

Freedonia Industry Study #1508

*World Major
Household Appliances*

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World Major Household Appliances, a new study from The Freedonia Group, provides you with an in-depth analysis of the major trends in the world market for household appliances and the outlook for product segments by country -- critical information to help you with strategic planning.

This brochure gives you an indication of the scope, depth and value of Freedonia's new study, *World Major Household Appliances*. Ordering information is included on the back page of the brochure.

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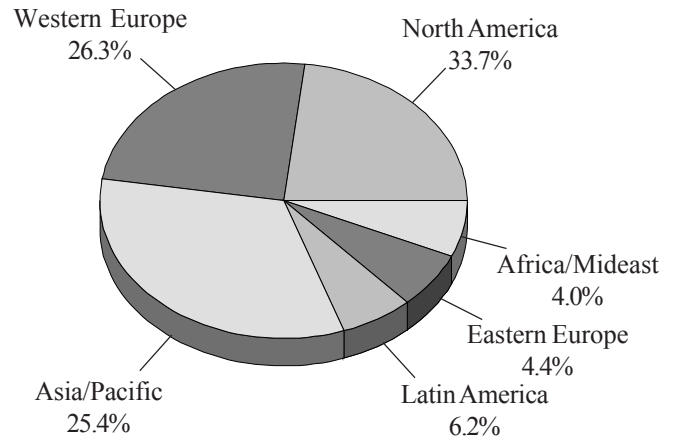
Study Highlights

- World demand for major household appliances (white goods) is projected to increase 3.6 percent annually through 2005, reaching 337 million units.
- Particularly favorable prospects will be found in the Asia/Pacific region, where ongoing industrialization and rising personal incomes will provide opportunities for suppliers.
- Gains are expected to be modest within the developed nations, despite improving macroeconomic conditions in Japan.
- Microwave ovens are expected to exhibit the best gains through 2005 due to significant untapped market potential in numerous countries, especially in the developing regions.
- Technology is expected to become increasingly important in the industry, due to the diffusion of "smart appliances." These products include such capabilities as remote Internet monitoring, and provide added convenience for consumers.
- The top five major household appliance producers -- Whirlpool, Electrolux, Matsushita, General Electric and BSH -- accounted for 40 percent of global market share in 2000.

* Excluded from the scope of the study are such products as vacuum cleaners, air conditioners and other items generally referred to as "brown goods", as well as commercial appliances and smaller household appliances in general.

Study Highlights

World Major Household Appliances Demand, 2000



World Major Household Appliances Demand (million units)

Item	1995	2000	2005	2010	% Annual Growth	
					00/95	05/00
Households (million)	1409.6	1537.3	1665.0	1800.0	1.5	
units/000 households	164	183	200	220		
World	231.4	282.0	332.6	383.2	22.0	15.0
North America:	50.8	65.5	80.2	94.9	28.5	17.5
United States	43.0	54.0	65.0	76.0	25.6	18.5
Canada & Mexico	7.8	11.5	15.2	18.9	48.1	22.6
Western Europe	62.5	68.0	73.5	79.0	9.1	7.9
Asia/Pacific:	69.4	92.1	114.8	137.5	33.1	24.3
Japan	17.2	17.9	18.6	19.3	4.6	3.9
China	28.6	43.1	57.6	72.1	50.0	33.2
Other Asia/Pacific	23.6	31.1	38.6	46.1	32.2	22.2
Other Regions:	48.6	55.7	62.8	69.9	14.0	12.7
Latin America	15.0	18.5	22.0	25.5	23.3	18.9
Eastern Europe	19.1	18.9	18.7	18.5	-1.1	-1.1
Africa/Mideast	14.5	18.4	22.3	26.2	27.6	17.4

Sample Table

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Tables and Charts are featured for each region and country. Historical data and forecasts are presented for 1990, 1995, 2000, 2005 and 2010.

