	227	.22	158.2	149.1	165.8	168.9	167.3	168.1	159.1	162.9	176.1	163.8	141.8	138.1	148.5	156.4
Yarns & misc. text.	228,9	.55	124.6	128.2	126.0	126.5	122.0	109.6	135.2	125.6	133.1	129.5	109.1	128.8	126.8	128.1
APPAREL PRODUCTS	23	2.79	109.1	108.4	107.6	107.4	111.3	105.9	112.4	113.9	111.2	110.2	108.1	106.8	109.4	
LUMBER AND PRODUCTS	24	2.30	137.3	136.1	139.2	141.3	143.4	134.2	139.2	140.6	145.6	135.0	129.6	131.2	130.5	135.9
Logging and lumber	241,2	1.05	128.8	127.1	133.0	132.4	134.3	125.5	125.7	130.4	142.4	122.4	119.3	120.8	116.7	120.2
Lumber products	243-5,9	1.25	144.5	143.7	144.3	148.8	151.1	141.4	150.4	149.2	148.2	145.5	138.3	139.9	140.3	
Millwork & plywood	243	.67	179.2	179.1	177.2	184.2	186.4	176.9	186.0	182.7	180.5	180.0	172.7	174.0	172.7	
Manufactured homes	245	.25	80.6	78.7	86.0	87.6	95.1	76.7	92.0	90.7	91.5	77.7	62.6	67.6	71.2	77.1
FURNITURE AND FIXTURES	25	1.27	162.1	160.2	156.0	154.7	162.8	155.6	170.9	172.1	169.4	165.9	161.3	159.4	170.0	165.0
Household furniture	251	.74	129.7	130.9	125.7	123.5	131.3	116.7	135.0	137.5	136.4	135.7	131.8	128.6	140.6	137.4
Fixt., office furn.	252,4,9	.47	214.1	208.8	205.0	204.4	213.0	217.0	229.0	227.9	222.0	213.7	207.3	208.0	215.0	209.7
PAPER AND PRODUCTS	26	3.15	150.3	153.7	151.1	148.2	150.3	146.8	152.0	151.8	155.4	148.5	143.1	155.5	154.7	153.6
Pulp and paper	261-3	1.33	135.6	138.2	135.2	134.7	134.7	134.1	136.8	135.7	135.9	133.7	132.6	140.7	138.9	136.9
Wood pulp	261	.44	130.1	131.2	129.8	125.3	128.4	131.0	132.2	129.9	127.5	129.1	132.6	137.2	134.0	
Paper	262	.44	140.4	143.7	141.0	140.2	139.5	136.0	141.2	142.0	144.0	139.8	133.4	145.6	142.9	140.2
Paperboard	263	.44	136.2	139.6	134.8	138.7	136.3	135.2	137.1	135.2	136.1	132.3	131.8	139.4	139.8	137.6
Converted paper prod.	264	1.03	182.0	187.3	181.4	179.3	182.6	176.1	185.0	184.9	186.7	182.1	174.2	188.2	189.0	187.3
Paperboard containers	265	.75	135.9	138.5	141.0	132.4	136.9	132.4	136.7	138.1	150.4	131.8	121.8	140.1	139.2	136.1

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 4A—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR
PRINTING & PUBLISHING	27	4.54	184.2	180.4	181.8	180.7	182.3	184.9	186.7	188.0	188.1	188.5	188.0	193.0	194.5	196.4
Newspapers	271	1.35	148.3	150.4	146.5	144.3	146.5	150.4	148.7	152.7	148.9	147.7	146.8	151.7	150.6	152.3
Period.,books,cards	272,3,7	1.24	174.9	170.2	173.6	171.6	174.5	174.3	177.6	179.1	180.6	179.5	186.4	191.1	193.1	196.5
Job printing	274-6,8,9	1.95	214.9	208.5	212.5	213.6	211.9	215.6	218.0	218.8	218.6	221.4	223.7	225.7	226.5	228.8
CHEMICALS & PRODUCTS	28	8.05	151.9	146.4	148.9	149.1	150.5	153.4	154.8	155.3	156.7	157.5	158.1	159.0	158.1	159.5
Chemicals & syn. mat.	281,2,6	3.86	144.8	140.5	143.2	142.0	142.6	146.2	147.0	146.3	149.1	151.5	149.4	154.1	152.3	153.1
Basic chemicals	281	.92	103.9	101.4	104.8	102.7	101.8	103.4	104.0	106.9	104.6	110.2	108.4	112.8	117.9	114.8
Alkalies & chlorine	2812	.12	102.2	106.2	102.2	91.9	90.1	93.7	99.6	108.1	109.7	113.9	105.4	114.3	126.7	123.3
Industrial Gases	2813	.10	158.0	153.4	151.4	157.5	153.8	159.7	157.7	159.9	162.9	163.1	165.3	163.9	169.9	
Inorganic pigments	2816	.08	103.9	104.2	103.5	112.5	99.1	102.1	107.1	100.4	95.5	109.2	106.8	114.5	114.4	100.9
Inorganic chem, nec	2819	.62	95.1	91.4	97.6	94.3	95.6	96.0	95.4	98.6	95.1	100.7	99.7	103.6	108.0	105.5
Acids & other chem.		.40	100.3	96.1	104.4	98.8	100.8	100.9	100.0	104.8	99.6	108.6	107.2	110.1	116.1	111.3
Synthetic materials	282	1.11	195.1	186.3	193.0	190.8	192.8	199.6	201.8	192.8	204.3	205.4	198.6	210.8	197.7	198.5
Plastics materials	2821	.59	275.3	262.1	271.3	267.5	269.2	278.9	288.5	274.2	290.7	292.4	279.9	303.1	279.7	
Synthetic rubber	2822	.08	100.2	96.2	96.5	104.7	101.4	97.3	104.7	101.9	99.2	107.1	109.9			
Synthetic fibers	2823,4	.44	106.2	102.5	107.0	104.9	108.4	113.4	104.7	101.6	109.0	108.2	107.2	108.5	106.6	107.9
Indust. organic chem.	286	1.83	134.9	132.3	132.3	132.1	132.6	135.1	135.4	137.7	137.9	139.4	140.0	140.4	142.0	144.7
Chemical products	283-5,9	3.65	167.0	159.1	163.9	165.9	166.9	169.3	170.8	170.6	172.2	171.2	173.8	173.9	171.4	172.8
Drugs & medicines	283	1.41	151.5	144.3	153.6	150.4	150.6	152.9	155.0	153.4	152.7	152.9	154.6	154.1	151.7	153.4
Soap & toiletries	284	1.34	210.2	197.7	200.6	211.3	213.7	215.2	216.3	216.8	219.8	218.0	220.2	222.4	219.2	224.4
Paints	285	.40	107.0	103.2	105.3	102.8	100.7	105.9	106.5	107.2	115.8	109.5	119.8	114.0	111.3	99.5
Agricultural chemicals	287	.54	100.8	99.9	100.2	99.6	94.1	101.6	103.1	97.2	100.2	103.5	107.0	112.0	108.5	108.0
PETROLEUM PRODUCTS	29	2.40	96.0	98.4	98.5	95.2	94.1	95.0	96.0	93.7	96.3	95.0	98.0	98.0	96.3	95.4
Petroleum refining	291,9	2.21	94.3	96.2	96.4	93.1	92.3	93.7	95.1	92.3	95.1	93.8	97.3	97.2	93.2	93.3
Automotive gasoline		.96	98.9	98.8	101.2	96.7	95.9	99.4	100.2	97.5	100.4	99.3	101.5	99.6	98.0	96.2
Distillate fuel oil		.43	87.1	89.1	91.9	89.6	88.0	85.0	86.8	83.6	85.4	83.3	86.9	90.8	88.2	87.8
Residual fuel oil		.15	53.0	54.7	52.9	51.1	55.8	58.1	52.8	51.3	51.0	49.8	53.3	49.4	49.5	55.2
Aviation fuel & keros.		.18	124.5	129.3	121.0	123.1	123.9	123.8	123.9	125.2	123.0	119.7	132.6	132.0	121.9	121.8
Misc. petroleum prod.		.48	93.7	98.4	95.8	91.2	89.0	90.6	95.3	90.7	96.8	96.7	99.1	100.6	91.3	
Refinery fuel, nec		.09	135.7	140.2	139.3	135.1	129.6	133.7	133.1	132.2	139.1	137.6	136.8	145.8		
Refinery nonfuel mat.		.26	74.1	73.9	77.6	68.4	67.3	69.2	77.6	71.1	79.1	82.6	83.9	80.1		
Refinery products, nec		.13	103.9	118.2	102.5	106.6	104.3	103.5	104.7	101.1	103.1	97.2	103.5	110.4		
RUBBER & PLASTICS PROD.	30	2.80	174.4	172.2	172.3	173.4	174.4	175.4	175.3	175.3	176.9	177.5	177.5	175.9	175.6	174.8
Tires	301	.62	126.1	122.4	122.0	126.2	128.0	129.0	124.1	124.9	133.5	131.2	128.5	125.1	123.5	
Rub.prod.ex.tires	302-4,6	.51	138.7	135.8	137.8	136.7	139.8	139.7	140.2	140.1	140.2	140.8	142.5	139.6	142.1	138.6
Plastics products, nec	307	1.67	203.2	201.1	200.5	202.0	203.4	203.7	205.3	203.7	204.4	206.1	206.4	204.2	205.3	204.4
LEATHER AND PRODUCTS	31	.53	59.5	59.5	58.0	57.1	58.9	59.1	59.4	59.9	61.0	61.5	60.2	62.9	63.1	62.7
Pers. leather gds	313,5-7,9	.16	77.0	77.2	75.7	77.1	75.3	77.1	78.7	77.7	78.6	76.4	76.2	79.0	79.8	79.9
Shoes	314	.29	50.3	50.3	48.9	47.3	49.7	48.5	50.4	50.5	53.0	54.3	50.8	54.6	55.0	51.2
CLAY,GLASS & STONE PROD.	32	2.72	122.6	122.5	121.4	121.5	123.4	122.2	122.6	122.6	123.3	124.7	125.1	126.6	125.3	125.8
Pressed & blown glass	322	.51	107.6	107.4	109.8	109.8	107.7	109.5	108.1	108.3	109.0	105.5	104.6	108.9	107.9	110.8
Glass containers	3221	.30	92.0	93.0	95.6	95.6	92.5	95.7	91.9	91.3	93.4	88.1	88.1	93.2	90.2	96.3
Cement	324	.24	102.3	107.4	100.8	104.6	105.5	98.0	98.8	102.9	105.5	104.1	112.6	122.7	97.1	
Structural clay prod.	325	.15	139.8	142.3	141.1	142.2	140.6	135.8	141.1	138.2	134.6	138.2	140.9	142.3	128.8	127.7
Brick	3251	.07	101.2	110.2	103.7	100.2	102.7	99.7	103.0	97.8	94.7	97.9	96.1	98.3	109.3	109.5
Clay sewer pipe	3259	.02	38.1	37.4	34.6	37.1	34.8	35.1	39.4	37.3	39.2	39.7	43.4	39.7	57.4	36.8
Clay tile	3253,5	.07	206.3	203.2	207.7	213.2	207.5	199.6	207.2	206.3	200.7	205.5	212.6	214.6	167.8	170.7
Concrete and misc.	326-9	1.55	126.0	127.0	123.7	124.4	126.7	126.0	125.8	127.1	125.9	126.5	129.3	128.6	129.2	129.4
PRIMARY METALS	33	5.33	89.2	85.1	85.3	89.2	87.5	91.5	90.8	93.1	94.2	92.7	90.0	93.2	91.1	89.3
Iron and steel	331,2	3.49	78.1	74.2	74.5	78.6	74.2	80.2	78.9	81.4	83.1	80.8	77.6	82.2	79.1	76.2
Basic st. & mill prod.	331	2.60	84.8	80.3	80.8	84.8	80.4	91.2	85.6	89.4	91.7	87.6	82.1	88.3	85.9	83.1
Basic iron and steel		1.11	73.3	70.8	68.1	71.3	70.1	76.2	77.5	79.4	75.7	74.6	75.1	76.8	73.6	72.2
Pig iron		.42	68.6	65.1	62.4	64.1	63.8	69.4	69.7	75.2	73.0	71.3	76.0	75.3	71.4	68.8
Raw steel		.51	79.8	76.8	74.0	79.6	77.7	84.4	87.0	86.5	80.6	79.7	78.3	83.4	78.5	77.5
Steel mill products		1.49	93.3	87.3	90.2	94.8	88.0	102.4	91.6	96.8	103.6	97.2	87.2	96.8	95.0	91.1
Consumer dur. steel		.38	59.9	55.3	57.8	63.6	58.8	61.7	60.7	63.6	70.9	67.0	55.7	62.8	63.8	59.6
Equipment steel		.36	49.9	49.4	50.3	50.3	49.6	53.4	45.4	48.9	53.7	49.6	45.7	51.0	45.7	45.1
Construction steel		.19	75.9	73.8	73.9	76.0	65.4	79.0	70.5	78.4	84.2	80.8	70.5	78.7	75.4	77.8
Can & closure steel		.10	66.0	57.2	69.3	67.9	61.9	69.5	60.5	64.2	74.2	66.5	92.0	52.1	56.6	60.9
Misc. steel		.46	167.4	155.1	158.9	168.3	156.7	190.4	168.0	175.8	183.4	172.4	151.1	177.1	175.2	164.8
Iron & steel foundries	332	.89	58.3	59.4	58.3	64.6	54.3	53.6	55.6	57.6	60.9	61.7	58.8	57.9	52.2	53.0
Nonferrous metals	333-6,9	1.85	110.2	105.7	105.6	109.1	112.7	112.7	113.3	115.1	115.0	115.2	113.4	113.9	113.8	113.8
Primary nonf. metals	333	.51	95.2	94.0	90.3	92.5	93.6	99.1	97.2	99.0	99.8	100.7	97.6	97.3	97.4	95.6
Copper	3331	.13	105.4	106.8	93.2	99.5	94.3	104.8	121.5	120.2	104.0	111.6	109.4	103.3	110.8	102.7
Aluminum	3334	.28	95.5	93.9	94.6	94.4	95.4	97.1	97.2	97.4	97.3	98.4	97.7	98.8	97.9	98.9
Secondary nonf. mtls.	334	.11	78.3	81.4	74.2	74.8	77.5	86.4	77.6	76.9	75.4	76.7	81.7	88.2	80.1	
Nonferrous products	335,6	1.12	119.5	113.3	115.1	119.4	123.1	120.8	124.0	124.8	124.7	125.9	123.7	122.0	121.2	120.0
Nonf. mill products	335	.84	106.3	103.1	102.6	104.7	110.1	108.9	112.3	109.3	105.6	110.6	105.2	103.8	104.4	103.5
Copper mill prod.	3351	.14	102.9	94.9	96.2	96.0	110.0	98.2	118.7	103.2	99.5	114.7	99.2	87.3	105.0	83.4
Alum. mill prod.	3353-5	.32	119.2	118.4	115.5	117.4	124.6	129.6	126.8	124.2	114.3	121.1	114.3	114.5	110.7	118.6
Construction		.09	119.5	123.9	120.6	125.1	125.8	122.5	130.6	123.8	111.6	113.3	100.0	119.5	110.1	114.7
Misc. alum. mats.		.23	119.1	116.3	113.5	114.4	124.2	132.4	123.8	124.4	115.4	124.2	119.9	112.6	110.9	120.1
Nonferrous foundries	336	.28	159.4	144.0	152.9	163.7	162.0	156.5	159.1	171.5	182.1	171.9	179.4	176.7	172.0	169.7

