

**Current situation and development research report of Shenzhen
dental industry** (2017 version)

**Food and Drug Administration of Shenzhen Municipality
Shenzhen Association of Medical Devices**

06/2017

Contents

Foreword

1 Current situation of dental industry

- 1.1 The background of dental industry
 - 1.1.1 The development of dental industry
- 1.2 Types of denture
- 1.3 The Overall economic situation of Shenzhen dental manufacturing enterprises
 - 1.3.1 The annual value of production
 - 1.3.2 The annual profits
 - 1.3.3 The annual tax revenue
 - 1.3.4 The number of people engaged and the situation of professional technicians
 - 1.3.5 The area
 - 1.3.6 The exportation
 - 1.3.7 The numbers of manufacture and exportation
 - 1.3.8 The distribution and economy of dental manufacturing enterprises in each district

2 The analysis of the development of dental industry

- 2.1 The trend of dental industry development
 - 2.1.1 The developing trend of product chain
 - 2.1.2 The developing trend of dental manufacturing enterprises
- 2.2 The self strength and weakness of Shenzhen dental manufacturing enterprises
 - 2.2.1 Strength
 - 2.2.2 Weakness

3 Development countermeasures and suggestions

- 3.1 Standardized management and effective supervision and management system to form the benign competition of dental manufacturing enterprises
- 3.2 Increase the professional skill of the people engaged and the competitiveness of the enterprises
- 3.3 Support local brands and decrease the costs
- 3.4 Enhance the technical communication among the industry
- 3.5 Provide local preferential policies
- 3.6 Enhance the international communication of dental manufacturing enterprises

Afterword

Foreword

China dental manufacturing enterprises mainly distribute over the Pearl River Delta region which centers on Shenzhen and the Yangtze River Delta region which centers on Shanghai, the other districts are radiation from these two regions.

Among these areas, Shenzhen is the most important industrial cluster of our national dental industry with its unique industry development strength. By 2016, there are nearly 100 dental enterprises with scale, among them there are 20 whose production value are over 10 million RMB (about 1.44 million US dollars), and 4 whose are over 100 million RMB (about 14.42 million US dollars). The scale of Shenzhen dental enterprises is big and highly focus, which has developed the production mode of industrial assembly line.

Shenzhen is adjacent to Hongkong and with its developed logistics industry, the delivery time of customized dental products is effectively under control. Therefore, there are absolute advantage of Shenzhen dental products in international market share than other districts in China. The majority orders of many Shenzhen dental manufacturing enterprises are from abroad, so their technical skill and quality control are accepted by many dental hospitals and clinics of the developed countries, such as Europe and USA.

The customs statistics show that the market share of dental products from Shenzhen is over 60% in foreign trade market of national dental industry. With stable quality of dental products, short delivery time and high technician skill, the brand of Shenzhen dental-made is established.

1 Current situation of dental industry

1.1 The background of dental industry

.....

1.1.1 The development of dental industry

.....

1.2 Types of denture

.....

1.3 The Overall economic situation of Shenzhen dental manufacturing enterprises

According to the statistics of Food and Drug Administration of Shenzhen Municipality,there are 93 dental manufacturing enterprises(acquired relevant certificates) in Shenzhen city,among them 78 enterprises are with relevant statistical data filled effectively. These statistics covers all the dental manufacturing enterprises with scale and shows the current situation of development of Shenzhen dental industry.

1.3.1 The annual value of production

According to the statistical data filled effectively by the enterprises,the annual value of production of Shenzhen medical equipment enterprises in 2016 is 31.1 billion RMB(about 4.48 billion US dollars),of which the dental enterprises are 1.391 billion RMB(about 0.2 billion US dollars),accounting for 4.47%,with 13.96% year-on-year growth.

According to the annual inspection data of samples enterprises,there are 20 Shenzhen dental enterprises with annual value of production over 10 million RMB(about 1.44 million US dollars)