For each country/region, the following are given:

Gross Domestic Product
\$ GDP/capita

Population
urban % of total population
persons per household

Urban Population
units/000 urban person

Households
units/000 households

Major Appliances Demand by Type
Refrigerators & Freezers
Clothes Washers & Dryers
Washers
Dryers
Cooking Appliances
Ranges & Conventional Ovens
Microwave Ovens
Dishwashers

net exports

Major Appliances Shipments
Refrigerator & Freezer Shipments
Clothes Washers & Dryers Shipments
Washers
Dryers
Cooking Appliances Shipments
Ranges & Conventional Ovens
Microwave Ovens
Dishwasher Shipments

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Market Environment

The Market Environment Section discusses key indicators that drive demand for appliances, including demographic and social trends and Freedonia's uniquely developed macroeconomic indicators.

This information provides you with an understanding and an analysis of the climate in which the global appliance industry operates and helps you build your market strategy to sustain long-term growth.

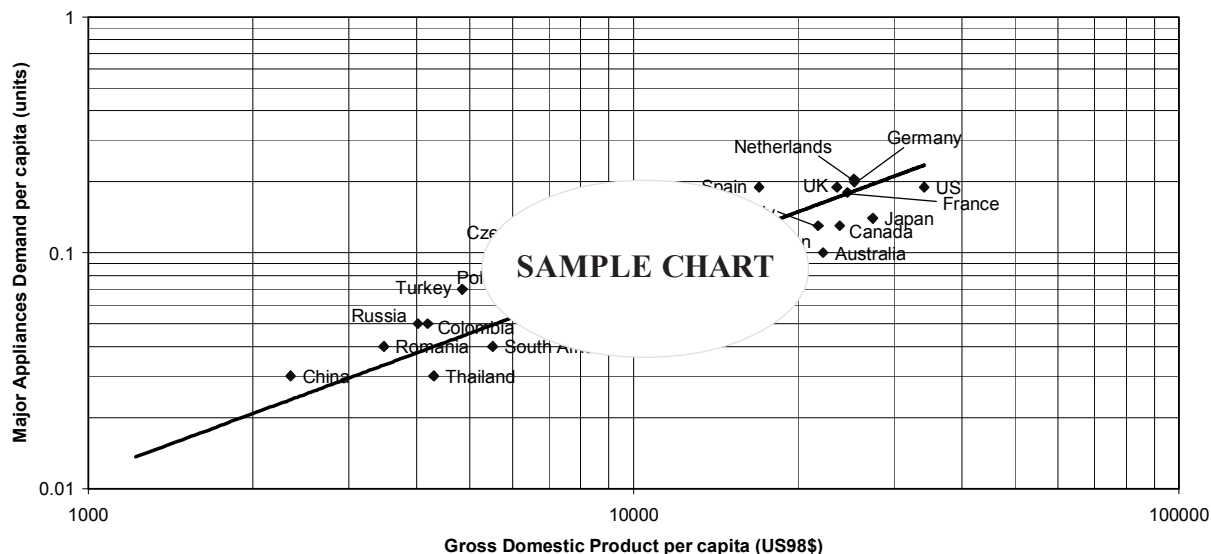
MARKET ENVIRONMENT

Technology & Product Innovation

Basic white goods design and manufacturing technology is well established and well understood, and the industry has generally been less technology-intensive compared to such businesses as electronics, chemical processing, aerospace, biotechnology and the pharmaceuticals industry. The addition of new technology such as microprocessors, electronic sensors, controls and monitoring systems has been used not only for improving the primary function of the device (washing, drying, refrigerating, etc.), but also resulting in the more efficient use of electric energy, water and other inputs. The addition of new technology is especially important in developed nations, where high ownership rates limit much product demand to the replacement market. Added technology is a potential means to entice consumers to trade in functional equipment for new models, thereby shortening replacement cycles and boosting demand.

Among the most notable trends in appliance technology is the development of web-linked models. For example, Whirlpool is developing a refrigerator that

PER CAPITA HOUSEHOLD APPLIANCES / PER CAPITA GDP RELATIONSHIP, 2000
(logarithmic scale, both axes)



World Supply & Demand

The World Supply and Demand Section highlights the key issues that have affected the global appliances market over the past ten years and summarizes contributing growth factors.

