

Medical Ceramics Market by Material (Bioinert (Zirconia, Aluminium), Bioactive (Glass, Hydroxyapatite), Bioresorbable Ceramics), Application (Dental Application, Orthopedic Application, Plastic Surgery, Surgical Instruments) - Global Forecast to 2027

Market Report | 2022-08-30 | 185 pages | MarketsandMarkets

AVAILABLE LICENSES:

- Single User \$4950.00
- Multi User \$6650.00
- Corporate License \$8150.00
- Enterprise Site License \$10000.00

Report description:

The global medical ceramics market is valued at an estimated USD 2.6 billion by 2022 is projected to reached USD 3.6 billion by 2027, at a CAGR of 6.6% during forecast period. The growing demand for medical ceramics in plastic surgeries & wound healing applications; the rising number of hip & knee replacement procedures; and the increasing demand for implantable devices are the major factors hampering the growth of this market.

"The zirconia segment accounted for the highest growth rate in the medical ceramics market, by type, during the forecast period" Based on type, the global bioinert ceramics market is segmented into zirconia, alumina, and other bioinert ceramics (titanium, pyrolytic carbon, and silicon nitride). In 2021, the zirconia segment accounted for the largest share of the global bioinert ceramics market. This segment is also expected to grow at the highest rate during the forecast period. The largest share of this segment can be atributed to advantages of zirconia over other ceramic materials, the rising demand for aesthetically attractive dental restorations will drive the market growth.

"Dental application segment accounted for the highest CAGR"

On the basis of application, the global medical ceramics market is segmented into - dental applications, orthopedic applications, surgical instruments, and plastic surgery. In 2021, the dental applications segment accounted for the largest share of the medical ceramics market. Factors supporting the growth increasing number of cosmetic dental procedures and dental implant procedures

Scotts International. EU Vat number: PL 6772247784 tel. 0048 603 394 346 e-mail: support@scotts-international.com

across various regions and rising periodontal disorders.

"The Asia-Pacific market is expected to grow at the highest CAGR during the forecast period."

The medical ceramics market is segmented into - North America, Europe, the Asia Pacific, Latin America, and Middle East and Africa. The medical ceramics market in several Asia-Pacific countries is expected to witness high growth during the forecast period owing to the aging population, rapid economic growth in emerging APAC countries and rising volume of knee & hip replacement procedures.

A breakdown of the primary participants referred to for this report is provided below:

- -∏By Company Type: Tier 1-45%, Tier 2-34%, and Tier 3- 21%
- By Designation: C-level-47%, Director-level-33%, and Others-20%
- By Region: North America-35%, Europe-32%, Asia Pacific-25%, Latin America-6%, and the Middle East & Africa-2% Lists of Companies Profiled in the Report:
- -□CeramTec GmbH (Germany)
- KYOCERA Corporation (Japan)
- Morgan Advanced Materials (UK)
- -□Nobel Biocare Services (Switzerland)
- Tosoh Corporation (Japan)
- -∏Institut Straumann (Switzerland)
- -[]3M (US)
- -□Royal DSM (DSM) (Netherlands)
- -∏Elan Technology (US)
- -□Bakony Technical Ceramic Ltd. (Hungary)
- -□Superior Technical Ceramics (US)
- -□QSIL Ceramics GmbH (Germany)
- -□NGK Spark Plug (Japan)
- -□CoorsTek, Inc. (US)
- -□Advanced Ceramic Materials (US)
- -□Berkeley Advanced Biomaterials (US)
- Kuraray Noritake Dental (Japan)
- -□Ferro Corporation (Japan)
- -□H.C. Stark GmbH (Germany)
- Berkeley Advanced Biomaterials (US).

Research Coverage

This report studies the medical ceramics market based on the type of material, application, and region. The report also studies factors (such as drivers, restraints, opportunities, and challenges) affecting market growth. It analyzes the opportunities and challenges in the market and provides details of the competitive landscape for market leaders. Furthermore, the report analyzes micromarkets with respect to their individual growth trends and forecasts the revenue of the market segments with respect to five main regions (and the respective countries in these regions).

Key Benefits of Buying the Report:

The report will help market leaders/new entrants by providing them with the closest approximations of the revenue numbers for the overall medical ceramics market and its subsegments. It will also help stakeholders better understand the competitive landscape and gain more insights to better position their business and make suitable go-to-market strategies. This report will enable stakeholders to understand the market's pulse and provide them with information on the key market drivers, restraints,

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

opportunities and challenges.

