

3D Printed Satellite Market by Component (Antenna, Bracket, Shield, Housing and Propulsion), Satellite Mass (Nano and microsatellite, small satellite, medium and large satellite), Application and Region - Global Forecast to 2030

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Report description:

The satellite industry is undergoing an intense transformation, driven by a convergence of technological advancements that are shaping the future of 3D-printed satellites. The 3D-printed satellite is at a critical juncture, driven by rapid technological advancements and intensified by global supply chain vulnerabilities and shifting geopolitical landscapes. With a growing emphasis on proactive 3D printed satellites, outsourcing 3D printed satellite components, and strategic partnerships, the industry is evolving to ensure the sustainability and readiness of 3D printed satellites in a rapidly changing environment.

The 3D printed satellite market is projected to grow from USD 112 million in 2024 to USD 487 million by 2030, at a CAGR of 27.7% from 2024 to 2030. The 3D-printed satellite market has the potential to make space exploration more accessible and affordable. By reducing the cost and complexity of satellite manufacturing, 3D printing could enable more countries and companies to participate in the space industry. Satellites that have less physical weight are also given higher preference in space missions as their weight directly affects the costs involved in the manufacturing of components used in satellites. Maxar Space Systems (US), Boeing (US), 3D Systems (US), Northrop Grumman Corporation (US), and Fleet Space Technologies Pty Ltd (Australia) are some of the leading players operating in the 3D printed satellite market.

"The small satellite segment will account for the highest growth in the 3D printed satellite market during the forecast period." Based on satellite mass, the 3D Printed Satellite Market has been classified into nano and microsatellites, small satellites, and Medium and Large Satellites. The miniaturization of satellites, driven by advances in component and system miniaturization, has been a transformative trend in the space industry. One key enabler of this trend is 3D printing technology, which facilitates the creation of intricate, lightweight structures perfectly suited for smaller satellites.

"The housing segment to account for largest market share in the 3D Printed Satellite market during the forecast period."
Based on the components, the 3D Printed Satellite Market has been classified into antenna, bracket, shield, housing, and

propulsion. The housing segment has the largest market share during the forecast period. This is because 3D-printed housing ensures a precise fit for the satellite's components while reducing weight and optimizing performance.

"The North America market is projected to lead the market during the forecast period."

North America takes the lead in this market because of its significant space spending, innovative technology, and strong industrial foundation. The region boasts a robust ecosystem of technology companies and research institutions, fostering innovation and expertise in additive manufacturing techniques. Additionally, North America is home to a significant portion of the global space industry, providing ample opportunities for collaboration and adoption of 3D printing in satellite production. Furthermore, the supportive regulatory environment and favorable investment in the region contribute to the growth of this emerging market segment. These factors collectively position North America at the forefront of the 3D printed satellite market, offering a competitive edge in terms of technological advancement and market leadership.

Maxar Space Systems (US), Boeing (US), 3D Systems (US), Northrop Grumman Corporation (US), and Fleet Space Technologies Pty Ltd (Australia) are some of the leading players operating in the 3D printed satellite market.

Breakdown of primaries

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

-□By Company Type: Tier 1-35%; Tier 2-45%; and Tier 3-20%

- By Designation: C Level-35%; Directors-25%; and Others-40%

- By Region: North America-40%; Europe-30%; Asia Pacific-20%; and Rest of the World-10%

Research Coverage

The study covers the 3D-printed satellite market across various segments and subsegments. It aims to estimate the size and growth potential of this market across different segments based on satellite mass, application, components, manufacturing technique, and region. This study also includes an in-depth competitive analysis of the key players in the market, along with their company profiles, key observations related to their solutions and business offerings, recent developments undertaken by them, and key market strategies adopted by them.