This information helps you:

- Focus your sales and marketing efforts on high growth areas.
- Propose new areas for development

WORLD SUPPLY & DEMAND

Appliance Ownership Rates

The economic standard of living of the country is a major determinant of a country's ability to sustain high ownership rates for household appliances, since appliances tend to be purchased, whose purchase often involves the extension of credit. Of course, the fact that certain appliances are basic, virtually essential items in assuring a rudimentary quality of life results in a broader degree of ownership in most countries than is typical of highly desirable although less essential consumer products such as, say, automobiles; this is even true of many if not most poorer countries. For example, virtually all stable (i.e., nonnomadic) households utilize some type of cooking device, although these do not necessarily fall under the definition of major appliances. In addition, refrigeration equipment tends to be among the first convenience appliances purchased as household incomes rise in a country, and even many less advanced nations boast comparatively high refrigerator and/or freezer ownership rates.

The highest overall ownership rates for major household appliances are found in the industrialized countries located in North America (the US and Canada), Western Europe and the Asia/Pacific region (e.g., Australia, Japan, New Zealand,

World Major Household Appliances Demand by Product
(million units)

Item	1990	1995	2000	2005	2010
Households (million)	1281.5	1409.6	1538.7	1667.8	1806.9
units/000 households	155	155	155	155	155
World Major Appliances Demand	199.2	212.5	225.8	239.1	252.4
Refrigerators & Freezers	59.1	60.4	61.7	63.0	64.3
Clothes Washers & Dryers:	57.3	60.4	63.5	66.6	69.7
Washers	47.5	49.6	51.7	53.8	55.9
Dryers	9.8	10.8	11.8	12.8	13.8
Cooking Appliances:	72.9	74.1	75.3	76.5	77.7
Conventional Ranges & Ovens	50.9	51.1	51.3	51.5	51.7
Microwave Ovens	22.0	23.0	24.0	25.0	26.0
Dishwashers	9.9	12.5	15.1	17.7	20.3

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Supply & Demand by Country & Region

These Sections analyze supply and demand trends and consider the threats and opportunities for 6 regions and 27 individual countries.

ASIA/PACIFIC

Indonesia: Clothes Washers & Dryers

Demand for clothes washers and dryers in Indonesia is expected to rise 6.8 percent annually through 2005, representing above-average growth over the span of the period. Above-average gains in personal incomes, which will continue to drive demand, will turn to these labor saving devices as an alternative. Washers will remain the dominant portion of demand, with 80 percent of the total in 2005. Demand for clothes dryers will rise through 2005, but utilization will remain limited almost exclusively to the wealthiest households. Shipments of laundry equipment from facilities in Indonesia will increase 6.5 percent annually, reaching 295,000 units in 2005. While dependent on imports for its washing machine requirements (with Electrolux models quite popular), it is noteworthy that the country is a net importer of clothes washers and dryers. This is a trend that is expected to be substantial by 2005.

Spain - Cooking Appliances Supply & Demand (thousand units)

Item	1990	1995	2000	2005	2010
Households (million)	12.2	12.5	12.8	13.1	13.4
% with ranges & ovens	95.9	95.9	95.9	95.9	95.9
% with microwave ovens	20.5	20.5	20.5	20.5	20.5
Cooking Appliances in Use (million)	14.2	14.2	14.2	14.2	14.2
Ranges & Conventional Ovens	11.7	11.7	11.7	11.7	11.7
Microwave Ovens	2.5	2.5	2.5	2.5	2.5
Cooking Appliances Demand	2025	2025	2025	2025	2025
Ranges & Conventional Ovens	1600	1600	1600	1600	1600
Microwave Ovens	425	425	425	425	425
net exports	-55	-55	-55	-55	-55
Cooking Appliances Shipments	1970	1970	1970	1970	1970
Ranges & Conventional Ovens	1720	1720	1720	1720	1720
Microwave Ovens	250	250	250	250	250