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 4B—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Not seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR
PRINTING & PUBLISHING	27	4.54	184.2	170.2	173.8	175.4	186.1	194.8	206.0	206.3	197.1	187.1	182.4	177.7	183.6	185.5
Newspapers	271	1.35	148.3	150.4	150.1	148.3	146.4	137.3	142.2	154.5	160.1	161.7	148.9	136.5	147.6	152.3
Period.,books,cards	272,3,7	1.24	174.9	158.6	163.4	165.5	178.3	189.2	202.5	199.7	184.1	173.9	174.0	176.7	183.8	183.1
Job printing	274-6,8,9	1.95	214.9	191.4	196.8	200.5	218.5	238.3	252.5	246.3	231.0	213.0	211.0	206.8	208.4	210.0
CHEMICALS & PRODUCTS	28	8.05	151.9	145.4	148.3	149.0	155.1	156.0	157.6	161.5	158.6	155.2	151.5	152.6	156.5	157.6
Chemicals & syn. mat.	281,2,6	3.86	144.8	143.0	145.2	142.4	144.9	143.0	143.6	148.5	149.9	150.5	146.9	149.2	156.0	155.8
Basic chemicals	281	.92	103.9	103.0	105.0	102.3	105.0	100.9	100.9	108.6	106.7	107.8	104.9	108.0	125.3	116.7
Alkalies & chlorine	2812	.12	102.2	107.0	106.2	94.0	94.6	94.0	96.8	109.9	107.2	108.7	104.5	107.4	129.2	124.3
Industrial Gases	2813	.10	158.0	157.4	155.7	158.7	154.7	153.6	155.6	161.1	160.8	164.5	160.6	160.5	174.9	
Inorganic pigments	2816	.08	103.9	103.9	109.2	109.1	110.6	101.7	99.7	107.2	91.6	103.9	105.0	107.3	118.6	100.6
Inorganic chem, nec	2819	.62	95.1	93.0	95.7	93.5	97.9	93.3	92.6	99.8	99.5	98.7	95.6	99.3	117.2	107.5
Acids & other chem.		.40	100.3	98.3	101.2	97.1	104.1	96.9	95.9	106.9	106.6	105.7	100.9	103.4	131.3	113.7
Synthetic materials	282	1.11	195.1	194.4	200.1	192.7	196.7	191.2	194.3	198.7	205.2	202.5	191.0	199.0	205.6	207.1
Plastics materials	2821	.59	275.3	276.0	281.6	270.3	275.7	267.9	278.1	283.9	293.1	289.2	266.0	281.5	289.8	
Synthetic rubber	2822	.08	100.2	103.0	103.2	105.5	101.8	92.6	100.1	102.8	99.5	105.1	96.7			
Synthetic fibers	2823,4	.44	106.2	103.1	110.0	105.7	109.6	107.4	100.4	103.5	108.1	105.5	108.9	107.0	112.3	108.5
Indust. organic chem.	286	1.83	134.9	131.9	132.0	132.0	133.5	134.9	134.2	138.1	137.9	140.4	141.2	139.7	141.2	144.4
Chemical products	283-5,9	3.65	167.0	154.1	157.8	163.0	174.7	178.4	181.4	184.4	176.3	167.5	163.2	163.0	164.3	167.4
Drugs & medicines	283	1.41	151.5	135.1	145.6	144.9	161.4	169.0	169.0	170.0	158.0	149.7	145.0	140.7	138.4	143.6
Soap & toiletries	284	1.34	210.2	193.4	189.4	204.9	216.0	222.0	227.0	235.0	226.1	216.7	212.0	212.7	217.0	219.5
Paints	285	.40	107.0	106.4	117.4	118.1	123.3	112.2	117.0	111.1	111.7	92.0	84.5	93.5	104.6	102.5
Agricultural chemicals	287	.54	100.8	102.5	106.1	101.6	94.4	96.1	97.7	99.5	102.1	104.3	106.2	107.1	107.6	110.8
PETROLEUM PRODUCTS	29	2.40	96.0	92.2	94.7	95.6	98.2	99.4	100.9	97.3	96.8	96.8	98.7	94.1	89.9	89.5
Petroleum refining	291,9	2.21	94.3	91.7	93.6	93.3	95.9	96.9	98.3	94.6	93.9	94.3	97.6	94.5	89.9	89.0
Automotive gasoline		.96	98.9	95.2	98.2	97.4	99.3	101.8	102.4	98.8	97.8	100.3	103.8	98.6	94.5	92.6
Distillate fuel oil		.43	87.1	82.9	87.4	89.3	88.1	84.8	86.6	84.7	86.2	88.5	93.5	90.6	85.3	81.7
Residual fuel oil		.15	53.0	53.9	54.3	49.4	50.3	52.1	49.3	49.0	49.3	52.7	61.0	54.1	53.0	54.4
Aviation fuel & keros.		.18	124.5	130.3	115.2	115.5	120.2	123.3	123.1	125.2	124.4	123.0	135.3	137.9	126.4	122.7
Misc. petroleum prod.		.48	93.7	90.3	94.5	94.6	101.6	102.5	107.1	98.2	95.9	90.0	86.7	86.5	83.0	
Refinery fuel, nec		.09	135.7	134.4	134.2	137.2	137.5	139.5	141.2	136.3	134.2	133.9	136.1	140.2		
Refinery nonfuel mat.		.26	74.1	75.7	79.8	69.8	75.0	75.6	79.3	71.3	73.4	74.8	76.3	73.9		
Refinery products, nec		.13	103.9	89.6	96.7	114.5	129.4	130.3	138.8	125.2	114.4	90.3	74.0	75.2		
RUBBER & PLASTICS PROD.	30	2.80	174.4	175.9	173.8	173.0	178.4	166.2	177.9	181.0	183.1	176.0	167.9	166.0	181.3	179.1
Tires	301	.62	126.1	131.9	127.5	123.0	127.4	109.6	124.1	129.6	141.8	125.6	115.8	126.9	133.0	
Rub.prod.ex.tires	302-4,6	.51	138.7	139.6	138.2	139.3	142.7	131.9	140.7	142.4	143.1	141.4	137.5	132.7	145.2	142.3
Plastics products, nec	307	1.67	203.2	203.3	201.9	201.8	208.2	197.5	209.2	211.9	210.7	205.2	196.4	190.1	209.5	206.6
LEATHER AND PRODUCTS	31	.53	59.5	60.8	57.9	58.0	59.5	51.0	62.0	61.6	64.8	63.5	56.3	60.9	65.2	64.2
Pers. leather gds	313,5-7,9	.16	77.0	76.0	74.2	75.7	76.7	72.1	80.0	80.9	83.1	80.5	76.9	75.4	77.3	78.7
Shoes	314	.29	50.3	53.2	49.1	48.8	50.1	40.0	53.2	51.4	56.3	55.3	44.3	53.2	58.9	54.1
CLAY,GLASS & STONE PROD.	32	2.72	122.6	120.1	121.7	123.8	127.5	123.4	127.6	127.6	129.0	124.7	119.1	118.2	118.6	122.7
Pressed & blown glass	322	.51	107.6	109.0	111.9	110.5	112.5	111.6	113.2	110.3	113.8	104.3	89.5	101.0	109.8	112.4
Glass containers	3221	.30	92.0	95.1	100.0	97.1	99.4	98.8	97.8	90.4	98.9	84.2	66.0	86.2	96.0	98.5
Cement	324	.24	102.3	90.3	105.4	117.2	129.5	115.6	123.0	123.0	124.7	102.7	82.3	70.2	65.2	
Structural clay prod.	325	.15	139.8	140.4	142.2	142.7	148.0	124.9	146.0	145.6	139.8	142.0	134.9	135.8	123.0	125.6
Brick	3251	.07	101.2	103.6	106.0	104.7	109.7	100.5	109.7	105.7	102.7	97.4	89.6	85.6	97.3	102.9
Clay sewer pipe	3259	.02	38.1	35.8	36.6	37.8	38.6	41.1	40.9	41.7	42.0	39.0	37.0	33.3	44.6	35.2
Clay tile	3253,5	.07	206.3	205.9	207.5	209.5	216.2	172.3	211.1	214.0	203.9	215.1	207.2	214.2	170.3	173.0
Concrete and misc.	326-9	1.55	126.0	124.1	123.3	125.1	127.9	125.3	128.8	129.0	130.5	128.9	127.8	124.2	124.6	126.5
PRIMARY METALS	33	5.33	89.2	91.7	92.3	94.8	90.6	85.4	85.9	90.5	92.6	89.4	82.6	90.8	93.4	94.3
Iron and steel	331,2	3.49	78.1	80.4	82.7	85.6	77.8	76.7	73.7	78.0	80.6	76.2	69.9	79.0	80.6	81.0
Basic st. & mill prod.	331	2.60	84.8	86.6	88.9	91.4	84.5	86.2	80.2	85.1	85.9	82.0	77.2	87.5	89.7	89.6
Basic iron and steel		1.11	73.3	76.3	75.5	77.0	72.7	73.5	71.3	74.3	71.8	70.6	69.8	75.5	77.6	78.0
Pig iron		.42	68.6	70.2	70.4	71.4	67.3	69.0	66.4	69.1	67.3	66.7	68.3	71.9	74.7	74.1
Raw steel		.51	79.8	84.2	82.1	84.3	79.1	79.1	77.3	81.4	78.2	76.4	74.6	83.0	84.0	85.0
Steel mill products		1.49	93.3	94.1	98.8	102.0	93.2	95.5	86.8	93.1	96.4	90.4	82.6	96.4	98.7	98.2
Consumer dur. steel		.38	59.9	57.6	62.2	68.0	61.5	54.2	56.6	63.6	68.6	63.7	49.8	67.9	67.3	62.2
Equipment steel		.36	49.9	53.5	55.7	54.4	51.4	48.5	45.2	48.1	50.2	46.3	41.9	48.5	48.8	48.8
Construction steel		.19	75.9	75.7	79.0	82.7	74.6	80.0	70.3	77.6	78.6	75.7	63.6	73.1	73.4	79.8
Can & closure steel		.10	66.0	58.9	70.2	69.5	67.0	71.5	63.3	63.7	66.4	61.6	86.5	53.2	56.7	62.7
Misc. steel		.46	167.4	170.7	176.6	181.7	165.0	177.5	155.7	164.9	168.7	158.7	148.1	175.7	182.6	181.4
Iron & steel foundries	332	.89	58.3	62.3	64.4	68.7	58.3	48.9	54.9	57.1	64.9	59.4	48.5	54.0	53.8	55.6
Nonferrous metals	333-6,9	1.85	110.2	112.9	110.4	112.1	114.6	101.7	108.8	114.1	115.3	114.4	106.7	113.0	117.7	119.4
Primary nonf. metals	333	.51	95.2	97.3	94.3	95.7	93.7	91.5	92.2	95.0	99.1	100.7	97.1	98.5	100.8	98.9
Copper	3331	.13	105.4	112.3	102.8	107.5	100.0	96.3	107.9	107.9	102.4	113.1	105.7	103.4	114.0	108.0
Aluminum	3334	.28	95.5	94.4	95.6	96.0	95.5	95.4	95.1	96.5	97.1	98.2	98.2	99.0	98.8	99.4
Secondary nonf. mtls.	334	.11	78.3	84.2	76.9	74.1	78.1	75.8	76.4	81.1	79.7	78.6	75.6	82.2	86.1	
Nonferrous products	335,6	1.12	119.5	122.1	120.5	123.1	127.2	108.3	119.1	125.1	125.7	123.6	112.7	121.7	127.5	129.6
Nonf. mill products	335	.84	106.3	108.8	106.3	108.2	112.7	102.8	109.6	111.2	106.5	106.6	99.8	101.5	106.0	109.1
Copper mill prod.	3351	.14	102.9	106.5	104.3	104.9	111.0	83.3	109.0	114.0	99.8	105.0	89.8	85.0	107.5	93.5
Alum. mill prod.	3353-5	.32	119.2	126.4	121.0	124.0	131.6	125.0	126.7	123.4	116.0	113.4	101.0	108.6	113.8	126.8
Construction		.09	119.5	126.7	126.4	126.5	132.7	118.1	136.8	125.8	117.9	111.4	85.1	113.4	113.0	117.3
Misc. alum. mats.		.23	119.1	126.4	118.9	123.0	131.2	127.7	122.7	122.4	115.3	114.2	107.2	106.7	114.0	130.5
Nonferrous foundries	336	.28	159.4	162.4	163.2	168.1	170.8	125.1	147.9	166.7	183.4	174.6	151.7	182.6	192.2	191.4