Table of Contents:

1□INTRODUCTION□28

1.1□STUDY OBJECTIVES□28

1.2 MARKET DEFINITION 28

TABLE 1 | INCLUSIONS & EXCLUSIONS | 28

1.3 MARKET SCOPE 29

1.3.1 MARKETS COVERED 29

1.3.2 ☐YEARS CONSIDERED ☐ 30

1.4□CURRENCY CONSIDERED□30

1.5∏STAKEHOLDERS∏30

1.6 SUMMARY OF CHANGES 31

2 RESEARCH METHODOLOGY 32

2.1∏RESEARCH DATA∏32

FIGURE 1∏RESEARCH DESIGN∏32

2.1.1 SECONDARY DATA 33

2.1.1.1 Secondary sources 34

2.1.2 PRIMARY DATA 35

FIGURE 2∏PRIMARY SOURCES∏35

2.1.2.1 Key data from primary sources 36

2.1.2.2 Key industry insights 36

FIGURE 3 BREAKDOWN OF PRIMARY INTERVIEWS: BY COMPANY TYPE, DESIGNATION, AND REGION 37

2.2 MARKET SIZE ESTIMATION 37

FIGURE 4 APPLICATION-BASED MARKET ESTIMATION 39

FIGURE 5 CAGR PROJECTIONS: SUPPLY-SIDE ANALYSIS 40

FIGURE 6∏TOP-DOWN APPROACH∏40

2.3 MARKET BREAKDOWN AND DATA TRIANGULATION 41

FIGURE 7 DATA TRIANGULATION METHODOLOGY 41

2.4∏MARKET SHARE ANALYSIS∏42

2.5 ASSUMPTIONS 42

2.6 RISK ASSESSMENT/FACTOR ANALYSIS 142

TABLE 2∏RISK ASSESSMENT/FACTOR ANALYSIS∏42

3 EXECUTIVE SUMMARY 43

FIGURE 8∏MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2022 VS. 2027 (USD MILLION)∏43

FIGURE 9 ZIRCONIA, BY TYPE, IS EXPECTED TO COMMAND LARGEST MARKET SHARE FROM 2022 TO 2027 44

FIGURE 10 HYDROXYAPATITE SEGMENT TO COMMAND LARGEST MARKET SHARE FROM 2022 TO 2027 44

FIGURE 11 □ DENTAL APPLICATIONS SEGMENT TO DOMINATE MEDICAL CERAMICS MARKET DURING FORECAST PERIOD □ 45

FIGURE $12\square$ ASIA PACIFIC MARKET TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD \square 46

4□PREMIUM INSIGHTS□47

4.1 MEDICAL CERAMICS MARKET OVERVIEW 4.7

FIGURE 13 RISING NUMBER OF HIP & KNEE REPLACEMENT SURGERIES AND GROWING AWARENESS OF DENTAL CARE DRIVE MARKET GROWTH 47

4.2∏GEOGRAPHIC ANALYSIS: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE AND REGION∏48

FIGURE 14 | BIOINERT CERAMICS SEGMENT DOMINATED MARKET IN NORTH AMERICA IN 2021 | 48

4.3 GEOGRAPHICAL SNAPSHOT OF MEDICAL CERAMICS MARKET 49

FIGURE 15 CHINA REGISTERS HIGHEST CAGR DURING FORECAST PERIOD 49

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

5 MARKET OVERVIEW 50

5.1 INTRODUCTION 50

5.2 MARKET DYNAMICS 50

FIGURE 16 MEDICAL CERAMICS MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES 50