No	Enterprises	Annual value of production in 2016 (Million US dollars)	Annual value of production in 2015 (Million US dollars)	Growth rate
1	现代牙科器材（深圳）有限公司 <u>Modern Dental Laboratory</u> (Shenzhen)	46.09	46.98	-1.90%
2	洋紫荆牙科器材（深圳）有限公司 <u>YZJ Dental Lab</u> (subsidiary of Modern)	25.35	25.18	0.72%
3	康泰健美医疗科技（深圳）有限公司 <u>DDS Lab(Shenzhen)</u> (Subsidiary of KTJ Dental Group)	15.87	12.73	24.68%
4	四洲义齿（深圳）有限公司	14.68	15.73	-6.70%
5	深圳市金悠然科技有限公司 <u>Royal Dental Lab</u>	14.21	10.82	31.30%
6	深圳市康泰健牙科器材有限公司 <u>KTJ Dental Group</u>	10.88	6.26	74.02%
7	深圳捷登义齿科技有限公司	9.98	10.08	-1.06%
8	深圳市家鸿口腔医疗股份有限公司 <u>JiaHong Dental Lab</u>	7.75	7.37	5.20%
9	深圳市世星泰得技术研发有限公司 <u>WorldStar Lab</u>	5.05	3.90	29.59%
10	深圳市亚卡特义齿有限公司 <u>Alcadent</u>	4.52	Not Filled	-
11	深圳康泰健牙科技术有限公司 KTJ Dental (Subsidiary of KTJ Dental Group)	3.79	3.45	10.09%
12	深圳市德乐牙科技术有限公司 Expert Dental Laboratory (Subsidiary of KTJ Dental Group)	3.64	3.51	3.59%
13	深圳市联合牙科科技有限公司 Unitech (Subsidiary of Royal Dental Lab)	2.51	1.47	71.09%
14	深圳精艺牙科技术有限公司	2.04	1.78	14.87%
15	深圳市威兰丹特牙科器械 技术有限公司 Wielandent	2.02	Not Filled	-
16	深圳市名扬假牙制品有限公司 <u>Famous Dental</u>	1.81	1.51	19.68%
17	深圳新致美精密齿研有限公司 <u>New Perfect Dental Lab</u>	1.72	2.54	-32.32%
18	深圳美冠达牙科技术有限公司 <u>Mecodent Dental Laboratory</u>	1.62	1.89	-14.39%

19	深圳市宝鑫科技有限公司 Beyond&BX Dental Laboratory	1.44	1.15	25.00%
20	深圳市致历宝牙科配制有限公司 Zhilibao Dental Laboratory	1.44	1.15	25.00%

1.3.2 The annual profits

The total annual profits of Shenzhen dental manufacturing enterprises is 143.79 million RMB(about 20.73 million US dollars) and the profit rate is 9.93% in 2016,which is in accordance with the characteristics of dental industry.

The two reasons for obvious increase of the total profits in 2016 are:

1,When the dental enterprises have developed with certain scale,they will set up new companies or buy other enterprises as subsidiary to run different businesses.

2,Due to mass depreciation of RMB and the currency of the trade of the exportation of dental enterprises is in dollar,also the increase of turn over may lead o the obvious increase of the profits.

1.3.3 The annual tax revenue

The total annual tax revenue of Shenzhen dental manufacturing enterprises in 2016 is 104.27 million RMB(about 15.03 million US dollars), with year-on-year growth of 41.33%. And the total annual profits and taxes of counted enterprises are 248.07 million RMB(about 35.76 million US dollars),accounting for 17.14% of the total sales amount, which is at the medium level among the Shenzhen medical equipment industry.

The average profits and taxes percentage of self-owned brand innovative dental manufacturing enterprises is about 30%, which is far beyond the average level of Shenzhen dental industry.

The statistics show that there are 53 enterprises who have profits of the samples enterprises, accounting for 67.95% of total enterprises and 14 enterprises with negative profits, 11 enterprises with 0 filled in profits item, which account for 32.05% of total enterprises.

1.3.4 The number of people engaged and the situation of professional technicians

The total number of the people engaged in Shenzhen dental manufacturing enterprises is 11242, with year-to-year growth at 20.96% by 2016. Among them there are 4413 professional technicians, accounting for 39.25% of the total people engaged.

The number of the people engaged in Shenzhen dental manufacturing enterprises, who is below/including junior college degree is 10771, accounting for 95.81% of total people engaged, the people above bachelor degree only accounts for 4.19%.

We can see that since the traditional hand-working is the mainstream in dental industry, it does not require too much professional knowledge, but more on the experience and proficiency of the professional technicians, which leads to lower requirement of the education of the people engaged.

The statistics show that the per-capita production value of Shenzhen dental manufacturing enterprises is 123.8 thousand RMB(about 17.84 thousand US dollars), with a little decrease comparing to 131.4 thousand RMB(about 18.94 thousand US dollars) of last year, also lower than the per-capita production value of Shenzhen city (167.4 thousand RMB,about 24.13 thousand US dollars).

Basically the mode in dental manufacturing technician teams is master-to-apprentice,which will take about 2 to 3 year to train the apprentices. For this reason,the labor costs are more than 60% in dental manufacturing enterprises. The worst thing is the labor costs of dental manufacturing enterprises has increased over 200% during recent 10 years,Shenzhen is worse,with lowering industry profits every year,the competition becomes very fierce.

1.3.5 The area

According to the statistic of the samples enterprises,the total area of Shenzhen dental manufacturing enterprises is 158 thousand square meters in 2016,with average area per enterprise of 2,025 square meters and average annual production value per square meter of 8,806.93 RMB(about 1,269.56 US dollars).Among them,the self-owned area is 6,894.15 square meter,accounting for 4.36% and the rent area is 151,129.92 square meter,accounting for 95.64%.