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 4A—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR
FABRICATED METAL PRODUCTS	34	6.46	120.9	118.8	118.8	119.8	120.4	121.7	122.1	122.5	122.6	124.6	125.1	124.5	124.5	124.2
Metal containers	341	.52	99.4	98.6	95.8	99.6	97.6	98.9	100.6	99.5	103.1	102.7	102.3	104.9	105.8	102.8
Hardware,tools,cutlery	342	.73	111.5	109.0	109.8	112.8	112.4	113.4	113.2	114.5	112.5	112.9	113.6	112.6	112.7	113.5
Structural metal prod.	344	1.67	115.7	113.1	114.9	115.4	115.7	116.7	115.4	116.0	116.9	119.1	119.6	123.8	123.0	123.5
Fasteners, stamp, etc.	345-7	1.95	130.8	128.2	128.8	129.0	130.8	131.8	131.6	131.9	132.9	136.4	134.6	133.3	133.8	131.1
NONELECTRICAL MACHINERY	35	9.54	170.8	164.6	167.2	170.3	171.2	173.1	174.1	174.8	173.8	175.4	177.8	178.7	180.2	181.5
Engine & farm equip.	351,2	1.48	73.6	70.3	73.4	72.9	73.2	74.7	74.4	75.0	75.8	76.0	75.6	75.7	75.5	75.2
Construct. & allied eq.	353	1.68	83.7	79.7	81.2	83.2	84.2	86.3	86.0	88.0	87.2	87.2	87.2	86.7	88.0	90.3
Metalworking machinery	354	1.24	149.5	144.7	144.4	144.2	150.4	153.5	154.6	155.5	152.7	153.4	155.5	151.4	153.7	155.8
Spec. & genl. ind. eq.	355,6	2.12	114.6	111.2	111.5	112.6	114.2	116.0	116.0	117.5	119.4	119.0	119.8	119.6	120.0	119.3
Office, serv, & misc.	357-9	3.02	315.3	304.9	309.6	318.0	317.3	316.6	320.0	320.3	315.8	320.4	329.9	333.6	336.1	339.3
ELECTRICAL MACHINERY	36	7.15	180.1	176.6	178.7	179.1	179.5	181.5	182.2	181.8	183.0	182.2	180.9	180.9	181.5	180.8
Major elect. eq.& pts	361,2	1.27	104.3	102.9	101.6	101.9	104.8	106.0	106.9	105.9	106.1	107.0	106.3	107.0	108.6	108.0
Household appliances	363	.75	136.8	126.8	133.8	136.9	123.5	135.4	142.1	129.2	150.3	149.9	143.3	147.1	148.2	137.3
Cooking equipment	3631	.11	218.4	206.0	209.4	195.3	164.2	219.1	222.4	203.4	254.4	240.4	255.9	241.2	258.6	248.5
Refrigeration appl.	3632	.17	117.5	102.4	113.0	121.8	105.5	108.2	131.6	105.6	136.2	137.5	116.6	130.9	122.8	107.5
Laundry appliances	3633	.12	160.8	148.2	164.7	179.8	165.6	155.3	166.9	141.5	168.7	179.7	159.5	173.2	172.7	153.8
Misc. appliances	3634-6,9	.35	112.0	106.1	109.2	110.9	104.8	115.0	113.2	112.7	117.8	116.9	114.8	116.2	116.9	110.5
TV and radio sets	365	.44	155.3	143.3	157.6	154.5	148.8	157.6	159.2	163.8	152.3	153.3	172.9	156.1	160.9	160.4
Communication equipment	366	2.01	219.1	221.0	221.6	221.4	221.1	221.3	221.1	218.1	214.9	214.3	207.4	212.3	213.1	209.1
Electronic components	367	1.31	278.8	270.6	270.5	274.2	277.3	282.3	282.9	283.1	287.5	290.3	293.3	283.5	283.4	282.7
TV tubes	3671-3	.13	146.8	122.8	119.8	135.9	139.2	145.5	166.8	165.7	166.5	173.8	205.0	131.4	140.2	
Misc. electrical supp.	369	.70	133.5	131.0	132.9	131.8	135.6	136.6	131.7	133.9	136.6	136.3	137.5	136.5	139.3	139.9
Storage battery,repl.	3691	.13	137.5	140.3	143.9	138.1	144.4	154.2	131.2	133.2	133.9	123.3	137.5	120.9	143.8	146.3
TRANSPORTATION EQUIPMENT	37	9.13	132.1	130.0	130.4	133.1	132.8	131.9	131.8	132.7	134.8	135.2	136.8	136.7	136.4	134.4
Motor vehicles & parts	371	5.25	117.2	113.0	114.8	119.6	119.1	116.6	117.5	118.5	121.7	122.9	125.5	124.9	123.4	119.9
Autos, total		1.82	106.6	98.5	103.8	112.9	113.0	107.1	106.2	111.5	115.7	115.3	119.9	113.7	109.6	107.7
Consumer		1.16	93.4	86.3	91.0	98.9	99.0	93.8	93.0	97.7	101.3	101.0	105.1	99.6	96.0	94.4
Business		.66	130.0	120.1	126.6	137.6	137.7	130.6	129.4	135.9	141.0	140.5	146.2	138.7	133.6	131.3
Trucks and buses		1.03	161.1	159.9	154.5	159.3	157.3	157.4	162.8	158.4	163.3	167.7	181.3	180.8	181.5	168.9
Business vehicles		.41	136.6	140.9	133.5	129.0	131.4	136.7	137.9	132.4	140.1	145.0	153.9	147.8	150.0	
Consumer trucks		.63	177.0	172.2	168.2	178.9	174.1	170.8	179.0	175.3	178.4	182.4	199.1	202.3	201.9	190.0
Truck trailers	3715	.09	153.3	149.6	155.0	148.5	153.7	165.7	159.8	165.3	172.8	154.2	109.6	159.0	162.4	159.7
Motor vehicle parts	3714	2.31	104.4	101.9	104.2	106.0	105.5	103.9	104.4	104.4	105.7	107.7	105.6	107.3	106.7	106.0
Aircraft and parts	372	2.09	168.0	165.8	164.5	165.9	167.6	169.4	167.4	167.5	166.8	169.6	169.2	170.8	169.6	171.7
Ships and boats	373	.66	87.9	89.7	89.1	89.4	88.9	86.2	86.5	85.2	87.5	87.0	86.3	86.3	86.0	85.3
Rail & misc trans eq.	374-6,9	1.11	161.5	164.9	161.7	159.1	157.0	159.4	159.4	163.1	165.0	160.2	164.8	164.7	167.1	163.3
Railroad equipment	374	.27	31.7	37.5	33.4	30.1	27.0	28.6	29.7	30.2	30.2	36.7	44.0	54.0	60.0	
INSTRUMENTS	38	2.66	154.3	149.7	150.5	151.3	153.0	156.4	156.8	157.8	159.9	160.4	159.1	161.0	161.3	161.2
Equipment instr.& pts	381-4	1.52	185.0	181.1	182.2	181.7	182.7	184.0	185.7	187.7	190.5	194.0	194.4	196.0	195.1	191.8
MISC. MANUFACTURES	39	1.46	107.1	105.1	105.9	106.0	107.6	107.8	108.3	108.5	107.7	109.0	110.9	112.2	110.0	110.3
Misc. cons. goods	391,3,4,6	.84	106.4	104.3	106.5	104.6	107.1	106.5	106.5	105.5	106.5	108.4	111.0	111.8	107.6	108.0
Misc. bus. supplies	395,9	.62	108.2	102.4	105.7	107.2	107.3	108.7	110.7	112.4	111.6	112.6	112.8	113.8	112.9	112.8
ELECTRIC UTILITIES	491	4.17	132.0	129.0	127.6	129.7	132.1	134.6	138.8	132.2	132.8	131.6	132.9	131.0	135.3	134.5
Elec. util. generation		1.76	125.8	123.8	121.2	122.7	126.1	128.7	133.5	125.3	125.6	125.1	127.5	123.4	130.6	
Fossil fuel generation		1.41	117.4	116.1	113.7	114.7	117.6	119.5	125.0	114.3	115.6	116.9	121.3	115.5	124.3	
Hydro & nuclear gener.		.35	159.2	154.7	151.1	154.5	159.9	165.7	167.7	169.1	165.8	158.0	152.4	154.8	155.8	
Elec. util. sales		2.41	136.5	132.8	132.2	134.9	136.5	138.9	142.6	137.3	138.1	136.3	136.8	136.6		
Residential elec.		.95	138.3	136.5	131.1	132.7	136.7	140.8	150.0	137.5	136.4	138.5	140.0	133.3	137.9	
Nonresidential elec.		1.46	135.4	130.4	133.0	136.3	136.3	137.7	137.8	137.2	139.2	134.9	134.8	138.8		
Industrial elec.		.68	113.8	109.0	111.6	113.7	115.5	117.5	116.4	114.2	116.5	113.0	114.4	117.8	117.0	
Commercial & other elec.		.78	154.1	149.1	151.6	156.0	154.5	155.4	156.5	157.3	159.0	153.9	152.5	157.0	158.7	

