

# Electromedical and Irradiation Equipment

1999

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Information about the scope of the survey, methodology, explanation of terms and historical notes for this survey may be found in the introduction of the 1997 Manufacturing Profiles, issued August 1999.

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/econ/www/manumenu.html>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR's)," clicking on "Report Number Index;" from the "Industrial Products by Numeric Index," choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

These data are also available through the U.S. Department of Commerce and STAT-USA Electronic Bulletin Board by subscription. To access, dial 202-482-3870 and follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for

further information. The Internet address is: [www.stat-usa.gov/](http://www.stat-usa.gov/).

#### NOTE:

Data are now published on the new North American Industry Classification System (NAICS) basis and therefore are not always comparable to the old Standard Industrial Classification (SIC) code. For further information on NAICS, see [www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html).

#### Summary of Findings

In 1999, the total value of shipments of electro-medical and irradiation equipment amounted to \$13.9 billion, an increase of 6.3 percent, from \$13.1 billion in 1998. Shipments of X-ray and other irradiation equipment decreased 3.4 percent to \$3.2 billion in 1999, from \$3.3 billion in 1998. Shipments of electromedical equipment increased 9.6 percent to \$10.7 billion in 1999, from \$9.8 billion in 1998.

Current  
Industrial  
Reports

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call James Hinckley, 301-457-4772.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-457-4673.

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**Table 1. Value of Shipments of Electromedical Equipment and Irradiation Equipment by Class of Product: 1994 to 1999**  
 [Value in millions of dollars]

Product code	Product description	1999	1998	1997	1996	1995	1994
3345170	X-ray and other irradiation equipment .....	3,200.9	3,312.9	3,139.1	2,900.9	2,698.1	2,458.2
3345101	Electromedical equipment.....	10,699.8	9,763.8	9,051.1	8,318.8	7,124.8	6,752.1