Key benefits of buying this report: This report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall 3D printed satellite market and its subsegments. The report covers the entire ecosystem of the 3D-printed satellite market. It will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report will also help stakeholders understand the pulse of the market and provide them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

- Analysis of key drivers (Rise in Development of Customized Products, Cost efficiencies in satellite production, Increasing demand for lightweight components from space industry, Government investments in 3D printing projects), restraints (High Initial cost, Stringent industry certifications and lack of process control), opportunities (Development of new 3D printing technologies requiring less production time, Advancements in printing technologies), and challenges (Product quality compliance, Limited availability and high costs of raw materials) influencing the growth in the market
- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the 3D Printed satellite market.
- Market Development: Comprehensive information about lucrative markets the report analyses the 3D Printed satellite market across varied regions
- Market Diversification: Exhaustive information about new solutions, untapped geographies, recent developments, and investments in 3D Printed satellite market.
- Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like

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Maxar Space Systems (US), Boeing (US), 3D Systems, Inc (US), Northrop Grumman (US), and Fleet Space Technologies Pty Ltd (Australia) among others in the 3D Printed satellite market.

Table of Contents:

1 INTRODUCTION 18

- 1.1□STUDY OBJECTIVES□18
- 1.2 MARKET DEFINITION 18
- 1.2.1 INCLUSIONS AND EXCLUSIONS 19

TABLE 1 INCLUSIONS AND EXCLUSIONS 19

- 1.3∏STUDY SCOPE∏20
- 1.3.1 MARKETS COVERED 20

FIGURE 1 3D PRINTED SATELLITE MARKET SEGMENTATION 20

- 1.3.2 REGIONS COVERED 20
- 1.3.3 YEARS CONSIDERED 21
- 1.4 CURRENCY CONSIDERED 21

TABLE 2□USD EXCHANGE RATES□21

- 1.5∏STAKEHOLDERS∏22
- 1.6 RECESSION IMPACT 22
- 2 RESEARCH METHODOLOGY 23
- 2.1 RESEARCH DATA 23

FIGURE 2 RESEARCH PROCESS FLOW 23

FIGURE 3 RESEARCH DESIGN 24

- 2.1.1 SECONDARY DATA 25
- 2.1.1.1 Key data from secondary sources 25
- 2.1.2 PRIMARY DATA 26
- 2.1.2.1 Primary respondents 26
- 2.1.2.2 Key data from primary sources 26
- 2.1.2.3 Insights from industry experts 27
- 2.2 FACTOR ANALYSIS 27
- 2.2.1∏INTRODUCTION∏27
- 2.2.2 DEMAND-SIDE INDICATORS 28
- 2.2.3 SUPPLY-SIDE INDICATORS 28
- 2.2.4 RECESSION IMPACT ANALYSIS □ 28
- 2.3 MARKET SIZE ESTIMATION 28
- 2.3.1 BOTTOM-UP APPROACH 29
- 2.3.1.1 Market size estimation methodology (demand-side) 29

FIGURE 4 BOTTOM-UP APPROACH 30

2.3.2 TOP-DOWN APPROACH 30

FIGURE 5 TOP-DOWN APPROACH 30

2.4 DATA TRIANGULATION 31

FIGURE 6 DATA TRIANGULATION 31

- $2.5 \square RESEARCH ASSUMPTIONS \square 32$
- 2.6 RESEARCH LIMITATIONS 32
- 2.7□RISK ASSESSMENT□33
- 3∏EXECUTIVE SUMMARY∏34

FIGURE 7 SMALL SATELLITES TO BE FASTEST-GROWING SEGMENT DURING FORECAST MARKET 34 FIGURE 8 BRACKET SEGMENT TO EXHIBIT HIGHEST GROWTH DURING FORECAST PERIOD 35

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FIGURE 9 COMMUNICATION TO BE LARGEST SEGMENT DURING FORECAST PERIOD 35

FIGURE 10 NORTH AMERICA TO HOLD LARGEST MARKET SHARE IN 2024 36

4∏PREMIUM INSIGHTS∏37

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN 3D PRINTED SATELLITE MARKET 37