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 4B—continued

INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

Not seasonally adjusted, 1977 = 100

Series	SIC Code	1977 Proportion	1988 Ann. Avg.	1988 MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR
FABRICATED METAL PRODUCTS	34	6.46	120.9	119.0	118.4	119.3	122.6	119.4	122.3	125.4	124.8	125.3	124.0	120.5	124.9	124.8
Metal containers	341	.52	99.4	97.7	95.4	99.6	102.1	101.6	105.4	105.8	103.2	100.2	96.7	97.3	103.7	101.9
Hardware,tools,cutlery	342	.73	111.5	110.1	107.8	110.8	114.4	111.7	115.7	118.9	115.1	112.9	110.2	106.5	115.1	114.7
Structural metal prod.	344	1.67	115.7	108.9	111.0	113.4	117.1	116.8	118.1	120.3	120.7	122.1	122.8	119.8	118.1	118.9
Fasteners, stamp, etc.	345-7	1.95	130.8	133.5	131.6	129.1	133.3	126.7	130.4	134.2	133.9	135.1	131.1	126.2	137.1	136.5
NONELECTRICAL MACHINERY	35	9.54	170.8	162.7	162.0	167.3	175.0	176.7	182.3	182.6	176.1	173.6	171.8	171.7	177.6	178.8
Engine & farm equip.	351,2	1.48	73.6	72.9	73.9	73.2	73.6	72.8	71.7	73.7	74.3	75.6	77.1	75.6	77.6	78.0
Construct. & allied eq.	353	1.68	83.7	78.0	78.9	81.4	85.0	86.8	86.9	91.4	87.5	86.5	88.3	85.4	89.0	88.5
Metalworking machinery	354	1.24	149.5	146.0	144.2	141.8	151.0	151.5	157.5	161.5	156.9	150.6	149.5	147.0	156.5	157.2
Spec. & genl. ind. eq.	355,6	2.12	114.6	112.4	110.4	112.3	115.6	114.1	117.0	121.0	119.8	119.2	118.6	115.8	120.5	120.5
Office, serv, & misc.	357-9	3.02	315.3	296.3	295.3	310.5	326.7	332.2	346.1	339.2	322.9	318.0	311.5	316.7	325.0	329.2
ELECTRICAL MACHINERY	36	7.15	180.1	175.4	176.5	177.1	179.1	176.1	182.2	184.0	189.4	185.9	181.7	179.9	181.4	179.1
Major elect. eq.& pts	361,2	1.27	104.3	101.7	99.4	101.0	106.8	106.4	109.6	111.0	109.3	106.0	102.7	104.4	106.4	106.9
Household appliances	363	.75	136.8	130.0	139.4	137.9	127.0	120.9	134.6	133.5	167.9	145.4	123.7	146.4	156.2	140.5
Cooking equipment	3631	.11	218.4	194.0	204.1	219.1	176.0	188.3	211.0	206.9	292.1	257.9	220.2	236.3	258.1	234.1
Refrigeration appl.	3632	.17	117.5	113.5	131.9	130.9	115.0	108.6	101.0	109.7	147.1	116.7	81.9	128.9	137.3	119.6
Laundry appliances	3633	.12	160.8	158.4	169.2	170.6	165.2	142.4	164.6	140.4	194.3	159.0	138.0	180.2	191.8	164.3
Misc. appliances	3634-6,9	.35	112.0	107.9	112.3	104.5	104.1	98.1	116.0	119.1	129.5	118.7	107.9	114.7	120.8	112.5
TV and radio sets	365	.44	155.3	125.3	144.0	149.4	140.8	151.3	176.2	169.5	199.5	176.4	149.5	145.1	151.8	142.4
Communication equipment	366	2.01	219.1	222.4	220.0	219.0	220.6	217.3	218.2	217.7	214.8	216.7	217.0	212.8	211.6	210.4
Electronic components	367	1.31	278.8	269.7	269.9	273.2	277.0	273.3	283.1	284.0	290.2	295.2	296.4	284.1	281.7	281.5
TV tubes	3671-3	.13	146.8	118.5	129.1	145.8	123.4	128.4	177.3	156.8	195.7	188.8	150.4	140.4	145.9	
Misc. electrical supp.	369	.70	133.5	125.0	125.7	125.4	132.5	127.0	131.8	142.7	145.9	144.5	146.7	137.0	133.2	133.6
Storage battery,repl.	3691	.13	137.5	112.9	108.3	105.8	128.1	127.4	142.3	173.9	174.5	155.8	161.2	120.8	119.6	117.7
TRANSPORTATION EQUIPMENT	37	9.13	132.1	134.3	133.1	136.1	137.9	116.3	123.8	134.1	138.1	136.7	132.8	137.7	140.6	136.8
Motor vehicles & parts	371	5.25	117.2	120.3	119.7	125.3	128.7	93.2	106.2	120.9	127.3	123.7	114.9	124.9	130.4	123.4
Autos, total		1.82	106.6	111.1	112.7	123.1	129.6	68.3	85.1	111.4	125.7	116.9	102.9	114.8	120.5	112.0
Consumer		1.16	93.4	97.3	98.8	107.9	113.5	59.9	74.6	97.6	110.2	102.4	90.2	100.5	105.6	98.1
Business		.66	130.0	135.4	137.4	150.1	158.0	83.3	103.8	135.8	153.3	142.5	125.4	139.9	146.9	136.5
Trucks and buses		1.03	161.1	174.1	163.8	170.4	173.7	115.8	149.0	167.9	173.7	167.6	148.9	178.7	198.5	178.0
Business vehicles		.41	136.6	155.2	142.7	139.4	146.0	100.6	126.2	140.3	146.9	141.4	125.0	147.8	164.3	
Consumer trucks		.63	177.0	186.4	177.4	190.6	191.7	125.7	163.7	185.8	191.1	184.6	164.5	198.8	220.7	198.6
Truck trailers	3715	.09	153.3	153.9	152.0	150.3	159.5	147.1	163.6	176.4	176.3	158.8	115.9	141.3	157.2	164.3
Motor vehicle parts	3714	2.31	104.4	102.2	104.2	105.8	106.6	100.6	101.4	105.2	105.8	108.1	109.1	108.1	106.5	106.3
Aircraft and parts	372	2.09	168.0	166.8	163.8	165.0	166.6	164.6	162.9	167.3	167.6	172.7	173.5	171.6	171.5	172.6
Ships and boats	373	.66	87.9	91.2	91.5	91.4	89.4	83.6	83.0	83.1	86.5	87.4	87.0	86.5	86.7	86.9
Rail & misc trans eq.	374-6,9	1.11	161.5	165.3	163.4	159.3	156.7	154.3	158.0	164.4	164.9	160.1	168.4	165.0	162.7	162.9
Railroad equipment	374	.27	31.7	31.2	32.0	29.0	26.3	28.3	32.1	40.5	34.0	36.0	52.1	51.0	38.4	
INSTRUMENTS	38	2.66	154.3	148.1	147.9	148.8	155.8	158.5	161.0	162.4	161.1	159.6	157.7	157.5	158.8	159.3
Equipment instr.& pts	381-4	1.52	185.0	177.9	177.1	179.0	187.4	190.4	194.4	199.1	192.0	190.3	188.0	188.1	189.9	188.4
MISC. MANUFACTURES	39	1.46	107.1	103.7	104.0	104.2	109.8	107.1	113.9	116.0	111.8	107.0	105.1	106.4	110.1	110.2
Misc. cons. goods	391,3,4,6	.84	106.4	104.3	104.7	104.4	110.8	105.1	112.0	113.8	111.5	104.5	103.3	105.3	105.8	108.0
Misc. bus. supplies	395,9	.62	108.2	102.8	103.2	103.9	108.5	109.9	116.5	119.0	112.1	110.4	107.7	108.0	116.0	113.1
ELECTRIC UTILITIES	491	4.17	132.0	123.0	117.6	117.3	135.0	146.0	152.9	137.2	123.5	123.4	131.6	137.2	143.5	127.4
Elec. util. generation		1.76	125.8	117.3	111.0	114.2	132.1	141.7	147.6	125.0	115.8	119.1	127.9	127.1	135.3	
Fossil fuel generation		1.41	117.4	107.1	100.5	104.1	124.5	135.4	143.6	115.9	108.7	111.3	119.9	117.5	127.4	
Hydro & nuclear gener.		.35	159.2	158.5	152.8	154.7	162.5	166.8	163.6	161.5	144.2	149.9	159.8	165.7	166.6	
Elec. util. sales		2.41	136.5	127.2	122.4	119.6	137.2	149.1	156.8	146.0	129.1	126.6	134.3	144.5		
Residential elec.		.95	138.3	131.5	116.4	105.6	129.3	156.6	172.2	146.9	117.0	120.6	141.6	157.1	158.8	
Nonresidential elec.		1.46	135.4	124.4	126.4	128.8	142.3	144.2	146.7	145.5	137.1	130.5	129.5	136.4		
Industrial elec.		.68	113.8	107.0	110.1	112.7	119.2	116.5	120.0	118.1	116.7	113.3	109.5	112.4	119.6	
Commercial & other elec.		.76	154.1	139.5	140.5	142.8	162.4	168.4	170.0	169.3	154.7	145.6	146.9	157.3	164.5	

Note: Seasonally adjusted industry totals are not aggregated from the seasonally adjusted components, but result from independent seasonal adjustment of the aggregated not seasonally adjusted components.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 5

INDUSTRIAL PRODUCTION: INDEXES; 1977 = 100

Quarterly averages, seasonally adjusted

SERIES	Quarterly Averages of Monthly Indexes									
	1986 Q4	1987 Q1	Q2	Q3	Q4	1988 Q1	Q2	Q3	Q4	1989 Q1
Industrial production	125.9	126.9	128.2	131.0	133.2	134.5	136.0	138.4	139.9	140.6
Products, total	134.5	135.6	136.8	139.6	141.1	143.2	144.8	147.1	148.6	150.0
Final products	133.3	134.4	135.4	138.0	139.5	141.5	143.3	145.5	147.0	148.3
Consumer goods	125.4	126.2	126.7	128.7	129.4	131.2	132.5	134.7	137.1	138.3
Durable consumer goods	117.9	119.9	118.1	120.1	122.8	120.9	124.7	125.8	130.2	130.7
Automotive products	115.3	120.3	116.2	116.6	120.4	119.0	125.4	125.0	131.0	130.9
Home goods	119.9	119.5	119.5	122.7	124.7	122.4	124.2	126.3	129.5	130.6
Nondurable consumer goods	128.2	128.6	129.9	131.9	131.9	135.1	135.4	138.0	139.7	141.1
Equipment, total	143.7	145.3	146.9	150.4	152.8	155.2	157.6	160.0	160.0	161.5
Business & defense equipment	148.7	150.4	152.1	154.7	157.2	160.1	162.5	165.1	165.6	167.6
Business equipment	139.2	140.7	142.6	145.8	148.9	152.3	156.5	160.1	161.3	164.6
Defense and space equipment	185.8	188.3	189.0	189.2	189.3	190.5	186.0	184.8	182.2	179.3
Intermediate products	138.5	139.9	141.8	145.1	146.6	149.2	150.0	152.2	154.4	156.0
Construction supplies	127.7	130.2	129.6	132.6	133.8	137.3	138.0	138.3	140.7	140.8
Business supplies	147.7	148.1	152.2	155.7	157.6	159.3	160.2	164.1	166.1	169.0
Commercial energy products	129.6	127.7	130.9	133.6	133.1	135.2	136.6	137.3	136.1	138.3
Materials	114.3	115.0	116.5	119.2	122.5	122.5	124.0	126.5	128.0	127.6
Durable goods materials	120.7	121.4	122.9	125.7	130.3	131.5	134.1	137.1	139.2	138.6
Basic metal materials	80.2	79.4	81.8	89.4	97.3	91.6	93.4	98.7	100.8	98.8
Nondurable goods materials	120.3	121.2	124.0	128.2	130.1	129.4	130.4	132.8	135.4	136.6
Textile, paper, & chem materials	120.9	122.3	125.1	130.5	133.0	131.6	132.4	135.3	138.1	139.5
Textile materials	106.2	106.1	111.4	116.8	113.1	111.8	109.0	109.3	109.9	112.3
Pulp and paper materials	137.0	136.4	137.7	144.6	145.1	145.7	145.9	148.9	148.6	148.1
Chemical materials	120.3	122.9	125.3	130.2	135.5	133.5	135.7	139.4	144.1	145.8
Energy materials	97.8	98.3	98.7	100.0	102.1	100.9	100.6	102.5	102.0	100.7
Manufacturing	130.4	131.6	133.2	135.7	138.1	139.6	141.5	144.0	145.8	146.9
Durable	129.1	130.5	131.4	133.7	136.9	138.4	141.0	143.3	145.2	145.8
Nondurable	132.1	133.1	135.7	138.6	139.7	141.4	142.3	145.0	146.7	148.3
Mining and Utilities	101.5	102.3	102.5	104.9	107.3	107.1	106.7	108.1	108.0	107.1
Mining	96.9	98.8	99.0	100.7	104.3	102.5	103.4	103.9	104.2	102.0
Utilities	109.1	108.1	108.3	111.8	112.3	114.7	111.9	115.1	114.3	115.5

