

Index page of Dental Chair

TABLE OF CONTENT

1. INTRODUCTION	Error! Bookmark not defined.
1.1 Evolution of Dental Chair	Error! Bookmark not defined.
2. PRODUCT INFORMATION.....	Error! Bookmark not defined.
2.1 Working Principle	Error! Bookmark not defined.
2.2 Overview and Major Components of the Dental Chair	Error! Bookmark not defined.
2.2.1 Patient Chair.....	Error! Bookmark not defined.
2.2.2 Junction Box.....	Error! Bookmark not defined.
2.2.3 Dental Chair Controls	Error! Bookmark not defined.
2.2.4 Cuspidor Section	Error! Bookmark not defined.
2.2.5 Bracket Table/ Operation Table	Error! Bookmark not defined.
2.2.6 Dental Lights	Error! Bookmark not defined.
2.2.7 X-ray Viewer	Error! Bookmark not defined.
2.3 Types of Dental Chair	Error! Bookmark not defined.
2.3.1 Ceiling Mounted Dental Chair	Error! Bookmark not defined.
2.3.2 Dental Chair Mounted Design	Error! Bookmark not defined.
2.3.3 MOBILE INDEPENDENT DESIGN DENTAL CHAIRS	Error! Bookmark not defined.
2.4 Design Requirements of the Dental Chair	Error! Bookmark not defined.
2.5 Technical Specifications of a Dental Chair	Error! Bookmark not defined.
3. STATE-OF-ART DENTAL TECHNOLOGY	Error! Bookmark not defined.
4. STANDARDS.....	Error! Bookmark not defined.
4.1 TYPES OF STANDARDS	Error! Bookmark not defined.
5. REGULATIONS	Error! Bookmark not defined.
5.1 Regulatory requirements and classification of the medical device across the world	Error! Bookmark not defined.
5.1.1 Medical Device (Dental Chair) Classifications under Indian Regulations.....	Error! Bookmark not defined.
5.1.2 Dental Chair Regulations in Europe	Error! Bookmark not defined.
5.1.3. USA: Pre-market Notification or the 510(k) Process ..	Error! Bookmark not defined.
5.1.4. Japan MHLW & PMDA	Error! Bookmark not defined.
5.1.5. Canadian Medical Devices Regulations	Error! Bookmark not defined.
5.2 Medical Device Single Audit Program (MDSAP)....	Error! Bookmark not defined.

Index page of Dental Chair

6. MARKET OVERVIEW	Error! Bookmark not defined.
 6.1 Global Market Overview	Error! Bookmark not defined.
 6.2 Market Segmentation	Error! Bookmark not defined.
 6.4 Prominent Manufacturers of Dental Chair - Global	39
 6.5 Prominent Manufacturers of Dental Chair - India.....	Error! Bookmark not defined.
7. EXPORT IMPORT INFORMATION	41
REFERENCES.....	43

LIST OF FIGURES

Index page of Dental Chair

Figure 1	First Dental chair invented by Dr. JosiahFlagg	2
Figure 2	20th Century Morrison Dental Chair by S.S.White.....	2
Figure 3	Den-Tal-Ez JChair® by Dr John Naughton	3
Figure 4	Major components of a Dental Chair	5
Figure 5	Positional relation between Backrest position and Leg rest movement/Rollup extension	6
Figure 6	Operating Position of dentist with respect to position of the chair.....	6
Figure 7	Junction Box of the DentalChair	7
Figure 8	Foot Control Switch of a DentalChair.....	8
Figure 9	Cuspidor Unit Section of the DentalChair.....	9
Figure10	Control panel of the cuspidor section	10
Figure11	Doctor unit/ Bracket table of the Dental chair.....	11
Figure12	Air-Water syringe or three-waysyringe	12
Figure13	High speed air turbine handpiece.....	12
Figure 14	Low speed air turbine handpiece causes it to spin	14
Figure 15	Dental Light attached to the DentalChair	15
Figure 16	Digital X-ray Viewer for Dental Chair	16
Figure 17	Ceiling Mounted Dental Chairs	19
Figure 18	Dental Chair Mounted Design.....	20
Figure 19	Mobile Independent Design Dental Chair	20
Figure 20	Life cycle of a Medical Device	34
Figure 21	Global Market Overview of Dental chair	37
Figure 22	Value of Exports and Imports for the HS Code 94021010(INR CR)	41
Figure 23	Top 10 Countries from which Imports originate for the HS Code 94021010 (2021-2022).....	42
Figure 24	Top 10 Countries for which Exports are generated for the HS Code 94021010 (2021-2022).....	42

LIST OF TABLES

Table 1 : Comparative Analysis between Hydraulic and Electronic Dental Chair	17
Table 2: Design Requirements of the Dental Chair	19
Table 3 : Technical Specifications of a Dental Chair	24
Table 4: List of ISO/IS standards applicable to Dental Chair/Dental Accessories	Error! Bookmark not defined.
Table 5: List of Particular standards applicable to Dental Chair/Dental Accessories	32
Table 6: Value of Exports and Imports and Y-o-Y Growth % of HS Code 94021010 INR CR	<u>41</u>

LIST OF ABBREVIATIONS

HS	Harmonized System
IGST	Integrated Goods and Services Tax
CAGR	Compound annual growth rate
USD	United States dollar
FDA	Food and Drug Administration
ISO	International Organization for Standardization
CDRH	Center for Devices and Radiological Health
IS	Indian Standard
IEC	International Electrotechnical Commission
RPM	Revolutions Per Minute