FIGURE 11 INCREASED GOVERNMENT INVESTMENTS IN 3D PRINTING TECHNOLOGY TO DRIVE MARKET 37

4.2 3D PRINTED SATELLITE MARKET, BY SATELLITE MASS 37

FIGURE 12 SMALL SATELLITES TO RECORD HIGHEST CAGR DURING FORECAST PERIOD 37

4.3∏3D PRINTED SATELLITE MARKET, BY COMPONENT∏38

FIGURE 13 HOUSING TO SURPASS OTHER SEGMENTS DURING FORECAST PERIOD 38

4.4□3D PRINTED SATELLITE MARKET, BY APPLICATION□38

FIGURE 14∏COMMUNICATION SEGMENT TO SECURE LEADING MARKET POSITION DURING FORECAST PERIOD∏38

5∏MARKET OVERVIEW∏39

5.1□INTRODUCTION□39

5.2 MARKET DYNAMICS □ 39

FIGURE 15 3D PRINTED SATELLITE MARKET DYNAMICS 39

5.2.1 DRIVERS 40

5.2.1.1 Need for customized functional parts in satellite manufacturing 40

5.2.1.2 Cost efficiencies in satellite production 40

5.2.1.3 Increasing demand for lightweight components from space industry 40

FIGURE 16 MAXAR'S 3D PRINTED SATELLITE COMPONENTS IN ORBIT, 2016-2019 □ 41

5.2.1.4 Government investments in 3D printing projects 41

TABLE 3 GOVERNMENT FUNDING FOR 3D PRINTING PROJECTS 42

5.2.1.5 Short supply chain of space components 43

FIGURE 17 SUPPLY CHAIN FLOW OF SPACE COMPONENTS 43

5.2.2 RESTRAINTS 44

5.2.2.1 High cost of 3D printing equipment 44

5.2.2.2 Stringent industry certifications and lack of process control 44

5.2.3 OPPORTUNITIES 44

5.2.3.1 Development of new 3D printing technologies requiring less production time 44

FIGURE 18 CLIP VS. OTHER 3D PRINTING TECHNOLOGIES 45

5.2.3.2 Advancements in printing technologies 45

5.2.4 CHALLENGES 146

5.2.4.1 Product quality compliance 46

5.2.4.2 Limited availability and high costs of raw materials 46

5.3 TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES 47

FIGURE 19 TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES 47

5.4 VALUE CHAIN ANALYSIS 48

FIGURE 20 VALUE CHAIN ANALYSIS 48

5.4.1 RESEARCH AND DEVELOPMENT 48

5.4.2 RAW MATERIALS 48

5.4.3 COMPONENT/PRODUCT MANUFACTURERS (OEMS) 48

5.4.4 INTEGRATORS AND SYSTEM PROVIDERS 49

5.4.5∏END USERS∏49

5.5∏PRICING ANALYSIS∏49

5.5.1 AVERAGE SELLING PRICE OF 3D PRINTED SATELLITES, BY KEY PLAYER 49

FIGURE 21 AVERAGE SELLING PRICE OF 3D PRINTED SATELLITES, BY KEY PLAYER 49

TABLE 4

AVERAGE SELLING PRICE OF 3D PRINTED SATELLITES, BY KEY PLAYER (USD MILLION)

49

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5.5.2 AVERAGE SELLING PRICE OF 3D PRINTED SATELLITES, BY SATELLITE MASS 5.5.2

TABLE 5[]AVERAGE SELLING PRICE OF 3D PRINTED SATELLITES, BY SATELLITE MASS (USD MILLION)[]50

5.5.3 INDICATIVE PRICING ANALYSIS, BY REGION 50

TABLE 6 INDICATIVE PRICING ANALYSIS, BY REGION 50

5.6 OPERATIONAL DATA 51

TABLE 7∏OPERATIONAL DATA FOR 3D PRINTED SATELLITE COMPONENTS, BY SATELLITE MASS, 2021-2023∏51

TABLE 8∏OPERATIONAL DATA FOR 3D PRINTED SATELLITE COMPONENTS, BY REGION, 2021-2023∏51

5.7 \ VOLUME DATA \ 51

TABLE 9 VOLUME DATA FOR 3D PRINTED SATELLITE COMPONENTS, BY REGION, 2021-2030 51

5.8□ECOSYSTEM MAP□52

5.8.1 | PROMINENT COMPANIES | | 52

5.8.2 PRIVATE AND SMALL ENTERPRISES 52

5.8.3 END USERS 52

FIGURE 22 ECOSYSTEM MAP 52

TABLE 10 ROLE OF COMPANIES IN ECOSYSTEM 53

5.9 USE CASE ANALYSIS 54

5.9.1 REDESIGN OF TITANIUM INSERTS WITH ADDITIVE MANUFACTURING 54

5.9.2 ☐ 3D PRINTING IN SATELLITE MOUNTING STRUCTURES ☐ 54

5.9.3 ENGINE OPTIMIZATION WITH 3D PRINTING 55

5.9.4∏ENGINE BLADE REPAIR WITH LASER METAL DEPOSITION∏55

5.9.5

3D PRINTING IN FLUID SYSTEMS

55

5.10 TECHNOLOGY ANALYSIS 56

5.10.1 INNOVATIVE 3D PRINTING TECHNOLOGIES ☐ 56

TABLE 11 INNOVATIVE 3D PRINTED TECHNOLOGIES 156

5.10.2 | 4D PRINTING | 57

FIGURE 23 | 4D PRINTING | 57

5.10.3∏ARTIFICIAL INTELLIGENCE∏57

5.11 TECHNOLOGY ROADMAP OF 3D PRINTED SATELLITE MARKET 58

FIGURE 24 INTRODUCTION TO TECHNOLOGY ROADMAP 58

FIGURE 25 PEVOLUTION OF 3D PRINTED SATELLITE TECHNOLOGY, 2020-2030 58

FIGURE 26 TECHNOLOGY TRENDS RELATED TO 3D PRINTED SATELLITES 59

5.12 REGULATORY LANDSCAPE 59

TABLE 12∏NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS∏59

TABLE 13 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS [60]

TABLE 14 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 160

5.13 TRADE DATA ANALYSIS 61

5.13.1 IMPORT VALUE OF SPACECRAFT, INCLUDING SATELLITES AND SUBORBITAL & SPACECRAFT LAUNCH VEHICLES (HS CODE: 880260) | 61

FIGURE 27 IMPORT DATA, BY COUNTRY, 2018-2022 (USD THOUSAND) 61

TABLE 15□IMPORT DATA, BY COUNTRY, 2018-2022 (USD THOUSAND)□61

5.13.2 EXPORT VALUE OF SPACECRAFT, INCLUDING SATELLITES AND SUBORBITAL & SPACECRAFT LAUNCH VEHICLES (HS CODE: 880260) 62

FIGURE 28∏EXPORT DATA, BY COUNTRY, 2018-2022 (USD THOUSAND)∏62

TABLE 16 EXPORT DATA, BY COUNTRY, 2018-2022 (USD THOUSAND) 62

5.14 KEY CONFERENCES AND EVENTS, 2024-2025 63

TABLE 17 KEY CONFERENCES AND EVENTS, 2024-2025 63

5.15 KEY STAKEHOLDERS AND BUYING CRITERIA 64

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5.15.1 KEY STAKEHOLDERS IN BUYING PROCESS 64

FIGURE 29 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS OF 3D PRINTED SATELLITES, BY SATELLITE MASS [64 TABLE 18 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS OF 3D PRINTED SATELLITES, BY SATELLITE MASS (%) [64 5.15.2 BUYING CRITERIA] 65

FIGURE 30∏KEY BUYING CRITERIA FOR 3D PRINTED SATELLITES, BY SATELLITE MASS∏65

TABLE 19 KEY BUYING CRITERIA FOR 3D PRINTED SATELLITES, BY SATELLITE MASS 65

5.16 BUSINESS MODELS OF SATELLITE MANUFACTURING 66

FIGURE 31 BUSINESS MODELS OF SATELLITE MANUFACTURING 66

5.16.1 BUILD-TO-ORDER 66

5.16.2 STANDARDIZED PLATFORM 67

5.16.3 CONSTELLATION MANUFACTURING 67

5.17 TOTAL COST OF OWNERSHIP 68

TABLE 20⊓TOTAL COST OF OWNERSHIP⊓68

5.18 BENEFITS OF 3D PRINTING OVER CONVENTIONAL PRINTING METHODS 69

TABLE 21 3D PRINTING VS. CONVENTIONAL PRINTING 69

TABLE 22 | ATTRIBUTE COMPARISON BETWEEN 3D PRINTING AND CONVENTION PRINTING | 70

5.19□3D PRINTED SATELLITE OUTSOURCING□70

FIGURE 32 MAKERSPACES AND OUTSOURCED SERVICES IN 3D PRINTED SATELLITE MANUFACTURING 70

5.20 INVESTMENT AND FUNDING SCENARIO 71

FIGURE 33 INVESTMENT IN START-UP SPACE COMPANIES, BY INVESTOR TYPE, 2022 71

FIGURE 34 VENTURE CAPITAL FUNDING, 2017-2022 72

FIGURE 35 VENTURE CAPITAL FUNDING FOR TOP 10 COUNTRIES, 2022 72

6□INDUSTRY TRENDS□73

6.1□INTRODUCTION□73

6.2 TECHNOLOGY TRENDS 73

FIGURE 36 ☐ TECHNOLOGY TRENDS ☐ 73

6.2.1 MINIATURIZATION OF SATELLITES 174

6.2.2 ADVANCED MATERIALS 74

6.2.3 INTEGRATION OF ELECTRONICS 74

6.2.4 HYBRID MANUFACTURING 175

6.2.5 LARGE-SCALE SPACE 3D PRINTING 75

6.3∏IMPACT OF MEGATRENDS∏75

6.3.1□GLOBAL CONNECTIVITY AND COMMUNICATION□75

6.3.2 SPACE EXPLORATION AND COMMERCIALIZATION 176

6.3.3 SUSTAINABILITY 76

6.4 SUPPLY CHAIN ANALYSIS 76

FIGURE 37 SUPPLY CHAIN ANALYSIS 77

6.5 PATENT ANALYSIS 78

FIGURE 38 PATENT ANALYSIS 78

TABLE 23□PATENT ANALYSIS□79

7□3D PRINTED SATELLITE MARKET, BY MANUFACTURING TECHNIQUE□83

7.1 INTRODUCTION 83

7.2∏FUSED DEPOSITION MODELING (FDM)∏83

7.3 SELECTIVE LASER SINTERING (SLS) 83

7.4□ELECTRON BEAM MELTING (EBM)□83

7.5 DIRECT METAL LASER SINTERING (DMLS) 84

7.6 OTHER TECHNIQUES 84

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8 | 3D PRINTED SATELLITE MARKET, BY SATELLITE MASS | 85

8.1 INTRODUCTION 86

FIGURE 39 3D PRINTED SATELLITE MARKET, BY SATELLITE MASS, 2024-2030 86

TABLE 24∏3D PRINTED SATELLITE MARKET, BY SATELLITE MASS, 2021-2023 (USD MILLION)∏86

TABLE 25 T3D PRINTED SATELLITE MARKET, BY SATELLITE MASS, 2024-2030 (USD MILLION) T86

8.2 NANO & MICRO SATELLITES 87

8.2.1 WIDE SCOPE IN TACTICAL COMMUNICATION DEVICES TO DRIVE MARKET 87

8.3□SMALL SATELLITES□87

8.3.1 DEPLOYMENT IN CONSTELLATION ARCHITECTURE TO GATHER SCIENTIFIC DATA TO DRIVE MARKET 87

8.4⊓MEDIUM & LARGE SATELLITES□88

8.4.1∏COST ADVANTAGES ASSOCIATED WITH LIGHTWEIGHT STRUCTURES TO DRIVE MARKET∏88

9∏3D PRINTED SATELLITE MARKET, BY COMPONENT∏89

9.1⊓INTRODUCTION⊓90

FIGURE 40∏3D PRINTED SATELLITE MARKET, BY COMPONENT, 2024-2030∏90

TABLE 26 3D PRINTED SATELLITE MARKET, BY COMPONENT, 2021-2023 (USD MILLION) 90

TABLE 27∏3D PRINTED SATELLITE MARKET, BY COMPONENT, 2024-2030 (USD MILLION)∏91

9.2∏ANTENNA∏91

9.2.1 INNOVATIONS IN ANTENNA DESIGN TO DRIVE MARKET 91

9.3 BRACKET 91

9.3.1 EXCELLENT STRUCTURAL INTEGRITY TO DRIVE MARKET 91

9.4∏SHIELD∏92

9.4.1 PROTECTION AGAINST RADIATION-INDUCED DAMAGE TO DRIVE MARKET 92

9.5∏HOUSING∏92

9.5.1 OPTIMIZED SATELLITE PERFORMANCE TO DRIVE MARKET 92

9.6 PROPULSION 93

9.6.1□EFFICIENT COMBUSTION AND HEAT TRANSFER TO DRIVE MARKET□93

10□3D PRINTED SATELLITE MARKET, BY APPLICATION□94

10.1□INTRODUCTION□95

FIGURE 41 3D PRINTED SATELLITE MARKET, BY APPLICATION, 2024-2030 95

TABLE 28[]3D PRINTED SATELLITE MARKET, BY APPLICATION, 2021-2023 (USD MILLION)[]95

TABLE 29[3D PRINTED SATELLITE MARKET, BY APPLICATION, 2024-2030 (USD MILLION)[]96

10.2∏TECHNOLOGY DEVELOPMENT∏96

10.2.1 RAPID ITERATION AND PROTOTYPING OF SATELLITE COMPONENTS TO DRIVE MARKET 96

10.3 COMMUNICATION 96

10.3.1 TRISING ADOPTION OF LEO SATELLITES IN MODERN COMMUNICATION TO DRIVE MARKET 196

10.4 NAVIGATION 97

10.4.1 IMPROVED ACCURACY AND PERFORMANCE TO DRIVE MARKET 97

10.5 EARTH OBSERVATION & REMOTE SENSING 97

10.5.1 ☐ EASE OF DESIGNING COMPLEX COMPONENTS TO DRIVE MARKET ☐ 97

11∏3D PRINTED SATELLITE MARKET, BY REGION∏98

11.1□INTRODUCTION□99

FIGURE 42[3D PRINTED SATELLITE MARKET, BY REGION, 2024-2030[]99

TABLE 30||3D PRINTED SATELLITE MARKET, BY REGION, 2021-2023 (USD MILLION)||99

TABLE 31∏3D PRINTED SATELLITE MARKET, BY REGION, 2024-2030 (USD MILLION)∏100

11.2 REGIONAL RECESSION IMPACT ANALYSIS 100

11.3 NORTH AMERICA 100

11.3.1 PESTLE ANALYSIS 100

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- 11.3.2 RECESSION IMPACT ANALYSIS 102
- 11.3.3 B PRINTED SATELLITE PROGRAMS 102

FIGURE 43 NORTH AMERICA: 3D PRINTED SATELLITE PROGRAMS 102

- 11.3.4∏US∏102
- 11.3.4.1 ☐ Expertise in space exploration and advanced printing technology to drive market ☐ 102
- 11.3.5 □ CANADA □ 103
- 11.3.5.1 Collaborative initiatives and ambitious space agendas to drive market 103
- 11.4 EUROPE 103
- 11.4.1 PESTLE ANALYSIS 103
- 11.4.2 RECESSION IMPACT ANALYSIS 104
- 11.4.3

 ☐ 3D PRINTED SATELLITE PROGRAMS

 ☐ 105

FIGURE 44 EUROPE: 3D PRINTED SATELLITE PROGRAMS 105

- 11.4.4∏UK∏105
- 11.4.4.1 Rising adoption of 3D printing technology by prominent players to drive market 105
- 11.4.5 FRANCE 106
- 11.4.5.1 Increasing satellite launches with 3D printed components to drive market 106
- 11.4.6∏ITALY∏106
- 11.4.6.1 Focus on developing specialized 3D printing materials to drive market 106
- 11.4.7 SPAIN 106
- 11.4.7.1 Strategic collaborations between domestic research institutions and private firms to drive market 106
- 11.4.8 REST OF EUROPE 106
- 11.5□ASIA PACIFIC□107
- 11.5.1 PESTLE ANALYSIS 107
- 11.5.2 RECESSION IMPACT ANALYSIS 108
- 11.5.3

 ☐ 3D PRINTED SATELLITE PROGRAMS

 ☐ 109

FIGURE 45 ASIA PACIFIC: 3D PRINTED SATELLITE PROGRAMS 109

- 11.5.4□CHINA□110
- 11.5.4.1 Escalating demand for reduced production costs to drive market 110
- 11.5.5 | JAPAN | 110
- 11.5.5.1 Shift toward smaller satellite constellations to drive market 110
- 11.5.6 INDIA 110
- 11.5.6.1 Rapid integration of 3D printing technology in space missions to drive market 110
- $11.5.7 \verb|| AUSTRALIA \verb||| 111$
- 11.5.7.1 Government investments in space technologies to drive market 1111
- 11.5.8 REST OF ASIA PACIFIC 111
- 11.6 REST OF THE WORLD 111
- 11.6.1 PESTLE ANALYSIS 111
- 11.6.2 RECESSION IMPACT ANALYSIS 112
- 11.6.3

 ☐ 3D PRINTED SATELLITE PROGRAMS

 ☐ 113

FIGURE 46 REST OF THE WORLD: 3D PRINTED SATELLITE PROGRAMS 113

- 11.6.4 MIDDLE EAST & AFRICA 113
- 11.6.4.1 Booming IT industry to drive market 113
- 11.6.5 LATIN AMERICA 114
- 11.6.5.1 Ongoing collaborations and technological advancements to drive market 114
- 12 COMPETITIVE LANDSCAPE 115
- 12.1□INTRODUCTION□115
- 12.2 STRATEGIES ADOPTED BY KEY PLAYERS 115

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TABLE 32 STRATEGIES ADOPTED BY KEY PLAYERS 115