Table 6

INDUSTRIAL PRODUCTION: GROSS VALUE OF PRODUCTS

Billions of 1982 dollars at annual rates, seasonally adjusted

SERIES	Billions of 1982 Dollars at Annual Rates												
			Quarters						Months				
	1982 Dollars	1988 Ann. Avg.	1987 Q4	1988 Q1	Q2	Q3	Q4	1989 Q1	1988 NOV	DEC	1989 JAN	FEB	MAR	APR
Products, total	1376.8	1824.5	1775.1	1798.5	1815.4	1826.6	1861.4	1878.5	1855.5	1875.3	1885.1	1878.6	1871.9	1886.5
Final products	1084.5	1401.2	1360.1	1380.8	1395.1	1402.5	1430.6	1444.3	1426.3	1442.1	1447.5	1448.9	1436.5	1452.6
Consumer goods	703.7	902.4	879.2	893.5	897.2	897.8	922.6	931.3	918.4	934.4	935.6	934.5	923.8	934.0
Durable consumer goods	133.3	218.4	212.5	209.2	218.1	218.9	228.6	230.2	226.2	233.8	232.4	231.8	226.5	229.8
Automotive products	65.9	120.2	115.0	113.4	120.8	120.2	127.3	128.1	125.3	132.1	130.4	129.1	124.9	127.8
Home goods	67.4	98.3	97.6	95.7	97.4	98.7	101.3	102.1	100.8	101.6	102.1	102.7	101.5	102.0
Nondurable consumer goods	570.4	684.0	666.7	684.4	679.0	678.8	694.0	701.1	692.2	700.7	703.2	702.7	697.4	704.2
Equipment, total	380.8	498.8	480.9	487.3	497.9	504.7	508.0	513.0	507.9	507.7	511.9	514.4	512.7	518.5
Business & defense equipment	345.4	479.7	460.3	468.1	478.3	485.2	489.7	495.9	489.7	490.1	494.6	497.9	495.3	500.7
Business equipment	278.0	384.2	362.7	370.2	382.7	390.6	395.8	403.6	395.7	397.0	402.0	405.5	403.2	408.5
Defense and space equipment	67.4	95.4	97.6	97.9	95.5	94.5	93.9	92.3	93.9	93.1	92.6	92.4	92.1	92.1
Intermediate products	292.2	423.3	415.0	417.7	420.3	424.1	430.8	434.2	429.3	433.2	437.7	429.7	435.3	434.0
Construction supplies	108.3	168.0	162.7	166.2	167.1	167.9	170.4	170.5	170.3	171.0	172.4	168.8	170.4	169.7
Business supplies	183.9	255.3	252.4	251.5	253.2	256.2	260.5	263.7	259.0	262.2	265.2	261.0	264.9	
Commercial energy products	63.4	80.0	82.7	79.1	80.9	79.7	80.5		79.2	80.5	80.3	77.4		

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 7

INDUSTRIAL PRODUCTION: DIFFUSION INDEXES

Percent of component series higher than in earlier months

	ONE MONTH EARLIER	THREE MONTHS EARLIER	SIX MONTHS EARLIER
1977-88			
AVERAGE	53.7	56.8	58.9
HIGH	76.6	79.4	88.3
LOW	26.4	23.2	23.0
1987			
MARCH	49.4	56.2	69.2
APRIL	49.6	59.5	63.7
MAY	59.5	58.1	63.9
JUNE	51.4	57.7	56.9
JULY	64.7	67.7	66.1
AUGUST	52.8	64.9	65.9
SEPTEMBER	45.6	61.5	64.3
OCTOBER	59.5	56.2	73.4
NOVEMBER	58.9	63.1	71.4
DECEMBER	54.2	69.4	72.4
1988			
JANUARY	57.3	68.3	67.1
FEBRUARY	48.8	54.6	62.7
MARCH	54.4	60.3	71.8
APRIL	54.6	56.9	63.9
MAY	55.6	60.1	60.5
JUNE	56.0	59.9	57.9
JULY	65.9	66.7	69.6
AUGUST	55.6	67.5	69.2
SEPTEMBER	53.2	63.7	65.7
OCTOBER	59.9	63.3	71.2
NOVEMBER	55.2	61.7	68.3
DECEMBER	54.4	66.5	70.0
1989			
JANUARY	62.5	61.7	65.7
FEBRUARY	44.8	53.6	63.7
MARCH	44.8	47.0	53.4

NOTE: THE DIFFUSION INDEXES SHOW THE PERCENT OF THE INDUSTRIAL PRODUCTION INDEX'S 252 SEASONALLY ADJUSTED COMPONENT SERIES THAT IN THE MONTH INDICATED WERE HIGHER THAN THEY WERE ONE MONTH EARLIER, THREE MONTHS EARLIER, AND SIX MONTHS EARLIER. IN CALCULATING THE DIFFUSION INDEXES HALF OF THE UNCHANGED COMPONENTS ARE COUNTED AS BEING HIGHER AND NO ALLOWANCE IS MADE FOR THE RELATIVE IMPORTANCE OF THE INDIVIDUAL COMPONENTS IN TOTAL INDUSTRIAL PRODUCTION. DIFFUSION INDEXES BASED ON CHANGES OVER A SIX-MONTH PERIOD GENERALLY SHOW MORE PRONOUNCED CYCLICAL PATTERNS THAN DIFFUSION INDEXES BASED ON CHANGES OVER SHORTER PERIODS.

Table 8

AUTO ASSEMBLIES AT ANNUAL RATES

Seasonally adjusted

	1988 Ann. Avg.	Millions of Units												
		1988 APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1989 JAN	FEB	MAR	APR
Autos, total	7.1	7.0	7.5	7.5	7.1	7.1	7.4	7.7	7.6	7.9	7.5	7.2	7.1	7.4

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 9A

ELECTRIC POWER USE BY INDUSTRIES

Seasonally adjusted indexes, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes: 1988 Avg.	1988 Q1	1988 Q2	1988 Q3	1988 Q4	1989 Q1	Percentage change from previous quarter: 1988 Q2	1988 Q3	1988 Q4	1989 Q1	Percentage change from year ago: 1988 Q1	Indexes: 1989 FEB	1989 MAR
TOTAL	10-14,20-39	785.8	107.9	106.5	105.9	109.2	110.3	110.1	-0.6	3.1	1.0	-0.1	3.4	109.4	109.6
MAJOR INDUSTRY DIVISIONS															
MINING	10-14	59.4	118.0	116.4	114.2	118.9	123.0	116.0	-1.8	4.1	3.4	-5.6	-0.3	114.5	114.3
MANUFACTURING	20-39	726.4	107.3	105.9	105.3	108.5	109.4	109.8	-0.6	3.1	.8	.4	3.7	109.2	109.3
DURABLE	24,25,32-39	344.3	108.2	106.1	106.4	109.1	111.1	108.8	.3	2.6	1.8	-2.1	2.5	108.3	107.5
NONDURABLE	20-23,26-31	382.1	106.5	105.4	104.8	107.9	107.8	110.4	-0.6	2.9	-0.1	2.5	4.8	109.8	110.6
INDUSTRY GROUPS AND SERIES															
METAL MINING	10	15.1	118.3	110.7	106.2	124.2	137.0	117.3	-4.0	16.9	10.3	-14.4	6.0	114.2	111.0
Iron ore	101	6.1	115.9	108.6	97.4	122.8	146.4	112.1	-10.3	26.0	19.2	-23.4	3.2	109.2	100.7
Copper ore	102	5.9	140.0	133.0	137.6	142.4	148.3	145.1	3.5	3.5	4.1	-2.1	9.2	142.0	152.9
COAL	11,12	10.3	135.1	134.7	130.2	132.3	143.4	131.7	-3.4	1.6	8.4	-8.2	-2.3	130.1	133.4
OIL AND GAS EXTRACTION	13	23.0	116.1	118.8	117.5	116.3	112.1	111.4	-1.1	-1.0	-3.6	-0.6	-6.2	110.7	109.9
Crude oil and natural gas	131	18.2	118.1	119.8	119.6	118.4	114.6	113.0	-0.2	-1.0	-3.2	-1.4	-5.7	111.9	111.3
Natural gas liquids	132	3.4	98.9	108.1	100.4	95.5	92.0	94.7	-7.2	-4.9	-3.6	2.9	-12.5	96.0	100.2
STONE AND EARTH MINERALS	14	11.0	103.1	99.2	101.9	106.0	105.5	106.4	2.7	4.0	-0.4	.9	7.3	102.0	105.6
Crushed stone	142	2.4	149.2	140.3	150.6	150.2	154.8	141.2	7.3	-0.3	3.0	-8.7	.6	134.9	143.2
Sand and gravel	144	2.0	104.1	100.3	105.7	103.8	105.9	104.7	5.4	-1.7	1.9	-1.1	4.4	104.0	104.8
Chemical & fertilizer mat.	147	5.0	80.0	77.9	78.1	83.4	81.3	87.4	.3	6.8	-2.5	7.4	12.2	84.9	86.3
FOODS	20	42.4	130.0	128.4	129.4	131.4	130.7	131.4	.7	1.6	-0.6	.6	2.4	129.7	132.3
Meat products	201	6.9	125.6	123.4	126.3	126.2	126.3	125.6	2.3	-0.1	.1	-0.5	1.7	125.7	126.4
Dairy products	202	5.3	133.8	133.7	133.9	134.6	133.0	135.4	.2	.5	-1.2	1.8	1.3	135.5	135.0
Canned and frozen foods	203	5.7	148.5	143.8	145.9	153.7	149.7	149.1	1.5	5.3	-2.6	-0.4	3.7	146.4	149.3
Grain mill products	204	7.4	116.0	115.3	115.9	114.2	118.8	122.0	.6	-1.5	4.0	2.7	5.8	119.6	123.5
Bakery products	205	2.5	143.2	143.2	140.3	143.7	145.7	146.1	-2.0	2.4	1.4	.3	2.0	142.7	144.7
Sugar and confectionery	206	3.3	191.5	194.3	187.7	190.0	194.0	198.2	-3.4	1.2	2.1	2.1	2.0	195.9	208.6
Fats and oils	207	3.4	98.2	98.7	97.2	96.2	100.7	102.1	-1.5	-1.0	4.6	1.4	3.4	97.7	102.1
Beverages	208	4.8	130.3	129.2	128.9	132.5	130.3	129.0	-0.2	2.8	-1.6	-1.0	-0.1	127.3	130.4
Misc. food preparations	209	3.1	119.9	117.1	119.9	123.9	118.3	117.5	2.4	3.4	-4.5	-0.7	.3	114.6	117.6
TOBACCO PRODUCTS	21	1.3	107.6	110.7	100.8	111.3	107.8	102.6	-8.9	10.4	-3.1	-4.9	-7.4	97.5	98.6
TEXTILE MILL PRODUCTS	22	28.3	106.3	109.6	105.3	107.0	103.5	110.7	-3.9	1.6	-3.2	6.9	1.0	110.0	110.8
Fabrics	221-4	12.1	95.2	100.6	95.5	94.8	90.6	97.7	-5.1	-0.8	-4.4	7.9	-2.9	97.4	96.8
Knit goods	225	3.7	92.0	92.0	90.9	91.6	94.0	96.4	-1.2	.8	2.6	2.5	4.7	97.2	95.5
Fabric finishing	226	2.2	135.3	132.8	135.8	134.7	137.9	144.6	2.2	-0.8	2.4	4.9	8.9	144.7	140.0
Yarn and thread	228	6.7	123.6	126.5	120.1	126.9	121.4	130.5	-5.0	5.7	-4.3	7.5	3.2	129.3	131.8
Miscellaneous textiles	229	2.1	108.9	109.5	108.7	109.3	108.0	110.5	-0.8	.6	-1.2	2.3	.9	108.5	109.0
APPAREL PRODUCTS	23	6.6	134.4	134.2	134.1	135.0	134.4	131.3	-0.1	.7	-0.5	-2.3	-2.2	129.6	133.8
Men's outerwear	231,2	2.1	149.9	148.8	150.8	147.6	152.6	147.6	1.3	-2.1	3.4	-3.3	-0.8	145.8	150.1
Women's outerwear	233	1.9	107.3	113.3	105.9	106.3	104.7	105.4	-6.5	.3	-1.4	.6	-7.0	103.2	105.8
LUMBER AND PRODUCTS	24	16.4	143.2	142.5	143.7	143.3	143.3	144.5	.8	-0.3	.0	.8	1.4	142.9	143.2
Lumber	242	6.9	114.8	117.0	114.6	113.5	114.2	118.1	-2.0	-0.9	.6	3.4	.9	116.5	117.9
Millwork and plywood	243	4.4	151.9	153.2	151.4	152.3	150.9	146.8	-1.1	.6	-0.9	-2.7	-4.2	142.3	143.5
FURNITURE AND FIXTURES	25	4.2	145.4	143.8	144.0	148.1	145.9	144.5	.2	2.8	-1.5	-0.9	.5	142.7	145.9
Home furniture	251	2.8	128.6	127.8	128.0	129.2	129.3	128.1	.1	.9	.1	-1.0	.2	126.7	128.8
PAPER AND PRODUCTS	26	71.9	129.1	129.3	127.9	129.3	130.0	130.7	-1.1	1.1	.5	.5	1.0	129.0	128.2
Wood pulp	261	5.9	136.2	134.1	133.4	140.8	137.0	151.0	-0.6	5.6	-2.7	10.2	12.6	150.4	154.6
Paper	262	34.4	137.8	139.9	135.8	137.8	137.9	137.9	-3.0	1.5	.1	.0	-1.5	135.9	133.5
Paperboard	263	22.1	107.3	101.0	104.3	110.8	113.3	106.8	3.3	6.2	2.2	-5.7	5.7	103.3	107.0
Converted paper	264	5.0	119.1	117.6	121.2	119.8	117.6	116.0	3.0	-1.2	-1.8	-1.3	-1.4	117.0	115.2
Paperboard containers	265	3.4	133.7	132.4	132.1	135.7	134.7	137.0	-0.2	2.7	-0.7	1.7	3.4	138.4	135.8
Building paper and board	266	1.1	169.6	169.2	167.0	174.3	168.4	174.6	-1.3	4.4	-3.4	3.7	3.2	161.8	170.7
PRINTING AND PUBLISHING	27	10.6	170.8	168.6	170.0	172.3	172.2	176.3	.8	1.4	-0.1	2.4	4.6	175.6	178.1
Newspapers	271	2.6	140.3	141.3	139.8	141.4	138.6	141.0	-1.1	1.1	-1.9	1.7	-0.2	139.7	142.7
Commercial Printing	275	4.8	203.5	200.8	202.8	203.3	207.0	209.2	1.0	.2	1.8	1.1	4.2	209.3	210.8
CHEMICALS AND PRODUCTS	28	162.1	86.8	83.8	84.0	89.1	90.5	93.5	.3	6.1	1.5	3.4	11.6	93.2	94.3
Basic chemicals	281	85.6	69.2	65.4	66.5	71.7	73.8	78.5	1.7	7.8	2.9	6.4	20.1	78.1	79.6
Alkalies and chlorine	2812	13.3	100.8	104.9	95.7	102.6	100.6	103.5	-8.7	7.1	-1.9	2.9	-1.3	105.7	101.1
Inorganic chemicals,nec	2819	58.1	44.8	39.5	43.1	46.7	50.2	56.3	9.2	8.4	7.5	12.0	42.6	55.1	58.9
Acid and fertilizer mat.		13.0	69.8	68.9	66.9	70.0	73.7	72.4	-2.8	4.6	5.3	-1.7	5.1	71.0	71.7
Nuclear mats., nondefense		44.6	34.3	27.7	33.3	36.6	40.1	50.2	20.1	10.2	9.3	25.2	81.2	49.4	53.6
Synthetic materials	282	19.3	132.2	131.2	130.8	131.6	135.4	136.6	-0.2	.6	2.9	.9	4.1	135.3	134.7
Plastics materials	2821	9.2	164.4	163.1	163.3	164.6	166.9	165.2	.2	.8	1.4	-1.0	1.3	162.4	167.3
Drugs	283	4.1	168.4	163.3	166.2	175.1	168.1	167.8	1.8	5.4	-4.0	-0.2	2.8	165.3	169.7
Soaps and toiletries	284	2.1	139.8	130.6	138.8	147.3	141.7	141.6	6.3	6.1	-3.7	-0.1	8.4	138.1	144.9
Industrial organic chem.	286	35.8	97.2	97.4	95.5	97.5	98.3	98.4	-1.9	2.0	.8	.1	1.1	98.0	97.8
Farm chemicals	287	10.5	89.1	92.7	86.6	88.2	89.2	94.5	-6.6	1.8	1.2	5.9	1.9	94.2	92.8