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appliances in
on units, quite
ll be limited by
vens as compared
r initial market
tional competi-
will most likely
e ovens will
ase, although
ht on in the
well developed
a is an outgrowth
ough most output
nents of
ected to increase

Industry Structure

Gain a better global understanding of your competition and analyze your company's position in the industry with information about:

- industry composition
- market share
- product development
- manufacturing
- marketing & distribution
- financial requirements
- mergers & acquisitions
- industry restructuring

INDUSTRY STRUCTURE

Marketing & Distribution

As with any industry, effective marketing is a key factor for success in the world major household appliance business. The principal marketing-related competitive variables for the industry are price, product quality and performance, and company reputation. The relative importance of each factor varies according to the type of product involved and its application.

Because brand name recognition is a key factor in product selections and users tend to be very brand loyal, manufacturers follow a strategy of product differentiation. Manufacturers emphasize product features and brand names to distinguish their products. Advertising and product design help to create a particular brand image, as does participation in related activities.

Other white goods firms have adopted a focus strategy, under which all resources are dedicated to a specific product or end-use segment. Because all resources are dedicated to one area, these firms are usually quick to market with updates and are perceived to provide higher quality products and better service than a supplier involved in numerous product categories. A focus strategy, however, can be dangerous, as company revenues rely solely upon performance of a particular product category or end market.

As with many industries, the Internet is taking an increasingly important role in product marketing. Major producers have websites detailing extensive product information. These sites allow users to see the full range of products available from a company, without the floor space limitations of a brick-and-mortar store. Retail stores are also moving into online sales, as evidenced by the 2000 launch of Lowe's web-based store, which offers a wide array of major appliances.

Retail establishments are the dominant source of distribution since they are virtually the only source for consumers. Retail establishments receive the products

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Company Profiles

The Profiles Section analyzes 38 companies active in the world appliance industry. These profiles represent a sampling or cross-section of the types of companies involved in the industry.

Divisions, subsidiaries, joint ventures, etc., are discussed under appropriate parent companies.

Sources for profiles included:

- Information provided by key staff members in the respective companies
- Annual reports
- 10-K reports
- Security analysts reports
- Corporate product literature

COMPANY PROFILES

Merloni Elettrodomestici SpA

Viale Aristide Merloni 47
60044 Fabriano
Italy
39-0732-6611
<http://www.merloni.com>

Merloni Elettrodomestici manufactures household appliances. The Company had 2000 sales of \$1.1 billion, Eastern Europe (accounted for \$193 million). Merloni employ

SAMPLE PAGE

According to Merloni, the Company produced eight million household appliances annually as of 2000, making it the third-largest European producer. Merloni produces cookers, ovens, hobs, refrigerators, freezers, dishwashers, washing machines, dryers and combination washer/dryers. These products are sold under the INDESIT and ARISTON brand names. According to the Company, INDESIT, which is a brand that features a youth-oriented design, had a ten-percent share of the Italian market as of October 2001.

The ARISTON line includes several digital and Internet-connected products. For example, the ARISTON OPERA refrigerator, which was introduced in mid 2001, is a digital refrigerator equipped with an electronic display. The display allows the user to control the temperature and choose functions. The ARISTON OPERA also has several compartments that can be adjusted to different temperatures. In late 2001, the Company introduced a self-cleaning ARISTON oven to the Italian market. This oven is equipped with a digital display and fast clean function, which automatically cleans the oven by increasing the oven temperature and burning residue. The oven is also capable of downloading recipes from the Internet. In

