



**Team**

**Gregg Blake**  
Managing Partner  
gblake@brocair.com  
917.374.4533

**Daniel Fagan, Ph.D.**  
Vice Chairman  
dfagan@brocair.com  
314.954.6554

**John Rask**  
Senior Advisor  
jrask@brocair.com  
+46 (0) 70.894.6060

Brocair Partners LLC, based in New York, was formed in 2004 to provide mergers & acquisitions advisory services, equity and debt placement services, and strategic advice to healthcare companies. Brocair Partners has advised a range of public and private companies across healthcare segments that include pharmaceuticals, medical devices, patient care, consumer health and nutrition, healthcare business services and information technology, and pharmaceutical ingredients and intermediates, both in the United States and worldwide.

**Brocair Partners LLC**  
Healthcare Investment Banking  
1001 Ave of the Americas  
11th Floor  
New York, NY 10017  
**Main:** 212.500.5015  
**Fax:** 917.591.3200

# Dental Products Industry Perspective

Consolidation among dental products majors continues as the industry expects 6.1% annual growth in the professional market, and an 4.5% growth in the oral care consumer market

## Industry Overview

The major segmentation of the dental market is among professional consumables, professional dental equipment, consumer oral care, and laboratories.

Professional Dental Consumables	Professional Dental Instruments
<ul style="list-style-type: none"> <li>• Periodontics</li> <li>• Infection Control</li> <li>• Restoration</li> <li>• Orthodontics</li> <li>• Endodontics</li> <li>• Polishing Products</li> <li>• Whitening Products</li> </ul> <p><b>2017 Market Size: \$ 27.4 B</b></p>	<ul style="list-style-type: none"> <li>• Radiology</li> <li>• Handpieces</li> <li>• Lasers</li> <li>• Hygiene Maintenance</li> <li>• Electrosurgical Systems</li> <li>• Ultrasonic Instruments</li> </ul> <p><b>2017 Market Size: \$ 4.7 B</b></p>
Consumer Oral Care	Dental Laboratories
<ul style="list-style-type: none"> <li>• Toothpaste</li> <li>• Toothbrush</li> <li>• Mouthwash</li> <li>• Dental Accessories</li> <li>• Denture Products</li> </ul> <p><b>2017 Market Size: \$ 43.3 B</b></p>	<ul style="list-style-type: none"> <li>• Restoration Material</li> <li>• Milling Equipment</li> <li>• Scanners</li> <li>• Furnace</li> <li>• Articulators</li> </ul> <p><b>2017 Market Size: \$ 32.6 B</b></p>

The global dental consumables market is expected to grow at a 7.1% compound annual growth rate (CAGR), reaching an estimated \$41.5 billion by 2023, while the global dental instrument market is set to grow at a 5.9% CAGR over the same period, reaching approximately \$6 billion by 2023.<sup>1</sup> In addition, the dental laboratory industry, which produces

restorations, is forecasted to reach \$43 billion by 2022, growing at a CAGR of 5.8%.<sup>2</sup> The global consumer oral care market is forecasted to grow by 4.5% annually and reach \$54 billion by 2022.<sup>3</sup>

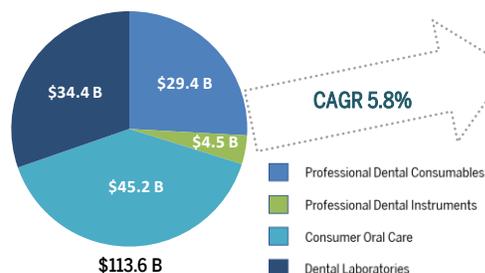
## Industry Leaders

Consolidation in the dental products market has significantly changed the competitive landscape.