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 9B

ELECTRIC POWER USE BY INDUSTRIES

Not seasonally adjusted, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes: 1988 Avg.	1988 Q1	Q2	Q3	Q4	1989 Q1	Percentage change from previous quarter: 1988 Q2	Q3	Q4	1989 Q1	Percentage change from year ago: 1988 Q1	Indexes: 1989 FEB	MAR
TOTAL	10-14,20-39	785.8	107.9	104.6	107.3	111.0	108.8	108.2	2.6	3.4	-2.0	-0.6	3.4	107.0	109.2
MAJOR INDUSTRY DIVISIONS															
MINING	10-14	59.4	118.0	120.5	116.8	115.2	119.4	120.2	-3.1	-1.4	3.7	.6	-0.3	118.6	118.3
MANUFACTURING	20-39	726.4	107.3	103.5	106.7	110.7	108.1	107.4	3.0	3.8	-2.4	-0.7	3.7	106.2	108.6
DURABLE	24,25,32-39	344.3	108.2	105.1	107.6	110.6	109.4	107.7	2.4	2.8	-1.0	-1.6	2.5	106.8	108.9
NONDURABLE	20-23,26-31	382.1	106.5	102.2	105.9	110.9	106.9	107.0	3.7	4.7	-3.6	.2	4.8	105.6	108.3
INDUSTRY GROUPS AND SERIES															
METAL MINING	10	15.1	118.3	114.9	117.4	118.6	122.4	121.6	2.1	1.1	3.2	-0.6	5.8	118.9	121.2
Iron ore	101	6.1	115.9	113.9	113.3	117.3	119.2	117.3	-0.5	3.5	1.6	-1.6	3.0	113.2	117.0
Copper ore	102	5.9	140.0	134.5	142.7	138.1	144.8	147.1	6.1	-3.3	4.9	1.6	9.3	144.2	149.3
COAL	11,12	10.3	135.1	154.4	129.1	116.7	140.0	150.9	-16.4	-9.7	20.0	7.8	-2.3	153.4	148.8
OIL AND GAS EXTRACTION	13	23.0	116.1	118.9	116.4	116.9	112.4	111.5	-2.1	.5	-3.9	-0.8	-6.2	108.9	107.8
Crude oil and natural gas	131	18.2	118.1	120.9	117.7	118.5	115.3	114.0	-2.7	.7	-2.7	-1.1	-5.7	110.6	109.2
Natural gas liquids	132	3.4	98.9	102.7	103.3	100.4	89.3	89.9	.5	-2.8	-11.0	.6	-12.5	90.5	94.1
STONE AND EARTH MINERALS	14	11.0	103.1	96.1	103.9	104.9	107.5	103.1	8.1	1.0	2.5	-4.1	7.2	100.9	103.4
Crushed stone	142	2.4	149.2	127.3	154.0	156.6	158.9	128.1	20.9	1.7	1.5	-19.4	.6	121.9	131.7
Sand and gravel	144	2.0	104.1	86.2	106.4	110.6	113.0	90.0	23.5	4.0	2.1	-20.4	4.4	88.5	89.2
Chemical & fertilizer mat.	147	5.0	80.0	79.5	79.1	79.0	82.2	89.3	-0.6	-0.1	4.0	8.6	12.2	87.5	88.7
FOODS	20	42.4	130.0	120.6	125.9	141.7	131.8	123.4	4.4	12.6	-7.0	-6.3	2.4	121.7	122.9
Meat products	201	6.9	125.6	114.5	123.0	138.5	126.3	116.5	7.4	12.6	-8.8	-7.7	1.7	117.0	114.7
Dairy products	202	5.3	133.8	123.1	134.8	148.7	128.8	124.7	9.5	10.3	-13.4	-3.2	1.3	122.3	125.1
Canned and frozen foods	203	5.7	148.5	133.0	139.0	170.1	151.9	137.8	4.6	22.3	-10.7	-9.3	3.6	136.2	139.5
Grain mill products	204	7.4	116.0	113.6	111.8	117.3	121.5	120.2	-1.6	4.9	3.7	-1.1	5.8	119.6	119.2
Bakery products	205	2.5	143.2	131.8	138.6	159.1	143.5	134.4	5.2	14.8	-9.8	-6.3	2.0	131.1	133.3
Sugar and confectionery	206	3.3	191.5	190.7	169.3	186.7	219.2	194.4	-11.2	10.3	17.4	-11.3	1.9	193.9	185.0
Fats and oils	207	3.4	98.2	99.7	92.8	94.9	105.5	103.0	-6.9	2.2	11.2	-2.3	3.4	100.9	99.9
Beverages	208	4.8	130.3	117.8	128.2	147.8	127.5	117.6	8.9	15.2	-13.7	-7.7	-0.1	115.2	118.5
Misc. food preparations	209	3.1	119.9	109.5	117.6	133.2	119.3	109.9	7.4	13.3	-10.4	-7.9	.3	106.9	109.9
TOBACCO PRODUCTS	21	1.3	107.6	103.2	97.7	117.7	111.8	95.6	-5.4	20.4	-5.0	-14.6	-7.5	96.7	91.5
TEXTILE MILL PRODUCTS	22	28.3	106.3	98.6	108.2	113.6	104.7	99.5	9.7	5.1	-7.9	-4.9	.9	102.7	103.8
Fabrics	221-4	12.1	95.2	90.2	98.0	100.9	91.7	87.5	8.7	3.0	-9.1	-4.6	-3.0	90.1	90.1
Knit goods	225	3.7	92.0	81.6	93.5	101.6	91.4	85.3	14.6	8.7	-10.1	-6.6	4.6	89.7	89.6
Fabric finishing	226	2.2	135.3	126.2	136.6	138.1	140.2	137.3	8.2	1.1	1.5	-2.0	8.8	142.1	137.7
Yarn and thread	228	6.7	123.6	112.5	124.2	134.3	123.1	116.2	10.4	8.1	-8.3	-5.6	3.3	120.5	124.4
Miscellaneous textiles	229	2.1	108.9	103.1	110.9	114.6	106.9	103.9	7.5	3.4	-6.8	-2.8	.8	103.8	108.3
APPAREL PRODUCTS	23	6.6	134.4	122.1	130.5	155.2	129.8	119.4	6.9	18.9	-16.3	-8.0	-2.2	122.4	122.1
Men's outerwear	231,2	2.1	149.9	130.9	148.9	172.8	146.8	129.8	13.7	16.1	-15.0	-11.6	-0.8	134.0	133.3
Women's outerwear	233	1.9	107.3	101.0	102.7	125.0	100.4	93.9	1.6	21.7	-19.7	-6.5	-7.0	95.4	94.8
LUMBER AND PRODUCTS	24	16.4	143.2	145.7	144.0	139.6	143.4	147.7	-1.2	-3.0	2.7	3.0	1.4	149.5	148.0
Lumber	242	6.9	114.8	119.6	115.5	109.6	114.7	120.7	-3.4	-5.1	4.6	5.2	.9	123.2	120.7
Millwork and plywood	243	4.4	151.9	156.2	153.2	148.5	149.5	149.7	-1.9	-3.0	.6	.2	-4.2	150.1	147.6
FURNITURE AND FIXTURES	25	4.2	145.4	144.1	141.9	149.2	146.4	144.8	-1.5	5.1	-1.9	-1.1	.5	149.0	146.3
Home furniture	251	2.8	128.6	129.1	126.7	128.2	130.3	129.3	-1.8	1.1	1.7	-0.8	.2	134.2	130.4
PAPER AND PRODUCTS	26	71.9	129.1	127.7	128.6	130.6	129.6	129.0	.7	1.5	-0.8	-0.4	1.0	126.6	128.6
Wood pulp	261	5.9	136.2	130.4	134.3	140.7	139.5	146.9	3.0	4.7	-0.8	5.3	12.7	149.9	151.0
Paper	262	34.4	137.8	139.4	137.4	137.6	136.8	137.3	-1.4	.1	-0.6	.4	-1.5	134.0	135.0
Paperboard	263	22.1	107.3	101.7	105.6	110.2	111.8	107.5	3.8	4.3	1.4	-3.8	5.7	104.8	110.0
Converted paper	264	5.0	119.1	113.7	122.0	123.6	116.9	112.1	7.3	1.3	-5.4	-4.1	-1.4	114.1	112.9
Paperboard containers	265	3.4	133.7	129.2	131.5	139.9	134.1	133.6	1.8	6.4	-4.1	-0.4	3.4	134.2	135.7
Building paper and board	266	1.1	169.6	168.5	168.3	174.1	167.5	173.8	-0.1	3.4	-3.8	3.8	3.2	162.1	178.3
PRINTING AND PUBLISHING	27	10.6	170.8	154.3	165.3	194.2	169.5	161.4	7.1	17.5	-12.7	-4.8	4.6	160.7	162.4
Newspapers	271	2.6	140.3	128.8	138.2	156.0	136.0	128.6	7.3	14.3	-13.9	-5.5	-0.2	126.8	127.0
Commercial Printing	275	4.8	203.5	184.1	195.0	229.7	205.1	191.8	5.9	17.8	-10.7	-6.5	4.2	191.7	193.6
CHEMICALS AND PRODUCTS	28	162.1	86.8	82.5	86.6	89.7	88.5	92.1	5.0	3.5	-1.3	4.1	11.6	89.9	93.9
Basic chemicals	281	85.6	69.2	64.6	69.0	71.5	71.8	77.6	6.8	3.6	.5	8.1	20.1	74.8	80.7
Alkalies and chlorine	2812	13.3	100.8	102.4	100.7	102.7	97.5	101.0	-1.7	2.0	-5.1	3.7	-1.3	101.7	101.4
Inorganic chemicals,nec	2819	58.1	44.8	39.5	45.2	46.1	48.2	56.4	14.3	2.1	4.6	17.0	42.7	52.6	60.6
Acid and fertilizer mat.		13.0	69.8	68.3	68.3	70.0	72.8	71.7	.0	2.5	4.1	-1.5	5.1	68.1	71.7
Nuclear mats., nonderense		44.6	34.3	27.5	35.5	36.1	37.9	50.0	29.0	1.7	5.0	31.9	81.6	46.1	56.0
Synthetic materials	282	19.3	132.2	125.8	133.5	136.5	133.0	131.0	6.1	2.3	-2.6	-1.5	4.1	129.0	130.5
Plastics materials	2821	9.2	164.4	158.6	166.3	169.4	163.4	160.7	4.8	1.9	-3.5	-1.7	1.3	156.2	165.2
Drugs	283	4.1	168.4	149.5	165.9	193.9	164.4	153.6	11.0	16.9	-15.2	-6.5	2.8	150.9	156.4
Soaps and toiletries	284	2.1	139.8	127.5	135.6	155.0	141.0	138.2	6.3	14.3	-9.0	-1.9	8.4	136.7	141.7
Industrial organic chem.	286	35.8	97.2	98.9	97.5	95.2	97.1	99.9	-1.4	-2.3	2.0	2.9	1.1	100.6	97.3
Farm chemicals	287	10.5	89.1	90.0	88.7	88.9	89.0	91.7	-1.4	.3	.1	3.0	1.9	90.8	90.2