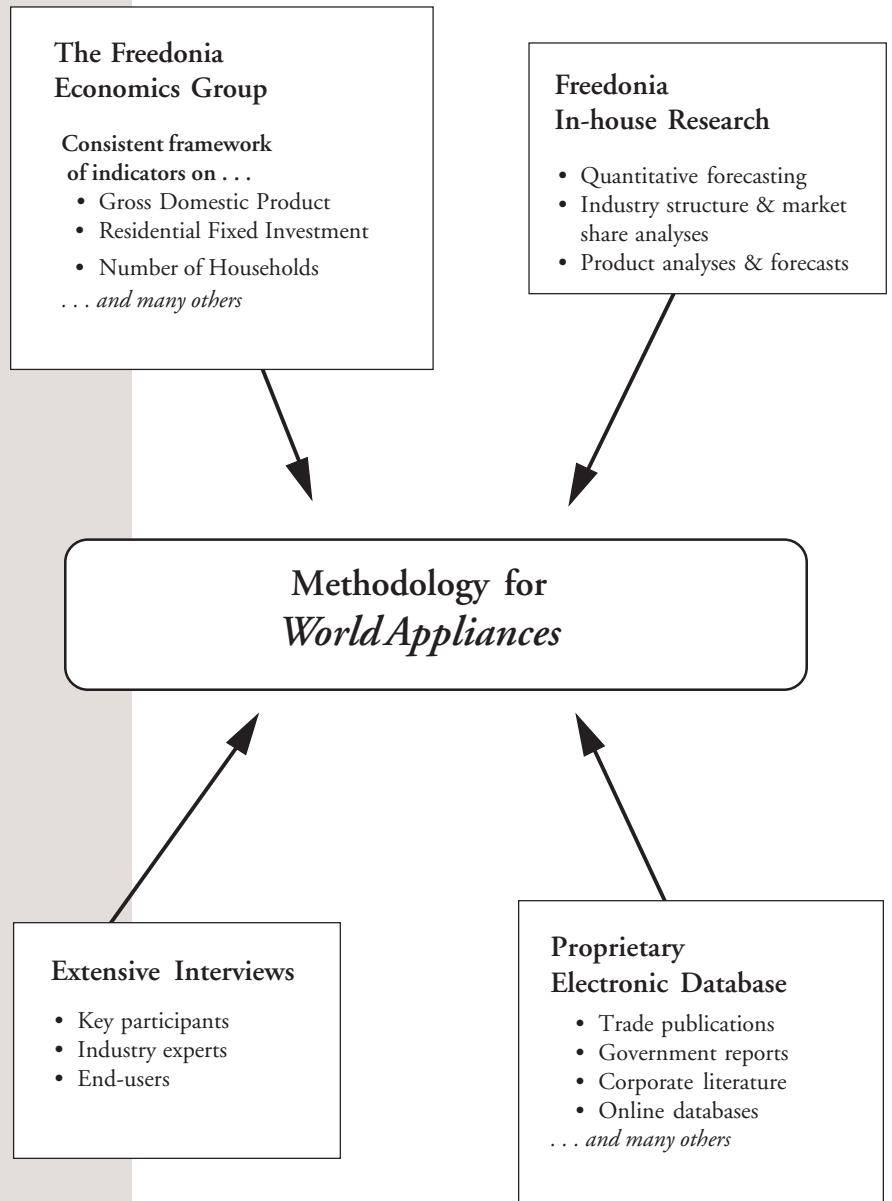
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Companies Profiled