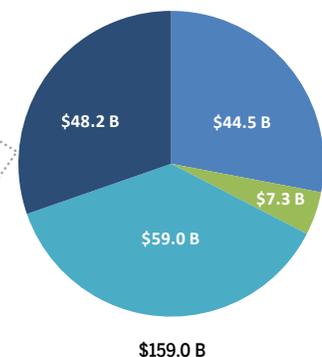
Over the past few years, M&A among the large market players has had a substantial impact on market dynamics. In 2016 Dentsply acquired Sirona, the third largest dental implants maker, for \$5.6 billion. In 2018, Danaher Corporation acquired Nobel Biocare for \$2.2 billion to strengthen its position as a market leader. In the personal dental care space, Church & Dwight acquired Water Pik for \$1 billion in 2017. But the largest transaction in recent years was Zimmer's acquisition of Biomet for \$13.9 billion.

Many of the industry's largest companies have acquired smaller firms to bolster their product portfolios, expand their geographic coverage, or enter new niches. Consolidation has also helped boost profit margins as it allows companies to spread fixed costs across larger organizations.

**2018 Dental Market Size**



**2024 Dental Market Size**

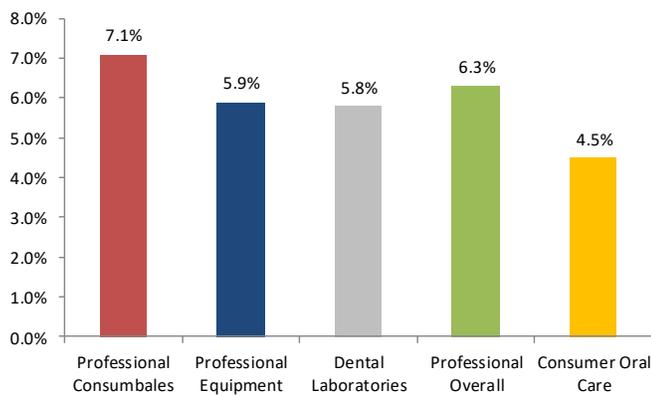


The recent expiration of key patents underpinning Invisalign's clear aligners is signaling a potential shakeup in the orthodontic market. Align Technology has an 80% share of the North America clear aligner market, and many expected a slower growth for Align, due to intensified competition. Nonetheless, its stock price remains close to all-time highs as it seems to be in a good position against market entrants with its remaining and new-issued patents.

## Growth Drivers

In the past few years, the worldwide dental products market benefitted from an aging population, a continuing focus on oral health and aesthetics, growing emerging markets, and technological innovations.

Global Dental Products Market Annual Growth



North America and Europe have traditionally dominated the dental products market, though highest growth rates are still found in Asia. In developed nations, the greatest driver has been an aging population with growing dental care needs. By 2050, the population over age 65 will double in the US, Europe, and Japan. Dental health is significant to the senior citizens, since they are likely to suffer from gum disease, often associated with more significant health issues. This same demographic change has also resulted in the growing demand for cosmetic dentistry.

In developing markets, growing wealth and expanding middle classes make better oral health more accessible. As per capita income increases, healthcare, including dental care, has become a priority in South Asia. More citizens can afford education, which makes them aware of the severity of oral health. China will have more than 40,000 companies providing dental care by 2020 with its current market growth, one third more than the number in 2014.<sup>4</sup> The number of dentists in China tripled from 2010 to 2013, leaving the markets still extremely underpenetrated.<sup>5</sup>

The adoption of new technologies has also led to strong growth in certain areas of the dental industry. Their application improved the efficiency and precision of dental practitioners. Market participants and industry experts are pointing to high-end dentistry solutions for the next wave of growth in the dental products market, with 3D printing and dental lasers being the two most noteworthy areas.

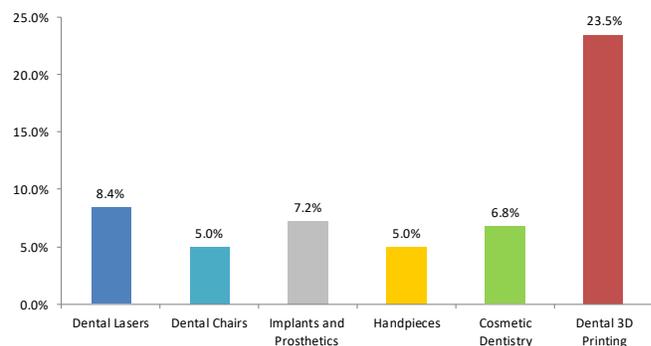
## Recent Trends

Dentistry in North America and Western Europe has transformed from a

profession primarily dealing with pain, infections, and tooth decay to one with increased emphasis on preventive care and cosmetic dentistry. As aesthetically-driven patients seek an increasing number of tooth replacement procedures, dental implants have become more and more mainstream over the past few decades. Dentists are increasingly viewing implants as preferable, longer-term alternatives to traditional options. The global dental implant market was valued at \$4.6 billion in 2017 and is expected to reach \$8 billion by 2025, growing at a CAGR of 7.2%.<sup>6</sup>

The combination of technological advancement in dentistry solutions and the transition from pain management to preventive care has led to substantial growth in two areas, 3D dental printing and dental lasers.

Selected Market Growth Rates



As 3D printing materials are ideal for developing accurate and detailed visual durable models, 3D dental printing enables dentists to perform restorative procedures with great accuracy, high efficiency and minimal trauma to the patients. The 3D approach is increasingly adopted by dental practitioners worldwide, and is growing at a CAGR of 23.5%, the fastest among all dental areas.<sup>7</sup> In fact, it is estimated that by 3D printing technologies will become the leading production source for dental restorations and devices by 2027, replacing digital subtractive milling and traditional analog fabrication processes.<sup>8</sup>

Dental lasers are another area that is experiencing rapid growth due to technological improvements. It has demonstrated improvements in chair time, pain, bleeding, morbidity, and healing time while providing more precise treatment and diagnosis. For example, VELscope is a special type of light that a dentist will shine in a patient's mouth to detect abnormalities. This new form of technology is effectively used to detect early forms of cancer or disease during an oral cancer screening. These advantages have made dental lasers the fastest growing segment in the dental equipment markets after 3D dental printing, with an 8.4% CAGR.<sup>9</sup>

1 Report files, Dental Consumables – Global Market Outlook, March 2018

2 Research and Markets, Dental Surgical Instruments Market, June 2018

3 Markets and Markets, Oral Care/Oral Hygiene Market Global Forecast, June 2017

4 Market Watch, Global Dental Market Industry Analysis, July 2018

5 Dentist's Money Digest, China Emerging as a Land of Dental Business Opportunity, January 2017

6 QY Research, Global Dental Implant Market Research Report, June 2018

7 Wise Guy Report, Dental 3D Printing Market 2018 Global Analysis, August 2018

8 SmarTech Publishing, 3D Printing in Dentistry 2018, January 2018

9 Allied Market Research, North American Dental Lasers Market, February 2018

## Competitive Matrix

Below is a matrix of select dental products companies by product type. Companies in bold are profiled on the next page.

Company	Laboratory Products	Laboratory Services	Dental Office Equipment	Dental Office Consumables	Prosthetics / Implants	Materials	Preventative Supplies	Distribution
A-Dec								
3M (ESPE/Unitek)								
Air Techniques								
<b>Align Technology</b>								
Amann Girrbach								
Benco Dental Supply								
BIOLASE								
Brasseler USA								
Cantel Medical								
Cendres+Métaux								
<b>COLTENE</b>								
Danaher								
Den-Mat								
DentalEZ								
<b>DENTSPLY</b>								
Dürr Dental								
EMS - Electro Medical Systems								
Glidewell Laboratories								
<b>Henry Schein</b>								
ImageWorks								
Ivoclar Vivadent								
Keystone Dental								
Koninklijke Philips								
Kyocera Medical								
<b>Lifco</b>								
Lisi								
<b>Mani, Inc.</b>								
<b>Meta Biomed</b>								
Millennium Dental Technologies								
Nakanishi								
Neoss								
Ocumenta								
<b>Osstem</b>								
<b>Patterson Companies</b>								
Planmeca								
Premier Products								
Pro-Dex								
Ranir								
SAS Menix (Tekka)								
SDI Ltd.								
Sentage Corporation								
Septodont								
Shin Hung								
<b>Shofu</b>								
Sterngold								
<b>Straumann</b>								
<b>Value Added Technologies</b>								
Vita Zahnfabrik H. Rauter								
Young Innovations								
Zest Anchors								
Zimmer								

## Profiles of Selected Participants

Below are profiles of selected public-listed dental products companies.

Company	Brief Description	LTM* (US\$)	
		Sales	EBITDA
 ALIGN TECHNOLOGY, INC.	Align Technology designs, based in San Jose, California, manufactures, and markets a clear aligner system (Invisalign), intra-oral scanners, and computer-aided design (CAD) and computer-aided manufacturing (CAM) restorative models.	1,733.8	474.3
	COLTENE, based Altstätten, Switzerland, in offers restoration products including CAD/CAM solutions, and endodontics products. The company also provides prosthetics, treatment auxiliaries, rotary instruments and laboratory products.	172.4	32.0
	Dentsply Sirona, based York, Pennsylvania, in designs and produces dental consumable products, dental laboratory products, and dental specialty products worldwide. The company's customers include dentists, dental hygienists, dental assistants, dental laboratories, and dental schools.	4,098.4	822.9
	Henry Schein, based in Melville, New York, distributes products and software to office-based dental practitioners, schools and other institutions. The company offers consumable dental products, dental laboratory products, and both small and large dental equipment.	13,026.3	1,101.7
	Lifco, based in Enköping, Sweden, is involved in the wholesale of dental equipment, as well as develops and sells medical record systems.	1,212.9	227.0
	Mani, based in Utsunomiya, Japan, offers dental products that include endodontic instruments, endodontic rotary instruments, root canal obturations, diamond and carbide burs, finishing and polishing instrumentss, stereoscopic microscopes, and endodontic instruments.	181.5	58.0
	Meta Biomed, based in Cheongju, South Korea, provides dental products include endodontic materials, restorative materials, implant materials, and impression materials, as well as equipment, including GENESYS, E&Q Master, E&Q Plus, ROOTOR, I-ROOT, Endo Smart, and Endo Magic System.	62.7	4.1
	Osstem Implant, based in Seoul, South Korea, manufactures and supplies dental implants. It provides TS, SS, US, and MS implant systems. The company also offers CAS/LAS, ESSET, and 123 Kits to enhance the safety while performing surgeries; bone regeneration materials; impression materials; dental whitening products; and other dental materials and equipment.	388.8	28.2
	Patterson Dental, based in St. Paul, Minnesota, offers its customers a selection of dental products, including approximately 96,000 SKUs of which approximately 5,000 are private-label products sold under the Patterson brand. Patterson Dental also offers customers a range of related services, including dental equipment installation, maintenance and repair.	5,465.7	303.7
	Shofu, based in Kyoto, Japan, manufactures and sells dental materials and equipment in Japan and internationally. Its products include artificial teeth, dental porcelains, dental abrasives and polishers, dental alloys, dental cements, composite and bonding materials, dental waxes, dental investments/stones, orthodontic devices, and preventive infection control goods.	220.0	22.8
	Straumann, based in Basel, Switzerland, engages in the research, development, and manufacture of implants, instruments, CAD/CAM prosthetics, and tissue regeneration products for use in tooth replacement and restoration or to prevent tooth loss.	1,141.1	333.7
	Value Added Technology, based in Hwaseong, South Korea, develops, manufactures, and sells dental digital X-ray and CT systems in South Korea. The company offers 2D and 3D imaging dental and medical solutions, and intra/extra oral products.	210.2	44.0

\*Latest Twelve Months as of 8/13/2018