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 9A—continued

ELECTRIC POWER USE BY INDUSTRIES

Seasonally adjusted indexes, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes: 1988 Avg.	1988 Q1	1988 Q2	1988 Q3	1988 Q4	1989 Q1	Percentage change from previous quarter: 1988 Q2	1988 Q3	1988 Q4	1989 Q1	Percentage change from year ago: 1988 Q1	Indexes: 1989 FEB	1989 MAR
PETROLEUM PRODUCTS	29	34.7	118.2	123.1	119.3	116.6	114.3	117.5	-3.1	-2.3	-1.9	2.8	-4.6	111.4	122.8
RUBBER & PLASTICS PRODUCTS	30	23.1	149.2	147.9	148.7	150.5	149.9	149.2	.6	1.2	-0.4	-0.5	.9	149.5	148.8
Tires	301	5.4	79.2	77.4	79.7	81.1	78.8	81.5	2.9	1.8	-2.8	3.4	5.2	82.2	82.5
Rubber products, nec	306	2.2	108.4	105.9	106.6	110.7	110.6	110.0	.7	3.9	-0.1	-0.6	3.9	109.9	108.4
Plastics products, nec	307	14.2	197.7	198.2	196.9	197.8	197.8	194.5	-0.7	.5	.0	-1.6	-1.9	195.2	193.5
LEATHER AND PRODUCTS	31	1.4	99.0	96.4	97.7	101.4	100.9	98.6	1.3	3.8	-0.5	-2.2	2.3	96.1	100.9
Shoes	314	.7	90.6	88.0	90.8	91.7	91.8	87.5	3.2	1.0	.1	-4.7	-0.5	84.9	88.0
CLAY, GLASS, AND STONE	32	31.4	108.8	109.5	108.4	108.1	109.4	111.7	-1.0	-0.3	1.2	2.1	2.0	110.1	110.2
Flat glass	321	1.3	143.3	137.7	142.7	146.4	146.1	147.2	3.7	2.5	-0.1	.8	6.9	153.2	148.1
Pressed and blown glass	322	6.8	102.7	102.2	102.7	104.3	101.4	103.4	.5	1.5	-2.7	1.9	1.1	103.4	102.8
Cement	324	10.2	96.1	97.2	96.9	93.2	97.5	100.4	-0.3	-3.8	4.6	3.0	3.3	97.3	96.2
Structural clay products	325	1.5	118.8	120.9	118.2	118.0	118.0	117.9	-2.3	-0.1	.0	-0.1	-2.5	114.9	125.3
Concrete products	327	3.6	112.7	113.6	109.7	111.9	115.7	112.2	-3.4	2.0	3.4	-3.0	-1.2	114.3	108.0
PRIMARY METALS	33	171.3	90.0	87.4	87.5	91.6	93.7	89.5	.1	4.7	2.3	-4.5	2.4	88.9	87.4
Basic steel and mill prod.	331	65.7	81.2	79.0	77.1	83.8	85.5	81.9	-2.4	8.8	1.9	-4.2	3.7	81.8	78.9
Iron and steel foundries	332	12.0	80.0	78.6	77.8	80.0	83.7	82.7	-1.0	2.8	4.6	-1.1	5.2	82.4	80.7
Primary nonferrous metals	333	78.1	106.9	105.9	102.1	107.6	112.0	111.7	-3.5	5.3	4.1	-0.2	5.5	116.1	108.1
Aluminum	3334	70.3	89.6	88.3	89.4	90.0	91.1	85.3	1.3	.6	1.2	-6.4	-3.4	83.6	83.1
Nonferrous foundries	336	2.1	131.4	126.7	129.4	133.5	135.9	135.1	2.2	3.2	1.8	-0.6	6.6	135.3	134.7
FABRICATED METAL PRODUCTS	34	26.4	132.2	130.3	131.7	133.6	133.4	132.4	1.1	1.5	-0.2	-0.7	1.6	131.2	131.1
Metal cans	341	2.2	135.3	132.8	132.2	136.6	139.8	140.5	-0.4	3.3	2.4	.5	5.8	143.4	135.2
Hardware	342	2.3	110.1	107.3	110.4	112.3	110.3	108.8	2.9	1.7	-1.7	-1.4	1.4	108.9	109.0
Structural metal products	344	.8	128.4	125.3	129.0	130.5	129.0	126.5	3.0	1.1	-1.2	-2.0	.9	125.3	129.1
Fasteners	345	1.6	124.1	120.2	120.0	128.3	128.2	123.1	-0.1	6.9	-0.1	-4.0	2.4	120.2	120.9
Metal stampings	346	6.2	122.1	116.9	121.7	123.5	126.8	120.8	4.1	1.4	2.7	-4.7	3.3	120.7	119.6
NONELECTRICAL MACHINERY	35	28.6	128.2	125.3	127.9	131.1	128.3	128.6	2.1	2.5	-2.2	.2	2.6	127.7	130.0
Engines and turbines	351	2.4	73.9	70.7	72.1	75.8	76.9	73.9	2.0	5.2	1.4	-3.8	4.6	73.7	75.4
Farm equipment	352	2.1	61.5	56.2	62.7	63.3	64.2	60.2	11.6	1.0	1.5	-6.3	7.1	57.5	61.5
Construction equipment	353	5.1	82.3	80.8	82.7	83.8	81.9	80.2	2.4	1.3	-2.3	-2.0	-0.7	78.7	83.4
Metalworking machinery	354	3.8	127.2	122.4	124.7	132.7	128.8	127.6	1.8	6.5	-3.0	-0.9	4.2	128.0	129.2
Special industry machinery	355	2.0	109.1	112.6	105.8	110.3	107.8	107.7	-6.1	4.3	-2.3	-0.1	-4.4	108.6	109.4
General industrial mach.	356	4.6	118.7	116.2	117.4	121.3	119.7	116.6	1.1	3.3	-1.3	-2.6	.4	117.0	114.5
Office and computing mach.	357	2.8	227.2	222.6	233.3	229.4	223.9	231.0	4.8	-1.7	-2.4	3.2	3.8	230.8	233.0
Service industry machinery	358	2.8	125.2	121.1	122.4	129.1	128.0	129.5	1.1	5.5	-0.8	1.2	6.9	131.9	128.0
ELECTRICAL MACHINERY	36	25.0	139.2	136.2	136.9	142.4	141.2	139.7	.5	4.0	-0.9	-1.0	2.6	138.2	138.1
Elect. distribution equip.	361	1.5	103.2	103.7	101.2	106.6	101.2	100.9	-2.4	5.3	-5.1	-0.3	-2.7	101.4	99.3
Elect. indust. apparatus	362	4.3	91.9	88.9	90.0	93.5	95.3	93.8	1.2	4.0	1.9	-1.7	5.4	94.2	90.9
Household appliances	363	2.7	94.2	92.9	94.3	94.9	94.8	93.2	1.5	.6	-0.1	-1.7	.3	92.6	93.3
Lighting and wiring prod.	364	2.3	109.8	110.2	110.3	110.8	107.9	118.6	.1	.4	-2.6	9.9	7.6	117.7	116.1
Radio and TV sets	365	.9	106.5	106.1	107.0	103.6	109.6	109.8	.8	-3.2	5.8	.2	3.5	110.6	114.2
Communication equipment	366	4.6	177.3	175.2	174.4	183.3	175.4	174.1	-0.5	5.1	-4.3	-0.7	-0.6	172.1	170.5
Electronic components	367	6.0	199.0	195.4	194.2	203.4	202.7	202.0	-0.6	4.7	-0.3	-0.3	3.4	200.5	198.1
TRANSPORTATION EQUIPMENT	37	31.4	118.4	117.3	117.3	116.6	122.8	121.5	.0	-0.6	5.4	-1.0	3.6	121.4	120.8
Motor vehicles and parts	371	19.3	100.8	98.7	100.0	99.7	104.8	100.4	1.3	-0.2	5.1	-4.2	1.7	100.6	99.4
Aircraft and parts	372	6.5	165.4	164.6	162.3	162.8	172.2	174.3	-1.4	.3	5.8	1.2	5.8	173.5	175.7
Ships and boats	373	2.1	131.0	130.9	133.9	129.2	130.1	135.9	2.3	-3.5	.7	4.4	3.8	137.5	134.5
INSTRUMENTS	38	5.5	165.0	161.4	161.1	168.5	168.7	171.4	-0.2	4.6	.1	1.6	6.2	171.4	170.4
Copiers and related equip.	386	1.4	140.2	136.5	135.7	147.7	140.7	143.8	-0.6	8.9	-4.8	2.2	5.4	144.8	142.5
MISCELLANEOUS MANUFACTURES	39	4.1	105.3	106.3	103.0	105.7	106.4	106.9	-3.1	2.5	.7	.5	.6	104.3	106.2
SUPPLEMENTARY GROUPINGS															
TOTAL, LESS NUCLEAR NONDEFENSE		740.7	114.1	113.0	112.3	115.1	116.0	115.0	-0.6	2.5	.8	-0.9	1.8	114.2	114.2
UTILITY SALES TO INDUSTRY		715.7	109.1	107.7	107.1	110.3	111.4	111.4	-0.6	3.0	1.0	.0	3.4	110.7	110.8
INDUSTRIAL GENERATION		70.1	87.8	85.3	85.2	89.6	91.4	88.0	-0.1	5.2	2.0	-3.7	3.2	86.9	89.1

Note- The electric power use data by industry, shown in billions of kilowatt hours for 1977, are from the Census of Manufactures of that year and from other sources. They are provided for information and are not used as weights to compile the electric power use indexes. All index aggregations, with their detailed components, are calculated from the kilowatt hour data collected in the Federal Reserve survey of electric power use by industry. The electric power total includes only those major divisions of industries--mining and manufacturing--for which data are collected in this Federal Reserve survey. The total does not include gas or electric utility kilowatt hour use. The supplementary grouping, "Total, less nondefense, nuclear" is shown separately because the nondefense nuclear materials series (part of SIC 2819) accounts for a disproportionally large part of total electric power use. Since the value added proportion for this industry is a considerably smaller part of total IP than its share of total electric power use, excluding this component from total power use facilitates comparisons with total IP.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Table 9B—continued