1.3.6 The exportation

According to the data of China Chamber of Commerce for Import & Export of Medicines & Health Product,the exportation amount of Shenzhen dental manufacturing enterprises in 2016 is 128.84 million US dollars.(according to the exchange rate on 31th,Dec,2016,1 dollar=6.937 RMB,i.e,893.79 million RMB) And the total exportation amount of national dental industry is 206.12 million US dollar,while Shenzhen city accounts for 62.51%,indicating the characteristics of Shenzhen dental industry are strong aggregation,high concentration and large market share.

Diagram The ranking of the export volume of the Shenzhen dental enterprises in 2016

No	Enterprises	Export value (million US dollars)	Year-to-year export volume (%)	Ranking
1	现代牙科器材(深圳)有限公司 <u>Modern Dental Laboratory</u> (Shenzhen)	59.65	14.62	8
2	康泰健美医疗科技(深圳)有限公司 <u>DDS Lab(Shenzhen)</u> (Subsidiary of KTJ Dental Group)	16.57	17.83	28
3	四洲义齿(深圳)有限公司	12.89	-19.32	36
4	深圳捷登义齿科技有限公司	10.38	-8	41
5	深圳市亚卡特义齿有限公司 <u>Alcadent</u>	4.72	-0.21	81
6	深圳市德乐牙科技术有限公司 Expert Dental Laboratory (Subsidiary of KTJ Dental Group)	3.78	-3.67	86

1.3.7 The numbers of manufacture and exportation

The total number of dental restorations manufactured of Shenzhen dental manufacturing enterprises in 2016 is 6755,649 pieces, among them fixed denture is 3967,566 pieces, and removable denture is 2202,915 pieces, implant denture is 376,543 pieces, orthodontics and the others is 208,625 pieces.

The total number of dental restorations exported of Shenzhen dental manufacturing enterprises in 2016 is 3673,836 pieces, including 2399,130 pieces of fixed denture, 1067,800 pieces of removable denture, 115,159 pieces of implant denture and 91,747 pieces of orthodontics, accounting for 60.47%,48.47%,30.58% and 43.98% of each type of total amount of production.

According to the statistics, there are 19 dental enterprises who have 3d dental printers, all of them are with big scale. In total, they have 49 printers and the total number of dentures using the 3d printer is 480,542 pieces, accounting for 7.11% of total 6755,649 pieces dentures manufactured. Besides, 45 dental enterprises has 219 pieces dental milling machines, the total number of dentures manufactured by dental milling machines is 480,542 pieces, accounting for 15.03% of total dentures manufactured.

1.3.8 The distribution and economy of dental manufacturing enterprises in each district

The core dental industry cluster is at Baoan district, then Nanshan and Longgang district. There are 69 dental manufacturing enterprises in these districts, accounting for more than 80%.

The economic indicators of Shenzhen dental manufacturing enterprises at each district
(Million US dollars)

District	Quantity	Gross production value	Total sales value	Total export value	Total tax revenue value	Total profits value
Nanshan	11	112.44	123.19	85.28	11.93	12.33
Baoan	49	56.84	53.95	41.36	1.68	2.29
Longgang	9	19.387	20.20	12.09	1.04	2.83
Longhua	6	9.24	8.63	0.42	0.30	3.24
Futian	1	1.62	1.62	1.26	0.05	-0.10
Luohu	1	0.91	0.91	0.91	0.02	0.16
Dapeng	1	0.14	0.14	0	0.0001	-0.0002

Although Baoan and Nanshan districts are the main industry clusters, with different scales, the economic indicators are with big differences. The dental enterprises at Baoan district are mostly medium-and-small while at Nanshan district are mostly large, with 6 dental enterprises of total gross production value over 10 million RMB (about 144 million US dollars).

2 The analysis of the development of dental industry

2.1 The trend of dental industry development

2.1.1 The developing trend of product chain

Dental diagnostic and manufacturing digitization

According to the statistics,the number of dental restorations manufactured by using 3d dental printers is 480,542,accounting for 7.11% of the total numbers manufactured.And by using dental milling machines is 1015,207,accounting for 15.03% of the total numbers manufactured.(The total number manufactured is 6755,649)

Dental CAD/CAM instead of hand-working

...

New restoration materials and methods coming out continuously

...

2.1.2 The developing trend of dental manufacturing enterprises

...

2.2 The self strength and weakness of Shenzhen dental manufacturing enterprises

2.2.1 Strength

Technology and management

...

Geography location

...

Supplementary Services

...

2.2.2 Weakness

...

3 Development countermeasures and suggestions

3.1 Standardized management and effective supervision and management system to form the benign competition of dental manufacturing enterprises

...

3.2 Increase the professional skill of the people engaged and the competitiveness of the enterprises

...

3.3 Support local brands and decrease the costs

...

3.4 Enhance the technical communication among the industry

...

3.5 Provide local preferential policies

...

3.6 Enhance the international communication of dental manufacturing enterprises

...

-This Article is provided by 360MeiYa,translated by Dragon from Shenzhen UP3D Tech Co.,Ltd,we are not responsible for the correctness of the data listed above or any joint responsibility if any one uses the data above.