Dental Equipment

US Industry Study with Forecasts to 2011 & 2016

Study #2179 | April 2007 | $4400 | 181 pages
# EXECUTIVE SUMMARY

## MARKET ENVIRONMENT
- General ........................................... 4
- Population & Household Trends ........ 5
- Macroeconomic Outlook .................. 8
- Consumer Spending Trends ............. 12
- Dental Services Spending Outlook ........ 14
- Dental Services Payment Trends by Source .......... 15
- Dental Care Provider Trends ........... 17
- Dental Care Establishment Trends ........ 19
- Dental Patient Activity & Procedures .......... 21
- Regulatory Issues ......................... 24
- Historical Market Trends .................. 25
- International Activity ...................... 28

## PRODUCTS
- General ........................................... 30
- Instruments .................................. 33
  - Hand Instruments ......................... 36
  - Hand Pieces ................................ 39
  - Lasers ....................................... 41
  - Other Instruments ....................... 44
- Systems & Parts .............................. 46
  - Imaging Systems ......................... 50
  - Instrument Delivery Systems .......... 54
  - Utility Equipment ......................... 56
  - CAD/CAM Systems ....................... 58
  - Intra-Oral Cameras ....................... 61
  - Other Systems & Parts .................. 62
  - Infection Control Equipment .......... 63
  - Curing Lights ................................ 64
- Cast Machines .................................. 67
- Furnaces & Ovens ............................ 67
- Electrosurgical Equipment ............... 68
- All Other Systems & Parts ............. 69
- Toothbrushes .................................. 69
- Furniture & Lighting ....................... 74
- Seating ......................................... 76
- Lighting ......................................... 78
- Other Furniture .............................. 80
- Other ............................................ 83

## MARKETS
- General ........................................... 87
- Dental Offices .................................. 89
- Consumers ....................................... 91
- Other ............................................. 93
- Dental Laboratories ....................... 94
- All Other ........................................ 96

## INDUSTRY STRUCTURE
- General ........................................... 97
- Market Share .................................... 98
- Procter & Gamble .................... 101
- Danaher ......................................... 102
- A-Dec ........................................ 103
- Sirona Dental Systems .................. 103
- DENTSPLY International ............. 103
- Acquisitions, Divestitures & Industry Restructuring .......... 104
- Licensing & Related Cooperative Agreements .......... 106
- Marketing ...................................... 110
- Distribution ................................... 111
- Professional .................................. 111
- Patterson Companies .................... 112
- Henry Schein .................................. 114
- Other Major Distributors ............. 115
- Consumer ...................................... 116
- Research & Development ............. 117

## COMPANY PROFILES
- A-Dec Incorporated ...................... 119
- Air Techniques ......................... 121
- Aseptico Incorporated ............. 122
- BIOLASE Technology ............... 124
- Buffalo Dental Manufacturing .... 125
- Castellini SpA ......................... 126
- Church & Dwight ....................... 128
- Colgate-Palmolive Company .... 129
- Danaher Corporation .................. 130
- DentalEZ Incorporated ............. 136
- DENTSPLY International ........... 138
- Eastman Kodak ......................... 141
- Foremost Dental ....................... 143
- GC Corporation ......................... 144
- Heraeus Holding ....................... 145
- Hu-Friedy Manufacturing .......... 147
- Ivoclar Vivadent AG .................. 149
- Midmark Corporation ............... 151
- Morita (J.) Corporation ............ 153
- PaloDex Group Oy ..................... 155
- Planmeca Oy ............................... 157
- Procter & Gamble ..................... 159
- Royal Dental Manufacturing .... 161
- Shofu Incorporated ................. 162
- Sirona Dental Systems ............ 164
- SS White Burs ......................... 167
- Stryker Corporation ................. 168
- Synergetics USA ....................... 169
- 3M Company ............................... 170
- Water Pik Technologies ........... 172
- Other Companies Mentioned in Study .......... 174
List of Tables/Charts

EXECUTIVE SUMMARY
1 Summary Table .............................. 3

MARKET ENVIRONMENT
1 Population by Age Group ............. 8
2 Macroeconomic Indicators ....... 12
3 Consumer Income & Personal Consumption Expenditures ............ 14
4 Dental Services Expenditures ........ 15
5 Dental Services Payments by Source ............. 17
6 Dental Care Providers ............. 19
7 Dental Care Establishments .. 21
8 Dental Patient Activity & Procedures ........ 23
9 Dental Equipment Market, 1996-2006 ............. 27
Cht Dental Equipment Demand Per Office, 1996-2006 ...... 27
Cht Global Dental Equipment Demand, 2006 ............. 29