ELECTRIC POWER USE BY INDUSTRIES

Not seasonally adjusted, 1977 = 100

Series	SIC code	1977 (bil. KWH)	Indexes: 1988 Avg.	1988 Q1	Q2	Q3	Q4	1989 Q1	Percentage change from previous quarter: 1988 Q2	Q3	Q4	1989 Q1	Percentage change from year ago: 1988 Q1	Indexes: 1989 FEB	MAR
PETROLEUM PRODUCTS	29	34.7	118.2	119.5	117.7	121.7	113.9	114.0	-1.5	3.4	-6.4	.1	-4.6	110.7	113.1
RUBBER & PLASTICS PRODUCTS	30	23.1	149.2	144.9	150.1	152.7	149.4	146.2	3.6	1.7	-2.2	-2.1	.9	151.2	149.8
Tires	301	5.4	79.2	74.5	80.0	83.9	78.6	78.4	7.4	4.9	-6.4	-0.2	5.3	81.3	80.7
Rubber products, nec	306	2.2	108.4	105.2	107.9	110.6	109.9	109.3	2.5	2.6	-0.7	-0.5	3.9	113.9	110.7
Plastics products, nec	307	14.2	197.7	195.0	198.6	200.2	196.8	191.3	1.9	.8	-1.7	-2.8	-1.9	197.6	195.9
LEATHER AND PRODUCTS	31	1.4	99.0	96.1	97.9	103.7	98.4	98.4	1.9	5.9	-5.1	.0	2.4	100.1	101.7
Shoes	314	.7	90.6	88.3	89.9	95.6	88.4	87.8	1.9	6.3	-7.5	-0.7	-0.6	89.4	88.4
CLAY, GLASS, AND STONE	32	31.4	108.8	102.1	109.5	112.2	111.4	104.2	7.2	2.5	-0.7	-6.5	2.0	102.6	104.8
Flat glass	321	1.3	143.3	136.3	141.4	148.8	146.5	145.8	3.7	5.2	-1.6	-0.5	6.9	150.1	147.4
Pressed and blown glass	322	6.8	102.7	99.0	102.8	107.0	101.9	100.1	3.8	4.2	-4.8	-1.8	1.1	101.4	103.3
Cement	324	10.2	96.1	82.1	99.4	100.8	102.0	84.8	21.1	1.5	1.2	-16.9	.4	79.0	82.7
Structural clay products	325	1.5	118.8	117.7	118.7	118.6	119.9	114.8	.9	-0.1	1.1	-4.2	-2.5	113.4	118.6
Concrete products	327	3.6	112.7	108.4	111.8	114.4	116.0	107.1	3.1	2.4	1.4	-7.7	-1.2	107.0	105.5
PRIMARY METALS	33	171.3	90.0	88.7	89.6	89.7	91.9	90.9	1.0	.1	2.4	-1.1	2.4	88.0	91.9
Basic steel and mill prod.	331	65.7	81.2	81.6	80.7	80.6	81.9	84.6	-1.1	-0.2	1.7	3.2	3.7	83.6	86.4
Iron and steel foundries	332	12.0	80.0	78.2	80.8	78.6	82.3	82.2	3.4	-2.7	4.7	-0.1	5.2	84.8	84.1
Primary nonferrous metals	333	78.1	106.9	103.9	101.7	106.8	115.0	109.6	-2.1	5.0	7.7	-4.7	5.5	111.0	108.8
Aluminum	3334	70.3	89.6	87.6	90.8	90.2	90.0	84.8	3.6	-0.7	-0.2	-5.7	-3.2	76.5	85.5
Nonferrous foundries	336	2.1	131.4	127.8	129.3	132.3	136.0	136.3	1.1	2.3	2.8	.2	6.6	139.7	140.3
FABRICATED METAL PRODUCTS	34	26.4	132.2	129.9	131.9	135.8	131.3	132.0	1.5	2.9	-3.3	.5	1.6	135.5	133.2
Metal cans	341	2.2	135.3	128.4	134.5	143.0	135.4	135.8	4.7	6.3	-5.3	.3	5.8	140.8	135.1
Hardware	342	2.3	110.1	106.7	110.0	114.1	109.6	108.2	3.1	3.7	-4.0	-1.3	1.4	111.3	110.5
Structural metal products	344	.8	128.4	127.5	126.9	131.0	128.2	128.7	-0.5	3.3	-2.1	.3	.9	131.7	130.0
Fasteners	345	1.6	124.1	121.7	120.4	129.2	125.1	124.5	-1.0	7.3	-3.2	-0.5	2.3	125.7	124.6
Metal stampings	346	6.2	122.1	119.8	123.1	121.7	124.4	123.2	3.1	-1.1	2.2	-0.9	3.2	127.9	126.3
NONELECTRICAL MACHINERY	35	28.6	128.2	122.3	127.0	136.7	126.9	125.5	3.8	7.7	-7.2	-1.1	2.6	126.9	128.0
Engines and turbines	351	2.4	73.9	69.9	70.9	78.9	75.8	73.1	1.5	11.2	-3.9	-3.6	4.6	74.0	75.0
Farm equipment	352	2.1	61.5	58.4	62.8	62.7	62.2	62.5	7.5	-0.1	-0.8	.4	7.0	61.6	64.0
Construction equipment	353	5.1	82.3	79.5	81.7	86.9	81.2	78.9	2.8	6.3	-6.6	-2.7	-0.7	80.0	80.8
Metalworking machinery	354	3.8	127.2	122.4	123.8	136.0	126.4	127.6	1.1	9.8	-7.1	.9	4.2	130.0	130.4
Special industry machinery	355	2.0	109.1	111.3	105.4	113.0	106.6	106.5	-5.3	7.2	-5.6	-0.1	-4.3	110.0	108.4
General industrial mach.	356	4.6	118.7	114.0	116.0	124.8	117.9	114.4	3.5	5.7	-5.5	-2.9	.4	117.6	115.6
Office and computing mach.	357	2.8	227.2	212.4	228.0	246.4	222.1	220.5	7.4	8.1	-9.9	-0.7	3.8	219.3	223.6
Service industry machinery	358	2.8	125.2	117.3	123.1	135.9	124.6	125.5	4.9	10.4	-8.3	.7	6.9	130.8	126.7
ELECTRICAL MACHINERY	36	25.0	139.2	131.8	136.6	149.2	139.2	135.2	3.6	9.2	-6.7	-2.9	2.5	135.6	136.0
Elect. distribution equip.	361	1.5	103.2	101.1	100.4	110.3	101.1	98.4	-0.7	9.8	-8.4	-2.7	-2.7	99.6	98.2
Elect. indust. apparatus	362	4.3	91.9	88.1	91.2	95.2	93.2	92.8	3.5	4.4	-2.1	-0.4	5.3	92.8	93.8
Household appliances	363	2.7	94.2	92.8	96.0	95.1	93.0	93.0	3.5	-1.0	-2.2	.0	.2	95.5	94.0
Lighting and wiring prod.	364	2.3	109.8	109.4	110.6	110.9	108.2	117.7	1.1	.3	-2.5	8.8	7.6	120.0	118.8
Radio and TV sets	365	.9	106.5	102.2	105.3	111.5	106.8	105.8	3.0	5.9	-4.3	-0.9	3.5	107.4	106.6
Communication equipment	366	4.6	177.3	163.9	172.8	199.7	172.9	162.8	5.4	15.6	-13.4	-5.9	-0.7	162.4	161.2
Electronic components	367	6.0	199.0	185.9	193.9	215.8	200.4	192.1	4.3	11.3	-7.1	-4.2	3.3	191.8	193.1
TRANSPORTATION EQUIPMENT	37	31.4	118.4	114.0	118.3	121.2	120.2	118.1	3.7	2.5	-0.9	-1.7	3.6	120.4	119.8
Motor vehicles and parts	371	19.3	100.8	96.9	102.0	102.1	102.2	98.4	5.3	.1	.1	-3.7	1.6	101.4	99.2
Aircraft and parts	372	6.5	165.4	156.8	161.4	172.1	171.4	165.9	2.9	6.6	-0.4	-3.2	5.8	166.6	170.1
Ships and boats	373	2.1	131.0	135.7	132.4	127.7	128.0	140.9	-2.5	-3.5	.2	10.1	3.8	146.2	138.4
INSTRUMENTS	38	5.5	165.0	155.1	159.8	180.3	164.6	164.7	3.0	12.9	-8.7	.0	6.2	163.9	166.8
Copiers and related equip.	386	1.4	140.2	133.3	135.2	153.0	139.2	140.5	1.4	13.2	-9.1	1.0	5.4	136.9	144.4
MISCELLANEOUS MANUFACTURES	39	4.1	105.3	104.1	102.7	110.4	104.0	104.6	-1.3	7.5	-5.8	.6	.5	105.1	105.8
SUPPLEMENTARY GROUPINGS															
TOTAL, LESS NUCLEAR NONDEFENSE		740.7	114.1	111.0	113.3	117.3	114.7	113.0	2.1	3.5	-2.2	-1.5	1.8	112.0	113.6
UTILITY SALES TO INDUSTRY		715.7	109.1	105.6	108.6	112.3	109.9	109.2	2.9	3.4	-2.1	-0.7	3.4	108.2	110.2
INDUSTRIAL GENERATION		70.1	87.8	87.5	85.5	89.0	89.3	90.3	-2.3	4.2	.2	1.2	3.3	85.6	91.6

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

Explanatory Note

Coverage. The index is a measure of industrial production expressed as a percentage of output in a reference period (currently 1977). The changes in the physical output of the nation's factories, mines, and electric and gas utilities are represented by 252 individual series in the index, covering 27 pertinent two-digit codes of the *Standard Industrial Classification* (SIC). For each individual series, index series relatives are calculated first and are then aggregated in the following two ways: (1) market groupings, such as consumer goods, equipment, intermediate products, and materials, from which the seasonally adjusted total index is derived (tables 1A and 1B), and (2) industry groupings, such as SIC two-digit industries, and major aggregates of these groupings, such as durable and nondurable manufacturing, mining, and utilities (tables 2A and 2B).

Market groupings. For purposes of analysis the individual industrial output series are grouped into materials, intermediate products, and final products; together, the latter two form the products category. Materials are industrial output requiring further processing within industry; intermediate products are expected to become inputs in nonindustrial sectors such as construction, farming, and services; and final products are assumed to enter final use as items of private consumption, government use, or capital formation. In the index, final products are subdivided into consumer goods and equipment.

Timing. A first estimate of output for a month is published about the 15th of the following month. This estimate may be revised in each of the next three months as new data become available. After the fourth month, indexes are not revised further until the time of an annual revision or a benchmark revision. The last three benchmark revisions were published in 1971, 1976, and 1985. Such revisons are derived mainly from the quinquennial *Census of Manufactures,* the quinquennial *Census of Mineral Industries,* and the *Annual Survey of Manufactures,* all prepared by the Bureau of the Census, and the *Minerals Yearbook* of the Bureau of Mines.

Source data. The indexes of industrial production are constructed from monthly data of two types: (1) directly measured output in physical units; and (2) estimates of output derived from data on input, expressed in physical units, adjusted by conversion factors that relate these inputs to physical output. The data on directly measured physical product (pounds, yards, barrels, and the like) are obtained from reports of the Bureau of the Census, the Bureau of Mines, other government agencies, and trade associations. When suitable monthly data on physical product are unavailable, estimates of physical output based on input data (kilowatt hours, production-worker hours) are used. The hours worked by production workers are collected in the monthly establishment survey of the Bureau of Labor Statistics, while data on the kilowatt hours used in industry are collected from electric utilities by the Federal Reserve Banks. The estimates of input conversion are based mainly on historical relationships that were derived from censuses and annual surveys and, when appropriate, on more recent cyclical, technological and statistical developments. Users of the index should bear in mind that, especially for the first and second estimates of a given month's indexes, the available source data are limited and are subject to change in the months following their initial receipt as well as in benchmark revisions.

Seasonal adjustment. Individual series are seasonally adjusted by the X-11 Method II of the Bureau of the Census with the intervention analysis technique applied to the series. The seasonal factors currently being used are based on data through 1985. The individual series and the major aggregate series are seasonally adjusted independently, and the factors for the aggregate series in the summary table and in tables 1 and 2 are reviewed monthly. The seasonally adjusted total index is aggregated from the seasonally adjusted market groupings of the index and may not precisely equal an aggregation of the seasonally adjusted industry groupings. A simple aggregation of the seasonally adjusted individual series within groupings may not precisely equal the seasonally adjusted groupings, primarily because aggregates are adjusted independently.

Weights. The total index and the various groupings of the component series are currently aggregated on the basis of 1977 value-added weights, which are shown in the first column of the index tables under the heading proportions. Value-added weights for 1972 are used for the 1972–77 period, while 1967 weights are used for the 1967–72 period. The weight years for earlier periods after World War II are 1963, 1958, 1954, and 1947. The indexes for the various periods are linked to provide the continuous final results expessed in relation to the 1977 comparison year taken as 100. The gross-value-weighted product series are expressed in terms of 1982 dollars.

Formula. The symbolic expression for the total index (I) is

$$I_t = \sum \left(\frac{q_{77}p_{77}}{\Sigma q_{77}p_{77}}\right) \cdot \left(\frac{q_t}{q_{77}}\right) \cdot 100 = \frac{\Sigma q_t p_{77}}{\Sigma q_{77}p_{77}} \cdot 100,$$

where q is quantity, p is Census value added per unit of output, t represents the tth period, and 77 denotes base-year values.

Reliability. The median of the revisions in total industrial production, without regard to sign, between the first and fourth estimates is 0.3 percent: that is, in about half of the cases the absolute value of the revision from the first to the fourth estimate was less than 0.3 percent. (This calculation used data for the period from January 1972 to January 1985.) Over the same period, positive changes in the first estimate were confirmed in the fourth estimate (available three months later) about 94 percent of the time. Negative changes in the first estimate were confirmed in the fourth estimate about 85 percent of the time. Thus the likelihood is high that the first estimate for a month will indicate the direction of change in the total index in a reliable manner. However, the magnitude of change as first estimated typically is revised during the next three months; these revisions are based on revised and more complete data sources. The estimates for the higher aggregates generally are considered more reliable than the estimates for their individual components. Revisions to the components often offset each other and thereby reduce the size of revisions to the aggregates.

Rounding. Changes shown for index components may not aggregate to changes for totals because of independent rounding. Percentage changes are calculated from indexes expressed in more digits following the decimal point than shown in their rounded form in the present release. Therefore, percentage changes calculated from the rounded indexes may not entirely coincide with the percentage changes calculated from unrounded indexes.

Literature. *Industrial Production—1986 Edition* contains a more detailed description of the index and the procedures used in compiling it, plus a history of its development, a glossary of terms, and a bibliography. The new edition was published in December 1986. To obtain copies of *Industrial Production—1986 Edition,* write to the Publication Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. The price of this volume of about 440 pages is $9.00 per copy. Selected data on industrial production are also published monthly in the Financial and Business Statistics section of the *Federal Reserve Bulletin.*

Release date. The industrial production index is released in midmonth. For the specific date, phone 202-452-3206 about the 11th of the month.

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis