

# Electromedical and Irradiation Equipment

1998

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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 1998, the total value of shipments of electro-medical and irradiation equipment amounted to \$13.1 billion, an increase of 7.9 percent from \$12.2 billion in 1997. Shipments of X-ray and other irradiation equipment increased 5.7 percent to \$3.3 billion in 1998, from \$3.1 billion in 1997. Shipments of electromedical equipment increased 8.7 percent to \$9.8 billion in 1998, from \$9.1 billion in 1997.

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: 1993 to 1998**  
 [Value in millions of dollars]

Product code	Product description	1998	1997	1996	1995	1994	1993
3345170	X-ray and other irradiation equipment .....	3,317.4	3,139.1	2,900.9	2,698.1	2,458.2	2,480.0
3345101	Electromedical equipment.....	9,837.0	9,051.1	8,318.8	7,124.8	6,752.1	6,222.0

Table 2. Quantity and Value of Shipments of Electromedical Equipment and Irradiation Equipment: 1998 and 1997  
 [Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1998		1997	
			Quantity	Value	Quantity	Value
	Electromedical and irradiation equipment.....	251	(X)	13,154,335	(X)	12,190,201
	Medical diagnostic equipment:					
	X-ray equipment:					
3345170103	Digital radiography equipment.....	5	4,597	128,181	6,152 r/	147,357
3345170106	Computerized axial tomography (CT or CAT scan).....	6	2,740	542,644	r/ 2,908	555,574
3345170109	Dental and conventional.....	13	23,573	625,626	22,956	522,837
3345170112	All other medical diagnostic X-ray equipment 1/.....	17	(X)	(D)	(X)	(D)
3345170115	Nuclear medicine equipment (all equipment used for nuclear in vivo studies).....	8	1,908	499,557	1,441	363,128
3345101103	Magnetic resonance imaging (MRI) equipment .....	8	2,392	842,961	r/ 2,279 r/	741,003
3345101106	Ultrasound scanning devices.....	15	18,181	1,300,664	14,551	1,102,906
3345101109	Electrocardiograph (EKG).....	16	48,300	227,212	44,891	204,907
3345101112	Electroencephalograph (EEG) and electromyograph (EMG) .....	6	4,127	90,460	4,500	108,295
3345101115	Audiological equipment.....	7	(X)	7,853	(X)	10,288
3345101118	Endoscopic equipment (bronchoscope, cystoscope, proctosigmoidoscope, colonoscope, etc.) 2/.....	5	(D)	(D)	(D)	(D)
3345101121	Respiratory analysis equipment.....	5	5,071	30,329	4,477	39,291
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..	19	(X)	617,862	(X) r/	594,256
3345101231	Prenatal monitoring 3/.....	6	(X)	(D)	(X)	(D)
3345101234	Respiratory monitoring 3/.....	8	(X)	(D)	(X)	(D)
3345101237	All other patient monitoring.....	34	(X)	673,276	(X) r/	618,697
	Medical therapy equipment:					
3345101241	Ultrasound therapy.....	7	(X)	13,843	(X)	12,096
3345101244	Pacemakers.....	6	243,990	870,000	242,504	803,335
3345101247	Defibrillators.....	11	65,649	746,185	50,024	578,780
3345101251	Dialyzers, including machines and equipment .....	5	(X)	493,039	(X)	458,290
3345101254	Medical laser equipment.....	17	(X)	617,381	(X)	623,934
3345170118	Radiation therapy (linear accelerators, X-ray, cobalt 60, brachotherapy) 1/.....	10	(X)	(D)	(X)	(D)
3345101257	All other medical therapy equipment.....	37	(X)	906,298	(X) r/	821,926
	All other irradiation and electromedical equipment:					
3345170121	Industrial and scientific X-ray equipment..	19	3,275	199,340	2,992	194,367
3345170124	X-ray tubes, sold separately.....	12	40,428	318,126	45,391	413,196
3345170227	Other nonmedical irradiation equipment, including gamma- and beta-ray equipment, n.e.c. ....	5	(X)	17,027	(X)	20,578
3345170331	Parts and accessories for X-ray equipment and other nonmedical irradiation equipment, n.e.c. ....	24	(X)	146,712	(X) r/	138,108
	Surgical systems:					
3345101361	Electrosurgical equipment.....	13	(X)	335,762	(X)	340,908
3345101364	Heart-lung machines, excluding iron lungs 4/ .....	2	(D)	(D)	(D)	(D)
3345101367	Blood flow systems 4/.....	8	(X)	(D)	(X)	(D)
3345101371	All other surgical support systems.....	17	(X)	333,927	(X) r/	286,005
3345101374	Other electromedical equipment (except diagnostic and therapeutic), n.e.c. ....	14	(X)	135,577	(X) r/	106,820
3345101477	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c. ....	46	(X)	745,686	(X) r/	747,028

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 value total for product codes 3345170 112 and 3345170 118 is 840,166 for 1998 and 783,922 for 1997.

2/The combined value total for product codes 3345101 118 and 3345101 124 is 192,827 for 1998 and 216,893 for 1997.

3/The combined value total for product codes 3345101 231 and 3345101 234 is 91,920 for 1998 and 88,046 for 1997.

4/The combined value total for product codes 3345101 364 and 3345101 367 is 563,894 1998 and 547,534 for 1997.

Table 3. Shipments, Exports, and Imports of Electromedical and Irradiation Equipment: 1998  
 [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).....	542,644	114,298	132,221
3345170103, 109, 112, 115, 118	Medical X-ray and nuclear equipment, diagnostic and therapeutic .....	2,093,530	585,230	565,777
3345170121	Industrial and scientific X-ray equipment.....	199,340	118,537	60,192
3345170124	X-ray tubes, sold separately.....	318,126	127,709	94,923
3345170331	Parts and accessories for X-ray equipment and other nonmedical irradiation equipment, n.e.c. ....	146,712	309,852	344,994
3345170227	Nonmedical irradiation equipment, including gamma- and beta-ray equipment, n.e.c. ....	17,027	24,162	6,948
3345101109	Electrocardiograph (EKG), diagnostic.....	227,212	70,767	13,259
3345101112	Electroencephalographs (EEG) and Electromyograph (EMG) .....	90,460	19,320	11,885
3345101106	Ultrasound scanning devices, diagnostic.....	1,300,664	497,207	81,333
3345101103	Magnetic resonance imaging (MRI) equipment.....	842,961	251,647	291,292
3345101244	Pacemakers, therapeutic.....	870,000	253,929	20,129
3345101115, 118, 121, 124	Diagnostic electromedical equipment, n.e.c. ....	231,009	767,714	470,620
3345101247, 254, 257	Therapeutic electromedical equipment, n.e.c. ....	2,269,864	199,719	39,908
3345101364, 367, 371, 374	Electromedical equipment and irradiation equipment, including X-ray, n.e.c. ....	1,033,398	230,500	360,942
3345101251	Dialyzers, machines and equipment.....	493,039	72,228	55,516
3345101227, 231, 234, 237	Patient monitoring equipment .....	1,383,058	251,561	29,690
3345101241	Therapeutic ultrasound equipment.....	13,843	14,110	3,145
3345101361	Electrosurgical equipment.....	335,762	425,232	90,090
3345101477	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c. ....	745,686	592,682	555,877

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 Standard Industrial Classification-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 1998

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 nonmedical irradiation equipment, n.e.c. ....	9022.90.4000 9022.90.6000 9022.90.8000	9022.90.4000 9022.90.6000 9022.90.9500
3345170227	Nonmedical 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 (MRI) equipment .....	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, 231, 234, 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: 1998 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 (1998).