Amica Wronki SA
Antonio Merloni SpA
 AM Appliance Group
 Asko Appliances
BPL Group
 BPL Sanyo Utilities and Appliances Ltd.
BSH Bosch und Siemens Hausgeraete GmbH
 BHST Washing Appliances Ltd.
Candy Elettrodomestici SpA
Daewoo Electronics Co. Ltd.
De' Longhi SpA
 Kenwood Appliances plc
Electrolux AB
 e2 Home
Email Ltd.
Fisher & Paykel Appliances Holdings Ltd.
General Electric Co.
 Camco Incorporated
 General Domestic Appliances Ltd.
 Mabe SA de CV
 McLean
Goodman Holding Co.
Gorenje gospodinjski aparati dd
Haier Group Co.
 Hayes Haier Appliances Co. Ltd.
 Nigeria Haier Co.
Koc Holding AS
 Arcelik AS
 Beko UK Ltd.
LG Group
Liebherr-International AG
Matsushita Electric Industrial Co. Ltd.
 AP National Sales Co. Ltd.
 National Panasonic Malaysia Sdn Bhd
 PT National Gobel
Maytag Corp.
 Rongshida-Maytag
 Trembath Appliance Imports Ltd.
Merloni Elettrodomestici SpA
 Stinol
 Wuxi Little Swan Merloni Dishwasher Co. Ltd.
Miele & Cie GmbH & Co.
Mitsubishi Electric Corp.
 Antah Melco Sales & Services Sdn Bhd
Mondragon Corporacion Cooperativa
 Edesa
 Fagor Electrodomesticos
Moulinex-Brandt Group
 Brandt SA
 Esswein
Norfrost
Samsung Group
Sanyo Electric Co. Ltd.
 Tottori Sanyo Electric Co. Ltd.
Sharp Corp.
Sub-Zero Freezer Co. Incorporated
Tatung Co.
Toshiba Corp.
Uponor Oyj
Videocon International Ltd.
Viking Range Corp.
Vitro Corporativo SA de CV
 Vitromatic SA de CV
Whirlpool Corp.
 Brasmotor SA
 Multibras SA Elettrodomesticos
 Vitromatic SA de CV
Wood (WC) Co. Ltd.
Wuxi Little Swan Co. Ltd.
 Wuxi Little Swan Merloni Dishwasher Co. Ltd.

Forecasting Methodology

Freedonia does not just collect and reprint data; Freedonia develops data. Our analysts thoroughly investigate an industry by extensively interviewing key industry participants and analyzing information from sources such as associations, government and trade literature. Once this research is complete, Freedonia establishes one set of forecasts. All writing, editing and forecasting is done in-house to assure quality and consistency. In cases where data does not exist, Freedonia develops the data based on input/output ratios, bills of materials and flow charts. The following chart summarizes Freedonia's methodology.



About The Freedonia Group

Advantages of Freedonia Reports

The Freedonia Group, Inc. is a leading international industry study/database company.

Since 1985, Freedonia has published over 1,600 titles covering areas such as plastics, chemicals, coatings and adhesives, building materials, industrial components and equipment, health care, packaging, household goods, security, and many other industries.

Freedonia has produced a wide variety of titles, including:

- *World Electric Housewares & Personal Care Appliances*
- *Power & Hand Tools*
- *Commercial Refrigeration Equipment*
- *World Power Tools*

Because Freedonia is a reliable information source, our forecasts are cited in numerous publications such as *The Wall Street Journal*, *The Financial Times*, *Appliance Manufacturer* and *Modern Plastics*.

In-house operations

Because all of our staff work at the same location, interaction between analysts and departments provides a strong system of checks and balances.

Consistency

Our Economics Group develops indicators that are used by all analysts. Therefore, every Freedonia study is based on a consistent set of economic assumptions (GDP, residential fixed investment, number of households, etc.).

Reliable forecasts

Because all of our forecasts consider the environment in which a product or industry is operating, as well as threats and opportunities to the market, Freedonia forecasts are reliable indicators of future performance.

One-on-one interviews

All studies are produced by conducting interviews with key industry participants and end-users.

Proprietary electronic database

Freedonia's analysts can tap into an extensive in-house electronic database containing corporate literature (including private company information), trade publications, government reports and many other sources of information.

About Our Customers

Freedonia's clients include major US and international companies in the manufacturing, services, consulting and financial sectors.

Typical purchasers of Freedonia studies :

- **Key Executives**
- **Corporate Planners**
- **Market Researchers**
- **Financial Analysts**
- **Information Centers**
- **New Product Developers**
- **Merger & Acquisition Specialists**

Since 1985 we have provided research to customers ranging in size from global conglomerates to one person consulting firms. More than 90% of the industrial companies in the Fortune 500 use Freedonia research to help with their strategic planning.

Some of Freedonia's customers in the appliance industry include: Antonio Merloni, BSH Bosch und Siemens Hausgeraete, Electrolux, Email Limited, Merloni Elettrodomestici and Whirlpool.