PRODUCTS
1 Dental Equipment Demand by Product .................. 32
Cht Dental Equipment Demand by Product, 2006 ............. 33
2 Dental Instruments Demand by Type & Market ........ 35
Cht Dental Instruments Demand by Type, 2006 ............. 36
3 Dental Hand Instruments Demand by Type ............. 39
4 Dental Hand Pieces Demand .................. 41
5 Dental Lasers Demand by Activity .................. 44
6 Other Dental Instruments Demand .................. 46
7 Dental Systems & Parts Demand by Type & Market .......... 49
Cht Dental Systems & Parts Demand by Type, 2006 ...... 50
8 Dental Imaging Systems Demand by Type ............. 54
9 Dental Instrument Delivery Systems Demand ............. 56
10 Dental Utility Equipment Demand .................. 58
11 Dental CAD/CAM Systems Demand ............. 60
12 Dental Intra-Oral Cameras Demand .................. 62
13 Other Dental Systems & Parts Demand ............. 63
14 Toothbrush Demand by Type & Market ............. 73
15 Dental Furniture & Lighting Demand by Type & Market .......... 75
Cht Dental Furniture & Lighting Demand by Type, 2006 .......... 76
16 Dental Seating Demand ............. 78
17 Dental Lighting Demand ............. 80
18 Other Dental Furniture Demand .................. 83
19 Other Dental Equipment Demand by Type & Market .......... 85
Cht Other Dental Equipment Demand by Type, 2006 .......... 86

MARKETS
1 Dental Equipment Demand by Market .................. 88
Cht Dental Equipment Demand by Market, 2006 .......... 89
2 Dental Office Equipment Demand by Type ............. 91
3 Consumer Dental Equipment Demand by Type .......... 93
4 Other Markets for Dental Equipment by Segment & Type .......... 94

INDUSTRY STRUCTURE
1 US Dental Equipment Sales by Company, 2006 ............. 99
2 Selected Acquisitions & Divestitures ............. 105
3 Selected Cooperative Agreements ............. 108
Cht Professional Dental Equipment Distribution Market Share by Company, 2006 .......... 112
4 R&D Spending Patterns: Selected Dental Equipment Suppliers .......... 118
US dental equipment demand will benefit from a strong professional and consumer interest in technology updates, and solid growth in older individuals more likely to require dental procedures.

US demand to reach $2.85 billion in 2011

Demand for dental equipment (excluding supplies) in the US is forecast to rise 3.8 percent per year to $2.85 billion in 2011, aided by favorable economic conditions and population trends, as well as a strong interest in technology updates among professionals and consumers alike. Solid growth in the over 50 population will provide opportunities as older individuals are more likely to require dental procedures than other segments of the population. An increase in dental procedures will expand the need for equipment, particularly those items that require relatively frequent replacement such as hand instruments and tools used with hand pieces.

Advanced technology to provide most rapid gains

In general, equipment that features advanced technology, such as lasers, intra-oral cameras, digital radiography and CAD/CAM systems, will provide the most rapid gains. Dentists are seeking higher tech equipment to improve office productivity, expand their procedure capabilities, and attract new patients with a state-of-the-art office appearance. Furniture and lighting are expected to achieve moderate growth, yet benefit from dental chair purchases, as dentists attempt to create comfortable settings for their patients. Lighting will benefit from a shift to higher value-added technologies, such as LED and fiber optics.

Dental offices to remain dominant market and grow the fastest

Markets for dental equipment include a variety of dental professional settings, including dental offices, dental laboratories and dental schools, as well as the general public. Dental offices are, by far, the leading outlet for dental equipment, accounting for 65 percent of total demand in 2006. In addition to gains in the number of dental establishments, growth in dental equipment is influenced by numerous factors, including replacement rates, annual revenues, tax incentives and technological advances. Replacement rates, which vary according to the type of equipment and intensity of use, can range from single-use (e.g., burs) to roughly 15 years (e.g., dental chairs). A limited number of dental schools, and an outright retraction in the number of existing dental laboratories, compounded with low replacement rates, will restrict growth for dental equipment in these markets.

In the consumer market, gains will be sluggish due to the market maturity of toothbrushes, the dominant product. Outside of toothbrushes, penetration rates for other consumer dental equipment (e.g., tongue cleaners and oral irrigation tools) are much lower, providing opportunities for growth. Nevertheless, consumer use of equipment other than toothbrushes will remain negligible.
PRODUCTS

CAD/CAM Systems

Demand for dental CAD/CAM (computer-aided design/computer-aided manufacturing) systems is projected to rise 7.5 percent per year to $115 million in 2011, with unit demand increasing 9.7 percent annually to 3,500. CAD/CAM systems will continue to penetrate the market, primarily due to their time-saving performance benefits. A steady decline in prices, however, will slightly limit value gains over the same period.

CAD/CAM systems, which typically consist of an imaging unit and a milling unit, can be used in either dental laboratories or dentist offices, with the latter projected to achieve the most growth over the period. The use of CAD/CAM systems in the dentist office allows the dentist to create customized all-ceramic crowns, bridges or veneers from ceramic blanks in the same visit. This system eliminates the need for the dentist to rely on an outside laboratory, reducing the amount of visits per procedure. Increased use of this system is dependent on dentists’ initiative in learning to use the equipment. Ceramics that are suitable for this application include leucite, alumina and zirconia. Zirconia ceramic, for example, features excellent stability and biocompatibility, as well as strength levels that are significantly higher than other all-ceramic materials. Several suppliers offer materials for use with CAD/CAM systems, including DENTSPLY International (CERCON), Ivoclar Vivadent (IVO-CLAR VIVADENT), 3M ESPE (LAVA and PARADIGM) and Vident (VITA).

Sirona Dental Systems is the leading supplier of dental CAD/CAM systems. The company offers both in-laboratory and in-office (or chair-side) types. In-laboratory CAD/CAM systems are sold under the INLAB brand name, while in-office systems are sold under the CEREC brand name. The CEREC CAD/CAM systems are exclusively distributed in North America by Patterson.
Sample Profile, Table & Forecast

**COMPANY PROFILES**

**Midmark Corporation**  
60 Vista Drive  
Versailles, OH 45380  
937-526-3662  
http://www.midmark.com

Annual Sales: $100 million (company would not verify, 4/07)  
Employment: 640 (company would not verify, 4/07)

Key Products: operatory equipment, oral surgery products, sterilization centers, sterilizers, air compressors and vacuum pumps, and nitrous oxide and oxygen delivery systems

Midmark Corporation is a privately held manufacturer of such equipment as examination tables, sterilizers, cases, lighting, seating, electrocardiographs and other patient monitors, and dental operatories. The Company’s products are primarily marketed to general practice physicians, podiatrists, dermatologists, obstetricians, gynecologists and plastic surgeons, as well as to veterinarians.

The Company’s dental equipment includes operatory equipment, oral surgery products, sterilization centers, sterilizers, air compressors and vacuum pumps, and nitrous oxide and oxygen delivery systems. Midmark manufactures dental equipment at facilities in Versailles, Ohio and Orchard Park, New York.

Operatory equipment from Midmark includes chairs, operatories, delivery units and lighting. The Company’s chairs encompass the KNIGHT BILTMORE, RITTER 391 and MIDMARK ULTRATRIM lines. An example of Midmark’s operatories is the KNIGHT BILTMORE CLASSIC ASEPSIS 21 unit, which includes the BILTMORE

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**TABLE III-10**

**DENTAL UTILITY EQUIPMENT DEMAND**  
(million dollars)

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<td>Dental Offices (000)</td>
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<td>117</td>
<td>121</td>
<td>123</td>
<td>126</td>
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<tr>
<td>utility eqpt/office</td>
<td>0.29</td>
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<tr>
<td>000S utility eqpt/office</td>
<td>0.6</td>
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<tr>
<td>Utility Equipment Demand (000 units)</td>
<td>33</td>
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<tr>
<td>$/unit</td>
<td>2030</td>
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<tr>
<td>Utility Equipment Demand</td>
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<tr>
<td>Compressor</td>
<td>35</td>
<td></td>
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<tr>
<td>Vacuum</td>
<td>26</td>
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<tr>
<td>Other Utility Equipment</td>
<td>6</td>
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<td></td>
</tr>
<tr>
<td>% utility equipment</td>
<td>16.7</td>
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<tr>
<td>Systems &amp; Parts Demand</td>
<td>401</td>
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</tbody>
</table>

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“Demand for dental equipment in consumer settings is forecast to increase 1.7 percent per year to $610 million in 2011, based on just under one percent annual growth in the US population during the same period. Gains will be sluggish due to the market maturity of toothbrushes, the dominant product in the consumer end user segment. Although toothbrush suppliers will continue to...”

--Section IV, pg. 91
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