5.2.1 DRIVERS 51

5.2.1.1 Growing demand for implantable devices 51

TABLE 3 INCREASING GERIATRIC POPULATION, BY REGION, 2022 VS. 2050 51

5.2.1.2 Increasing demand for medical ceramics in plastic surgeries and wound healing applications 52

5.2.1.3 Rising number of hip & knee replacement procedures 52

FIGURE 17∏TOTAL NUMBER OF REPLACEMENT PROCEDURES PERFORMED IN THE US FROM 2012 TO 2019∏53

5.2.2 RESTRAINTS ☐ 53

5.2.2.1 Stringent clinical & regulatory processes 53

5.2.3∏OPPORTUNITIES∏53

5.2.3.1 Growing healthcare industry in emerging economies 53

5.2.3.2□3D printed ceramics□54

5.2.3.3 Gradual shift toward new materials & products 54

5.2.3.4 Growing research activities for nanotechnology applications 55

5.2.4 CHALLENGES 55

5.2.4.1 Issues related to reparability & recycling 55

5.2.4.2 Shortage of skilled surgeons and dental professionals 55

5.3 REGULATORY ANALYSIS ☐ 56

5.3.1 NORTH AMERICA 56

5.3.1.1∏US∏56

5.3.1.1.1 FDA device classification 56

FIGURE 18 US: REGULATORY APPROVAL PROCESS 58

TABLE 4 US: MEDICAL DEVICE REGULATORY APPROVAL PROCESS 59

5.3.1.2 | Canada | 59

TABLE 5 CANADA: MEDICAL DEVICE REGULATORY APPROVAL PROCESS 59

FIGURE 19 CANADA: REGULATORY APPROVAL PROCESS FOR MEDICAL DEVICES 60

5.3.2∏EUROPE∏60

5.3.2.1 European regulatory process 61

FIGURE 20 | EUROPE: REGULATORY APPROVAL PROCESS FOR MEDICAL DEVICES (MDR) | 162

5.3.3 ASIA PACIFIC 63

5.3.3.1 Japan 63

TABLE 6 JAPAN: MEDICAL DEVICE CLASSIFICATION UNDER PMDA 63

5.3.3.2 China 64

TABLE 7 CHINA: CLASSIFICATION OF MEDICAL DEVICES 64

5.3.3.3∏India∏65

5.4□ECOSYSTEM COVERAGE□66

5.5∏VALUE CHAIN ANALYSIS∏66

FIGURE 21 MEDICAL CERAMICS MARKET: VALUE CHAIN ANALYSIS 67

6 MEDICAL CERAMICS MARKET, BY MATERIAL TYPE 68

6.1∏INTRODUCTION∏69

TABLE 8 MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 69

6.2□BIOINERT CERAMICS□70

TABLE 9 MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 70

TABLE 10 MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY REGION, 2020-2027 (USD MILLION) 70

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

- 6.2.1 ZIRCONIA 70
- 6.2.1.1 High resistance to corrosion to drive market growth 70
- 6.2.2∏ALUMINUM OXIDE∏72
- 6.2.2.1 Increasing use of aluminum oxide in hip replacements and dental implants to drive market growth 72
- TABLE 12 \square MEDICAL CERAMICS MARKET FOR ALUMINUM OXIDE, BY REGION, 2020-2027 (USD MILLION) \square 72
- 6.2.3 □ OTHER BIOINERT CERAMICS □ 73
- TABLE 13 OTHER BIOINERT CERAMICS MARKET, BY REGION, 2020-2027 (USD MILLION) 73
- 6.3∏BIOACTIVE CERAMICS∏73
- TABLE 14 MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 74
- TABLE 15 \square MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY REGION, 2020-2027 (USD MILLION) \square 74
- 6.3.1 | HYDROXYAPATITE | 74
- 6.3.1.1 ☐Increasing R&D activities to support adoption of hydroxyapatite applications in medical care ☐74
- TABLE 16 MEDICAL CERAMICS MARKET FOR HYDROXYAPATITE, BY REGION, 2020-2027 (USD MILLION) 75
- 6.3.2 GLASS CERAMICS 75
- 6.3.2.1 Rising number of orthopedic & dental procedures to drive demand for glass ceramics 75
- TABLE 17 MEDICAL CERAMICS MARKET FOR GLASS CERAMICS, BY REGION, 2020-2027 (USD MILLION) 176
- 6.4 BIORESORBABLE CERAMICS 76
- 6.4.1□INCREASING R&D ACTIVITIES IN FUNCTIONAL REGENERATION OF TISSUES TO DRIVE SEGMENT GROWTH□76
- TABLE 18 MEDICAL CERAMICS MARKET FOR BIORESORBABLE CERAMICS, BY REGION, 2020-2027 (USD MILLION) 77
- 7 | MEDICAL CERAMICS MARKET, BY APPLICATION | 78
- 7.1∏INTRODUCTION∏79
- TABLE 19 MEDICAL CERAMICS MARKET, BY APPLICATION, 2020-2027 (USD MILLION) 79
- 7.2 DENTAL APPLICATIONS 79
- TABLE 20∏MEDICAL CERAMICS MARKET FOR DENTAL APPLICATIONS, BY REGION, 2020-2027 (USD MILLION)∏80
- 7.2.1 DENTAL IMPLANTS 80
- 7.2.1.1 Increasing cases of dental caries to drive market growth 80
- 7.2.2 DENTAL CROWNS & BRIDGES 81
- 7.2.2.1 Long lasting properties of dental crowns- key factor expected to support market growth 81
- TABLE 22 MEDICAL CERAMICS MARKET FOR DENTAL CROWNS & BRIDGES, BY REGION, 2020-2027 (USD MILLION) 82
- 7.2.3 | BRACES | 82
- 7.2.3.1∏Increasing demand for invisible ceramic braces due to esthetic concerns to drive market growth □82
- TABLE 23 MEDICAL CERAMICS MARKET FOR BRACES, BY REGION, 2020-2027 (USD MILLION) 82
- 7.2.4 INLAYS & ONLAYS 83
- 7.2.4.1 Usage of CAD-CAM fabricated inlays & onlays to support market growth 83
- TABLE 24 MEDICAL CERAMICS MARKET FOR INLAYS AND ONLAYS, BY REGION, 2020-2027 (USD MILLION) 83
- 7.2.5 DENTAL BONE GRAFTS & SUBSTITUTES 83
- 7.2.5.1 Increasing use of bone grafts in dental implant procedures is expected to drive market growth 83
- TABLE 25 MEDICAL CERAMICS MARKET FOR DENTAL BONE GRAFTS & SUBSTITUTES, BY REGION, 2020-2027 (USD MILLION) 84 7.3 ORTHOPEDIC APPLICATIONS 84
- TABLE 26 MEDICAL CERAMICS MARKET FOR ORTHOPEDIC APPLICATIONS, BY REGION, 2020-2027 (USD MILLION) 85
- 7.3.1∏IOINT REPLACEMENT SURGERIES∏85
- 7.3.1.1 Rising volume of joint replacement procedures to drive market growth 185
- TABLE 27 MEDICAL CERAMICS MARKET FOR JOINT REPLACEMENT SURGERIES, BY REGION, 2020-2027 (USD MILLION) 186
- 7.3.1.2 Knee replacement 86
- 7.3.1.2.1 Growing number of knee replacement procedures to drive market growth 86