Table 2. Quantity and Value of Shipments of Electromedical Equipment and Irradiation Equipment: 1999 and 1998  
 [Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1999		1998	
			Quantity	Value	Quantity	Value
	Electromedical and irradiation equipment.....	242	(X)	13,900,680	(X)	13,076,678
	Medical diagnostic equipment:					
	X-ray equipment:					
3345170103	Digital radiography equipment.....	5	3,185	76,265	4,597 a/	128,181
3345170106	Computerized axial tomography (CT OR CAT SCAN).....	7	3,269	661,133	2,739	542,644
3345170109	Dental and conventional.....	13 b/	21,068	500,861	23,411	621,149
3345170112	All other medical diagnostic X-ray equipment .....	16	(X)	(D)	(X)	(D)
3345170115	Nuclear medicine equipment (all equipment used for nuclear in vivo studies).....	8	1,871	482,750 b/	1,908 c/	499,557
3345101103	Magnetic resonance imaging equipment (MRI) 1/.....	7	(D)	(D)	(D)	(D)
3345101106	Ultrasound scanning devices.....	14	20,094	1,392,783 r/	16,511	1,287,895
3345101109	Electrocardiograph (EKG).....	15	131,147 a/	252,827 r/	110,381 a/	230,850
3345101112	Electroencephalograph (EEG) and Electromyograph (EMG) 1/ .....	5	(D)	(D)	(D)	(D)
3345101115	Audiological equipment.....	7	(X) c/	10,454	(X) b/	7,853
3345101118	Endoscopic equipment (bronchoscope, cystoscope, proctosigmoidoscope, colonoscope, etc.) 2/.....	5	(D)	(D)	(D)	(D)
3345101121	Respiratory analysis equipment.....	4	7,123	53,343 b/	5,071	30,444
3345101124	All other medical diagnostic equipment 2/.....	27	(X)	(D)	(X)	(D)
	Patient monitoring equipment:					
3345101227	Intensive care/coronary care units, including component modules such as temperature, blood pressure, and pulse....	18	(X)	543,518	(X) b/	617,833
3345101233	Prenatal and respiratory monitoring.....	8	(X) c/	87,268	(X)	86,274
3345101237	All other patient monitoring.....	33	(X) a/	607,879	(X) a/	667,247
	Medical therapy equipment:					
3345101241	Ultrasound therapy.....	7	(X)	18,330	(X) a/	13,437
3345101244	Pacemakers.....	6 a/	318,951 a/	1,142,877	243,306	869,747
3345101247	Defibrillators.....	10 a/	77,971 a/	842,789 a/	65,649	746,185
3345101251	Dialyzers, including machines and equipment .....	5	(X)	503,484	(X)	493,039
3345101254	Medical laser equipment.....	14	(X)	677,024	(X)	617,381
3345170118	Radiation therapy (linear accelerators, X-ray, cobalt 60, brachtherapy) .....	10	(X)	(D)	(X)	(D)
3345101257	All other medical therapy equipment.....	35	(X) a/	1,039,188	(X)	902,902
	All other irradiation and electromedical equipment:					
3345170121	Industrial and scientific X-ray equipment....	18	3,141 a/	220,345	3,275	199,340
3345170124	X-ray tubes (sold separately) .....	13	(D)	(D)	40,428	318,126
3345170227	Other non-medical irradiation equipment, including gamma and beta ray equipment, n.e.c. ....	4	(X)	16,189	(X)	17,027
3345170331	Parts and accessories for X-ray equipment and other non-medical irradiation equipment, n.e.c. ....	23	(X) a/	133,731	(X)	146,661
	Surgical systems:					
3345101361	Electrosurgical equipment.....	10	(X)	352,797	(X)	335,762
3345101364	Heart-lung machines, excluding iron lungs 3/ .....	2	(D)	(D)	(D)	(D)
3345101367	Blood flow systems 3/.....	9	(X)	(D)	(X)	(D)
3345101371	All other surgical support systems.....	15	(X) b/	361,248	(X) a/	333,927
3345101374	Other electromedical equipment (except diagnostic and therapeutic), n.e.c. ....	14	(X) b/	163,846	(X) b/	135,577
3345101477	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c. ....	42	(X) a/	857,769	(X)	758,642

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. r/Revised by 5 percent or more from previously published data. X Not applicable.

1/The combined total value for product codes 3345101103 and 3345101112 is 1,086,809 for 1999 and 877,411 for 1998.

2/The combined total value for product codes 3345101118 and 3345101124 is 173,252 for 1999 and 187,527 for 1998.

3/The combined total value for product codes 3345101364 and 3345101367 is 532,309 for 1999 and 563,894 for 1998.

Note: Percent of estimation of each item is indicated as follows: a/10 to 25 percent of this item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of this item is estimated.

Table 3. Shipments, Exports, and Imports of Electromedical and Irradiation Equipment: 1999  
 [Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) 1/	Imports for consumption (value) 2/ 3/
3345170106	Computerized axial tomography (CT or CAT SCAN).....	661,133	106,063	192,061
3345170103, 109, 112, 115, 118	Medical X-ray and nuclear equipment, diagnostic and therapeutic .....	1,960,055	584,794	521,099
3345170121	Industrial and scientific X-ray equipment.....	220,345	112,669	78,129
3345170124	X-ray tubes sold separately.....	(D)	144,171	87,792
3345170331	Parts and accessories for X-ray equipment and other non-medical irradiation equipment, n.e.c. ....	133,731	403,197	365,561
3345170227	Non-medical irradiation equipment, including gamma and beta ray equipment, n.e.c. ....	16,189	26,783	5,237
3345101109	Electrocardiograph (EKG), diagnostic.....	252,827	82,127	18,174
3345101112	Electroencephalographs (EEG) and Electromyograph (EMG) .....	(D)	25,191	11,368
3345101106	Ultrasound scanning devices, diagnostic.....	1,392,783	544,530	112,543
3345101103	Magnetic resonance imaging equipment (MRI).....	(D)	289,995	340,532
3345101244	Pacemakers, therapeutic.....	1,142,877	307,406	86,302
3345101115, 118, 121, 124	Diagnostic electromedical equipment, n.e.c. ....	237,049	920,606	459,968
3345101247, 254, 257	Therapeutic electromedical equipment, n.e.c. ....	2,559,001	125,106	29,293
3345101364, 367, 371, 374	Electromedical equipment and irradiation equipment, including X-ray, n.e.c. ....	1,057,403	222,569	388,066
3345101251	Dialyzers, machines and equipment.....	503,484	82,657	12,606
3345101227, 233, 237	Patient monitoring equipment .....	1,238,665	219,199	80,163
3345101241	Therapeutic ultrasound equipment.....	18,330	19,325	2,117
3345101361	Electrosurgical equipment.....	352,797	592,876	112,171
3345101477	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c. ....	857,769	587,311	670,234