Related Studies From Freedonia

For more information about these or other Freedonia titles, please contact us at:

The Freedonia Group, Inc.
Phone: (440) 684-9600
(800) 927-5900
Fax: (440) 646-0484

World Electric Housewares & Personal Care Appliances

This new study forecasts the world market for electric housewares and personal care appliances. It presents historical data for 1990, 1995, 2000 and forecasts to 2005 and 2010 by type (e.g., coffee and tea makers; electric shavers, trimmers and clippers; hair dryers and curling irons/brushes; portable fans; toasters and toaster ovens; vacuum cleaners) and for 6 geographic regions and 25 countries. The study also examines the market environment, details industry structure and market share, and profiles key firms.
#1521. 2/02. \$4,700

Power & Hand Tools

US demand for power and hand tools will grow over 4% annually through 2005, driven by power tool upgrades and the continuing diffusion of cordless products. Electric drills and saws will lead gains among power tools, while multitools, automotive tools and ergonomic designs pace the hand tool segment. Professional users will remain dominant. This study analyzes the \$12.3 billion US power and hand tools industry to 2005 and 2010 by type and market. It also details market share and profiles key firms.
#1478. 10/01. \$3,800

Gaskets & Seals

The US market for gaskets and seals will grow 4.8% annually, driven by healthy aftermarket opportunities and improvements in motor vehicle production. Gains will be led by high-performance products such as advanced fiber gaskets, expanded graphite gaskets and shaft seals. Motor vehicles will remain the largest market and will grow at above-average rates. This study analyzes the \$7.6 billion US gasket and seal industry to 2005 and 2010 by type and market. It also evaluates market share and profiles key producers.
#1472. 10/01. \$3,600

World Gaskets & Seals

World gasket and seal demand will grow 5.7% annually through 2005. Motor vehicles will remain the largest market while electrical and electronic equipment uses grow the fastest. High-end products such as mechanical face seals, rotary oil seals and nonmetallic gaskets made of advanced materials have the best growth prospects. This study analyzes the US\$22 billion world gaskets and seals industry to 2005 and 2010 by product, source, region and for 34 countries. It also details market share and profiles key firms.
#1444. 7/01. \$4,500

World Power Tools

World demand for power tools will grow 5.8% per year through 2005. Gains will result from rising construction spending in developing nations and the popularity of large home center stores and "do-it-yourself" home repairs in developed countries. Electric tools will remain dominant and grow the fastest, especially electric saws. This study analyzes the US\$18.5 billion world power tool industry to 2005 and 2010 by product, region and for 22 countries. It also details market share and profiles leading firms.
#1419. 5/01. \$4,500

Industrial Controls

US demand for industrial controls will grow 6% annually, driven by continuing innovation in solid-state controls and rising demand for software and system integration services. Advanced controls will outpace conventional devices. Durable goods industries will remain the largest market, while services, chemicals and utilities grow the fastest. This study analyzes the \$14.5 billion US industrial controls industry to 2005 and 2010 by product and market. It also includes key company profiles and market share.
#1400. 3/01. \$3,700

World Commercial Refrigeration Equipment

World demand for commercial refrigeration equipment will grow over 6% annually, driven by rising demand in developing countries. Japan will lead gains among developed countries. Reach-in and walk-in coolers and freezers, vending machines, display cases and ice machines will be the fastest growing products. This study analyzes the US\$18.6 billion commercial refrigeration equipment industry to 2004 and 2009 in six world regions and 22 countries. It also evaluates market share and profiles key firms.
#1367. 1/01. \$4,500

Commercial Refrigeration Equipment

US demand for commercial refrigeration equipment will advance nearly 5% annually. Gains will be driven by the growing number of food stores and restaurants-including fast food outlets in venues such as gas stations-which will boost demand for display cases, walk-in coolers, freezers, beverage refrigeration and ice machines. This study analyzes the \$7.1 billion US commercial refrigeration equipment industry to 2004 and 2009 by product and by market. It also evaluates market share and profiles key firms.
#1337. 10/00. \$3,500