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

FIGURE 22 KNEE REPLACEMENT SURGERIES, 2015-2019 (PER 100,000) 86

7.3.1.3 Hip replacement 87

7.3.1.3.1 Use of ceramic materials in hip implants to drive market growth 87

FIGURE 23 HIP REPLACEMENT SURGERIES, 2015-2019 (PER 100,000) 87

7.3.1.4 Shoulder replacement surgery 87

7.3.1.4.1 Increasing incidence of shoulder injuries to drive market growth 87

7.3.1.5 Other joint replacement applications 88

7.3.2∏FRACTURE FIXATION∏88

7.3.2.1 Increasing demand for medical ceramics in constructing fracture fixation devices to support market growth 88

TABLE 28∏MEDICAL CERAMICS MARKET FOR FRACTURE FIXATION, BY REGION, 2020-2027 (USD MILLION)∏89

7.3.3 SYNTHETIC BONE GRAFTS 189

7.3.3.1∏Advantages of synthetic bone grafts over autografts & allografts to drive market growth □89

TABLE 29∏MEDICAL CERAMICS MARKET FOR SYNTHETIC BONE GRAFTS, BY REGION, 2020-2027 (USD MILLION)∏90

7.4 CARDIOVASCULAR IMPLANTS 90

7.4.1 RISING ADOPTION OF HYDROXYAPATITE FOR COATING OF CARDIOVASCULAR IMPLANTS TO DRIVE MARKET GROWTH 90 TABLE 30 MEDICAL CERAMICS MARKET FOR CARDIOVASCULAR APPLICATIONS, BY REGION, 2020-2027 (USD MILLION) 91

7.5 SURGICAL INSTRUMENTS 91

7.5.1 INCREASING NUMBER OF SURGICAL PROCEDURES WORLDWIDE TO DRIVE MARKET GROWTH 191

TABLE 31 \square MEDICAL CERAMICS MARKET FOR SURGICAL INSTRUMENTS, BY REGION, 2020-2027 (USD MILLION) \square 92

 $7.6 \verb||DIAGNOSTIC INSTRUMENTS|| 92$

 $7.6.1 \\ \square GROWING \ AWARENESS \ AMONG \ PATIENTS \ ON \ EARLY \ DISEASE \ DIAGNOSIS \ TO \ SUPPORT \ MARKET \ GROWTH \\ \square 92$

TABLE 32☐MEDICAL CERAMICS MARKET FOR DIAGNOSTIC INSTRUMENTS, BY REGION, 2020-2027 (USD MILLION)☐94 7.7☐PLASTIC SURGERY☐94

TABLE 33[MEDICAL CERAMICS MARKET FOR PLASTIC SURGERY, BY REGION, 2020-2027 (USD MILLION)[]95

7.7.1 CRANIOMAXILLOFACIAL IMPLANTS 95

7.7.1.1 □ Utilization of hydroxyapatite in craniomaxillofacial surgery for restorative purposes to support market growth □ 95

TABLE 34 MEDICAL CERAMICS MARKET FOR CRANIOMAXILLOFACIAL IMPLANTS, BY REGION, 2020-2027 (USD MILLION) 95

7.7.2 ORBITAL/OCULAR IMPLANTS 96

7.7.2.1 Increasing prevalence of eye diseases to drive market growth 96

TABLE 35 MEDICAL CERAMICS MARKET FOR ORBITAL/OCULAR IMPLANTS, BY REGION, 2020-2027 (USD MILLION) 96

7.7.3 DERMAL FILLERS 96

7.7.3.1∏Usage of calcium hydroxyapatite in dermal fillers to support market growth∏96

TABLE 36 MEDICAL CERAMICS MARKET FOR DERMAL FILLERS, BY REGION, 2020-2027 (USD MILLION) 797

7.8 OTHER APPLICATIONS 97

TABLE 37 MEDICAL CERAMICS MARKET FOR OTHER APPLICATIONS, BY REGION, 2020-2027 (USD MILLION) □98

8 GLOBAL MEDICAL CERAMICS MARKET, BY REGION 99

8.1 INTRODUCTION 100

TABLE 38 MEDICAL CERAMICS MARKET, BY REGION, 2020-2027 (USD MILLION) 100

8.2 NORTH AMERICA 100

FIGURE 24 NORTH AMERICA: MEDICAL CERAMICS MARKET SNAPSHOT 101

TABLE 39∏NORTH AMERICA: MEDICAL CERAMICS MARKET, BY COUNTRY, 2020-2027 (USD MILLION)∏101

TABLE 40 NORTH AMERICA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 102

TABLE 41 NORTH AMERICA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 102

TABLE 42∏NORTH AMERICA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)∏102

TABLE 43 NORTH AMERICA: MEDICAL CERAMICS MARKET, BY APPLICATION, 2020-2027 (USD MILLION) 103

TABLE 44 NORTH AMERICA: MEDICAL CERAMICS MARKET FOR DENTAL APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION) 103

TABLE 45 NORTH AMERICA: MEDICAL CERAMICS MARKET FOR ORTHOPEDIC APPLICATIONS, BY TYPE, 2020-2027 (USD

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

MILLION)∏103

TABLE 46 NORTH AMERICA: MEDICAL CERAMICS MARKET FOR PLASTIC SURGERY, BY TYPE, 2020-2027 (USD MILLION) 104 8.2.1 US 104

 $8.2.1.1 \\ \square Increasing \ elderly \ population \ \& \ rising \ need \ for \ dental \ procedures \ to \ drive \ market \ growth \\ \square 104$

FIGURE 25 AGING POPULATION IN THE US, 2014-2060 104

TABLE 47 US: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 105

TABLE 48 US: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 105

TABLE 49☐US: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)☐105 8.2.2☐CANADA☐106

8.2.2.1 Rising geriatric population to drive market growth for medical ceramics 106

TABLE 50∏CANADA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏106

TABLE 51∏CANADA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION)∏107

TABLE 52□CANADA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)□107 8.3□EUROPE□107

0.3[EUNOFE[]107

TABLE 53 CONFERENCES AND SYMPOSIUMS ON MEDICAL CERAMICS IN EUROPE (2018-2020) 108

TABLE 54 EUROPE: MEDICAL CERAMICS MARKET, BY COUNTRY, 2020-2027 (USD MILLION) 108

TABLE 55∏EUROPE: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏109

TABLE 56 EUROPE: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 109

TABLE 57□EUROPE: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)□109

TABLE 58 TEUROPE: MEDICAL CERAMICS MARKET, BY APPLICATION, 2020-2027 (USD MILLION) T110

TABLE 59 EUROPE: MEDICAL CERAMICS MARKET FOR DENTAL APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION) 110

TABLE 60 EUROPE: MEDICAL CERAMICS MARKET FOR ORTHOPEDIC APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION) 110

TABLE 61 EUROPE: MEDICAL CERAMICS MARKET FOR PLASTIC SURGERY, BY TYPE, 2020-2027 (USD MILLION) 111 8.3.1 GERMANY 111

8.3.1.1 ∏Rising geriatric population and medical tourism to support market growth for medical ceramics ☐111

FIGURE 26∏GERMANY: AGING POPULATION AGED 65 AND ABOVE, 2015-2021 (MILLION)∏111

FIGURE 27∏GERMANY: HIP REPLACEMENT SURGERIES, 2015-2019 (PER 100,000 POPULATION)∏112

TABLE 62∏GERMANY: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏112

TABLE 63 \square GERMANY: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) \square 112

TABLE 64 GERMANY: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 113

8.3.2 FRANCE 113

 $8.3.2.1 \\ \square Growing \ awareness \ of \ dental \ care \ \& \ rising \ surgical \ procedures \ to \ support \ market \ growth \\ \square 113$

FIGURE 28 FRANCE: KNEE REPLACEMENT SURGERIES, 2015-2019 (PER 100,000 POPULATION) 113

TABLE 65 FRANCE: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 114

TABLE 66∏FRANCE: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION)∏114

TABLE 67□FRANCE: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)□115

8.3.3 UK 115

8.3.3.1 Growing orthopedic & dental industry?key factor expected to drive adoption of medical ceramic products

TABLE 68∏UK: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏116

TABLE 69 UK: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 116

TABLE 70 \square UK: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) \square 116

8.3.4 [ITALY [] 117

8.3.4.1 Growing demand for medical ceramics in plastic surgeries to support market growth 117

TABLE 71∏ITALY: NUMBER OF KNEE AND HIP REPLACEMENT SURGERIES, 2015-2020 (PER 100,000)∏117

TABLE 72 TAB

TABLE 73[]ITALY: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION)[]118

TABLE 74□ITALY: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)□118

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

8.3.5 SPAIN 118

8.3.5.1 Growing demand for cosmetic dentistry to support uptake of medical ceramics 118

TABLE 75 SPAIN: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 119

TABLE 76 SPAIN: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 119 TABLE 77 SPAIN: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 119

8.3.6 REST OF EUROPE 120

TABLE 78□REST OF EUROPE: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)□120

TABLE 79 REST OF EUROPE: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 121 TABLE 80 REST OF EUROPE: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 121 8.4 ASIA PACIFIC 121

FIGURE 29 ASIA PACIFIC: MEDICAL CERAMICS MARKET SNAPSHOT (2021) 122

TABLE 81∏ASIA PACIFIC: MEDICAL CERAMICS MARKET, BY COUNTRY, 2020-2027 (USD MILLION)∏123

TABLE 82∏ASIA PACIFIC: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏123

TABLE 83

ASIA PACIFIC: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION)

TABLE 84

ASIA PACIFIC: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)

124

TABLE 85∏ASIA PACIFIC: MEDICAL CERAMICS MARKET, BY APPLICATION, 2020-2027 (USD MILLION)∏124

TABLE 86[ASIA PACIFIC: MEDICAL CERAMICS MARKET FOR DENTAL APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION)[124]

TABLE 87[ASIA PACIFIC: MEDICAL CERAMICS MARKET FOR ORTHOPEDIC APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION)[125]

TABLE 88□ASIA PACIFIC: MEDICAL CERAMICS MARKET FOR PLASTIC SURGERY, BY TYPE, 2020-2027 (USD MILLION)□125 8.4.1□CHINA□125

8.4.1.1 Increasing awareness of oral healthcare & presence of specialized dental hospitals to drive market growth 125

TABLE 89 CHINA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 126

TABLE 90 CHINA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 126

TABLE 91 CHINA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 126 8.4.2 APAN 126

8.4.2.1 Rising prevalence of age-related illnesses to drive market uptake of medical ceramics 126

TABLE 92 | JAPAN: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE

, 2020-2027 (USD MILLION) ☐ 127

TABLE 93□JAPAN: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION)□127 TABLE 94□JAPAN: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)□127 8.4.3□INDIA□127

8.4.3.1 □ Creation of medical device cluster projects to drive demand for medical ceramics □ 127

TABLE 95 | INDIA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) | 128

TABLE 96 INDIA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 128 TABLE 97 INDIA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 128 8.4.4 AUSTRALIA 129

8.4.4.1 Growing target disease burden to support market growth 129

TABLE 98∏AUSTRALIA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏129

TABLE 99 \square AUSTRALIA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) \square 129

TABLE 100[AUSTRALIA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)[130 8.4.5||SOUTH KOREA||130

8.4.5.1 Increasing dental care and plastic surgery procedures expected to support market growth 130

TABLE 101∏SOUTH KOREA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏130

TABLE 102 SOUTH KOREA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 131

TABLE 103[SOUTH KOREA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION)[131 8.4.6] REST OF ASIA PACIFIC[131]

TABLE 104 RISING GERIATRIC POPULATION (65 YEARS AND ABOVE), 2015-2021 131

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE 105 REST OF ASIA PACIFIC: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 132

TABLE 106 PREST OF ASIA PACIFIC: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 132 TABLE 107 PREST OF ASIA PACIFIC: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 132 8.5 ATIN AMERICA 132

TABLE 108 □ LATIN AMERICA: MEDICAL CERAMICS MARKET, BY COUNTRY, 2020-2027 (USD MILLION) □ 133

TABLE 109□LATIN AMERICA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY MATERIAL TYPE, 2020-2027 (USD MILLION)□133

TABLE 110 LATIN AMERICA: BIOINERT CERAMICS MARKET, BY TYPE, 2020-2027 (USD MILLION) 133

TABLE 111 LATIN AMERICA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 134

TABLE 112 LATIN AMERICA: MEDICAL CERAMICS MARKET, BY APPLICATION, 2020-2027 (USD MILLION) 134

TABLE 113 LATIN AMERICA: MEDICAL CERAMICS MARKET FOR DENTAL APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION) 134

 $TABLE\ 114 \verb|| LATIN\ AMERICA:\ MEDICAL\ CERAMICS\ MARKET\ FOR\ ORTHOPEDIC\ APPLICATIONS,\ BY\ TYPE,\ 2020-2027 (USD\ MILLION) \verb|| 135$

TABLE 115 LATIN AMERICA: MEDICAL CERAMICS MARKET FOR PLASTIC SURGERY, BY TYPE, 2020-2027 (USD MILLION) 135 8.5.1 | BRAZIL 135

8.5.1.1 ☐ Key market for medical ceramics owing to modernization of healthcare facilities ☐ 135

TABLE 116 BRAZIL: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 136

TABLE 117 BRAZIL: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 136

TABLE 118 BRAZIL: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 136 8.5.2 MEXICO 137

8.5.2.1 Favorable investment scenario for medical device manufacturers to drive market growth 137

TABLE 119 MEXICO: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION) 137

TABLE 120 MEXICO: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 138

TABLE 121 \square MEXICO: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) \square 138 8.5.3 \square REST OF LATIN AMERICA \square 138

TABLE 122□REST OF LATIN AMERICA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)□138

TABLE 123 REST OF LATIN AMERICA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 139

TABLE 124 TREST OF LATIN AMERICA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 139

8.6 MIDDLE EAST & AFRICA 139

8.6.1 INCREASING AWARENESS OF DENTAL TREATMENT TO DRIVE MARKET GROWTH 139

TABLE 125∏MIDDLE EAST & AFRICA: MEDICAL CERAMICS MARKET, BY MATERIAL TYPE, 2020-2027 (USD MILLION)∏140

TABLE 126 MIDDLE EAST & AFRICA: MEDICAL CERAMICS MARKET FOR BIOINERT CERAMICS. BY TYPE, 2020-2027 (USD MILLION) 140

TABLE 127 MIDDLE EAST & AFRICA: MEDICAL CERAMICS MARKET FOR BIOACTIVE CERAMICS, BY TYPE, 2020-2027 (USD MILLION) 140

TABLE 128∏MIDDLE EAST & AFRICA: MEDICAL CERAMICS MARKET, BY APPLICATION, 2020-2027 (USD MILLION)∏141

TABLE 129 \square MIDDLE EAST & AFRICA: MEDICAL CERAMICS MARKET FOR DENTAL APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION) \square 141

TABLE 130 MIDDLE EAST & AFRICA: MEDICAL CERAMICS MARKET FOR ORTHOPEDIC APPLICATIONS, BY TYPE, 2020-2027 (USD MILLION) 141

TABLE 131 MIDDLE EAST & AFRICA: MEDICAL CERAMICS MARKET FOR PLASTIC SURGERY, BY TYPE, 2020-2027 (USD MILLION) 142 9 COMPETITIVE LANDSCAPE 143

9.1∏INTRODUCTION∏143

9.2 KEY PLAYER STRATEGIES/RIGHT TO WIN 143

TABLE 132 OVERVIEW OF STRATEGIES ADOPTED BY KEY PLAYERS IN THE MEDICAL CERAMICS MARKET 143

 $9.3 \square MARKET SHARE ANALYSIS \square 144$

TABLE 133 MEDICAL CERAMICS MARKET: DEGREE OF COMPETITION 144

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

9.4 COMPANY EVALUATION MATRIX 145

9.4.1 STARS 146

9.4.2□EMERGING LEADERS□146

9.4.3 PERVASIVE PLAYERS 146

9.4.4 PARTICIPANTS 146

FIGURE 30 MEDICAL CERAMICS MARKET: COMPETITIVE LEADERSHIP MAPPING (2021) 147

9.5 COMPETITIVE SITUATIONS & TRENDS 147

9.5.1 PRODUCT LAUNCHES (2019-2022) 147

9.5.2 EXPANSIONS (2019-2022) 148

9.5.3 PARTNERSHIPS AND COLLABORATIONS (2019-2022) ☐ 148

9.5.4∏ACQUISITIONS (2019-2022)∏148

?