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified.

1/Source: Census Bureau report EM 545, U.S. Exports.

2/Source: Census Bureau report IM 145, U.S. Imports for Consumption.

3/Represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

Table 4. Comparison of North American Industry Classification System-Based Product Codes With Schedule B Export Numbers, and HTSUSA Import Numbers: 1999

Product code	Product description	Export number 1/	Import number 2/
3345170106	Computerized axial tomography (CT or CAT SCAN) .....	9022.12.0000	9022.12.0000
3345170103, 109, 112, 115, 118	Medical X-ray and nuclear equipment, diagnostic and therapeutic .....	9022.13.0000 9022.14.0000 9022.21.0000	9022.13.0000 9022.14.0000 9022.21.0000
3345170121	Industrial and scientific X-ray equipment .....	9022.19.0000	9022.19.0000
3345170124	X-ray tubes sold separately .....	9022.30.0000	9022.30.0000
3345170331	Parts and accessories for X-ray equipment and other non-medical irradiation equipment, n.e.c. ....	9022.90.4000 9022.90.6000 9022.90.8000	9022.90.4000 9022.90.6000 9022.90.9500
3345170227	Non-medical irradiation equipment, including gamma and beta ray equipment, n.e.c. ....	9022.29.8000	9022.29.8000
3345101109	Electrocardiograph (EKG), diagnostic .....	9018.11.0040	9018.11.3000
3345101112	Electroencephalographs (EEG) and electromyographs (EMG), diagnostic .....	9018.19.9535	9018.19.9535
3345101106	Ultrasound scanning devices, diagnostic .....	9018.12.0000	9018.12.0000
3345101103	Magnetic resonance imaging equipment (MRI) .....	9018.13.0000	9018.13.0000
3345101244	Pacemakers, therapeutic	9021.50.0000	9021.50.0000
3345101115, 118, 121, 124	Diagnostic electromedical equipment, n.e.c. ....	9018.19.4000 9018.19.9530 9018.19.9550	9018.19.4000 9018.19.9530 9018.19.9550
3345101247, 254, 257	Therapeutic electromedical equipment, n.e.c. ....	9018.90.7060	9018.20.0040 9018.90.6400 9018.90.7560
3345101364, 367, 371, 374	Electromedical equipment and irradiation equipment including X-ray, n.e.c. ....	9018.20.0000 9018.90.7080	9018.20.0080 9018.90.7580
3345101251	Dialyzers, machines and equipment .....	9018.90.7020	9018.90.7520
3345101227, 233, 237	Patient monitoring equipment .....	9018.19.5500	9018.19.5500
3345101241	Therapeutic ultrasound equipment .....	9018.90.7040	9018.90.7540
3345101361	Electrosurgical equipment .....	9018.90.6000	9018.90.6000
3345101477	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c. ....	9018.11.0080 9018.19.7500 9018.19.9560 9018.90.7070	9018.11.9000 9018.19.7500 9018.19.9560 9018.90.7570 9021.90.4080

n.e.c. Not elsewhere classified.

1/Source: 1999 Edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (1999).