10 COMPANY PROFILES 149

10.1 KEY PLAYERS 149

(Business Overview, Products Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made,

and Weaknesses and Competitive Threats))*

10.1.1 INSTITUT STRAUMANN AG 149

TABLE 134 INSTITUT STRAUMANN AG: BUSINESS OVERVIEW 149

FIGURE 31 INSTITUT STRAUMANN AG: COMPANY SNAPSHOT (2021) 150

10.1.2∏3M∏152

TABLE 135[]3M: BUSINESS OVERVIEW[]152

FIGURE 32[3M: COMPANY SNAPSHOT (2021)[153

10.1.3 ROYAL DSM 155

TABLE 136 ROYAL DSM: BUSINESS OVERVIEW 155

FIGURE 33 ROYAL DSM: COMPANY SNAPSHOT (2021) 156

10.1.4□CERAMTEC□157

TABLE 137 CERAMTEC: BUSINESS OVERVIEW 157

FIGURE 34 CERAMTEC: COMPANY SNAPSHOT (2021) 158

10.1.5 KYOCERA CORPORATION 160

TABLE 138 KYOCERA: BUSINESS OVERVIEW 160

FIGURE 35□KYOCERA CORPORATION: COMPANY SNAPSHOT (2021)□161

10.1.6 COORSTEK INC. 164

TABLE 139 \square COORSTEK INC.: BUSINESS OVERVIEW \square 164

10.1.7 MORGAN ADVANCED MATERIALS PLC 166

TABLE 140 \square MORGAN ADVANCED MATERIALS PLC.: BUSINESS OVERVIEW \square 166

FIGURE 36 MORGAN ADVANCED MATERIALS PLC: COMPANY SNAPSHOT (2021) 167

10.1.8 NGK SPARK PLUG CO., LTD. 169

TABLE 141 NGK SPARK PLUG CO. LTD: BUSINESS OVERVIEW 169

FIGURE 37 \square NGK SPARK PLUG CO., LTD: COMPANY SNAPSHOT (2021) \square 170

10.1.9□TOSOH CORPORATION□171

TABLE 142 TOSOH CORPORATION: BUSINESS OVERVIEW 171

FIGURE 38 TOSOH CORPORATION: COMPANY SNAPSHOT (2021) 172

10.1.10 SUPERIOR TECHNICAL CERAMICS 174

TABLE 143 SUPERIOR TECHNICAL CERAMICS: BUSINESS OVERVIEW 174

10.1.11 RAUSCHERT GMBH 175

TABLE 144 RAUSCHERT GMBH: BUSINESS OVERVIEW 175

10.1.12 H.C. STARCK GMBH 176

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE 145 H.C. STARCK GMBH: BUSINESS OVERVIEW 176

10.1.13 NOBEL BIOCARE SERVICES AG 177

TABLE 146 NOBEL BIOCARE SERVICES AG: BUSINESS OVERVIEW 177

10.1.14 BERKELEY ADVANCED BIOMATERIALS 178

TABLE 147 BERKELEY ADVANCED BIOMATERIALS: BUSINESS OVERVIEW 178

10.1.15 BAKONY TECHNICAL CERAMICS LTD. 180

TABLE 148 BAKONY TECHNICAL CERAMICS LTD: BUSINESS OVERVIEW 180

10.2 OTHER COMPANIES 181

10.2.1 KURARAY NORITAKE DENTAL INC. 181

10.2.2 QSIL CERAMICS GMBH 181

10.2.3 FERRO CORPORATION 182

10.2.4 ELAN TECHNOLOGY 182

10.2.5 NISHIMURA ADVANCED CERAMICS 183

*Details on Business Overview, Products Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made, and Weaknesses and Competitive Threats) might not be captured in case of unlisted companies.

11∏APPENDIX∏184

11.1□DISCUSSION GUIDE□184

11.2 KNOWLEDGESTORE: MARKETSANDMARKETS? SUBSCRIPTION PORTAL 188

11.3 CUSTOMIZATION OPTIONS 190

11.4 RELATED REPORTS 190

11.5 AUTHOR DETAILS 191



To place an Order with Scotts International:

 $\hfill \Box$ - Complete the relevant blank fields and sign

 $\hfill \square$ - Send as a scanned email to support@scotts-international.com

Scotts International. EU Vat number: PL 6772247784 tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

☐ - Print this form

Medical Ceramics Market by Material (Bioinert (Zirconia, Aluminium), Bioactive (Glass, Hydroxyapatite), Bioresorbable Ceramics), Application (Dental Application, Orthopedic Application, Plastic Surgery, Surgical Instruments) - Global Forecast to 2027

Market Report | 2022-08-30 | 185 pages | MarketsandMarkets

Select license	License			Price
	Single User			\$4950.00
	Multi User			\$6650.00
	Corporate License			\$8150.00
	Enterprise Site License			\$10000.00
				AT TA
			То	al
	ant license option. For any questions please at 23% for Polish based companies, individu			
** VAT will be added a	at 23% for Polish based companies, individu			
	at 23% for Polish based companies, individu	ials and EU based cor		
** VAT will be added a	at 23% for Polish based companies, individu	lals and EU based cor		
** VAT will be added a	at 23% for Polish based companies, individu	lals and EU based cor	mpanies who are unable to provide	

Zip Code*	Country*	
	Date	2025-05-20
	Signature	