12.3 MARKET RANKING ANALYSIS, 2023 116

FIGURE 47 MARKET RANKING OF KEY PLAYERS, 2023 116

12.4 REVENUE ANALYSIS, 2020-2023 116

FIGURE 48 REVENUE ANALYSIS OF KEY PLAYERS, 2020-2023 116

12.5 MARKET SHARE ANALYSIS, 2023 117

FIGURE 49∏MARKET SHARE ANALYSIS OF KEY PLAYERS, 2023∏117

TABLE 33 DEGREE OF COMPETITION 117

12.6 COMPANY EVALUATION MATRIX: KEY PLAYERS, 2023 119

12.6.1 STARS 119

12.6.2∏EMERGING LEADERS∏119

12.6.3 PERVASIVE PLAYERS 119

12.6.4 PARTICIPANTS □119

FIGURE 50 COMPANY EVALUATION MATRIX (KEY PLAYERS), 2023 120

12.6.5 COMPANY FOOTPRINT 121

FIGURE 51 COMPANY FOOTPRINT, 2023 121

TABLE 34 APPLICATION FOOTPRINT, 2023 122

TABLE 35 COMPONENT FOOTPRINT, 2023 122

TABLE 36 REGION FOOTPRINT, 2023 123

12.7 COMPANY EVALUATION MATRIX: START-UPS/SMES, 2023 124

12.7.1 PROGRESSIVE COMPANIES 124

12.7.2 RESPONSIVE COMPANIES 124

12.7.3 DYNAMIC COMPANIES 124

12.7.4 STARTING BLOCKS 124

FIGURE 52 COMPANY EVALUATION MATRIX (START-UPS/SMES), 2023 125

12.7.5 COMPETITIVE BENCHMARKING 125

TABLE 37 KEY START-UPS/SMES 125

TABLE 38□COMPETITIVE BENCHMARKING OF KEY START-UPS/SMES□126

12.8 COMPANY VALUATION AND FINANCIAL METRICS 127

FIGURE 53 COMPANY VALUATION OF KEY PLAYERS 127

FIGURE 54 EV/EBITDA OF KEY PLAYERS 127

FIGURE 55 □ COMPANY VALUATION OF START-UPS/SMES □ 128

FIGURE 56 TEV/EBITDA OF START-UPS/SMEST 128

12.9 BRAND/PRODUCT COMPARISON 129

FIGURE 57 BRAND/PRODUCT COMPARISON 129

12.10 COMPETITIVE SCENARIO 130

12.10.1 MARKET EVALUATION FRAMEWORK 130

12.10.2 PRODUCT LAUNCHES 130

TABLE 39[]3D PRINTED SATELLITE MARKET: PRODUCT LAUNCHES, 2020-2024[]130

12.10.3 DEALS 131

TABLE 40[]3D PRINTED SATELLITE MARKET: DEALS, 2020-2024[]131

12.10.4 OTHERS 133

TABLE 41∏3D PRINTED SATELLITE MARKET: OTHERS, 2020-2024∏133

13 COMPANY PROFILES 135

13.1 KEY PLAYERS 135

(Business Overview, Products/Solutions/Services offered, Recent Developments, MnM View)*

13.1.1 MAXAR SPACE SYSTEMS 135

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TABLE 42 \square MAXAR SPACE SYSTEMS: COMPANY OVERVIEW \square 135

FIGURE 58 MAXAR SPACE SYSTEMS: COMPANY SNAPSHOT 136

TABLE 43 MAXAR SPACE SYSTEMS: PRODUCTS/SOLUTIONS/SERVICES OFFERED 136

TABLE 44 MAXAR SPACE SYSTEMS: DEALS 137

13.1.2 NORTHROP GRUMMAN 138

TABLE 45 NORTHROP GRUMMAN: COMPANY OVERVIEW 138 FIGURE 59 NORTHROP GRUMMAN: COMPANY SNAPSHOT 139

TABLE 46 NORTHROP GRUMMAN: PRODUCTS/SOLUTIONS/SERVICES OFFERED 139

13.1.3 FLEET SPACE TECHNOLOGIES PTY LTD 141

TABLE 47 FLEET SPACE TECHNOLOGIES PTY LTD: COMPANY OVERVIEW 141

TABLE 48 | FLEET SPACE TECHNOLOGIES PTY LTD: PRODUCTS/SOLUTIONS/SERVICES OFFERED | 141

TABLE 49 FLEET SPACE TECHNOLOGIES PTY LTD: DEALS 142

?

13.1.4 DSYSTEMS, INC. 143

TABLE 50[]3D SYSTEMS, INC.: COMPANY OVERVIEW[]143 FIGURE 60[]3D SYSTEMS, INC.: COMPANY SNAPSHOT[]144

TABLE 51 3D SYSTEMS, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED 144

TABLE 52 3D SYSTEMS, INC.: DEALS 145

13.1.5 BOEING 146

TABLE 53 BOEING: COMPANY OVERVIEW 146
FIGURE 61 BOEING: COMPANY SNAPSHOT 147

TABLE 54 BOEING: PRODUCTS/SOLUTIONS/SERVICES OFFERED 147

TABLE 55 BOEING: OTHERS 148 13.1.6 THALES ALENIA SPACE 149

TABLE 56 THALES ALENIA SPACE: COMPANY OVERVIEW 149
FIGURE 62 THALES ALENIA SPACE: COMPANY SNAPSHOT 150

TABLE 57 THALES ALENIA SPACE: PRODUCTS/SOLUTIONS/SERVICES OFFERED 150

TABLE 58 THALES ALENIA SPACE: PRODUCT LAUNCHES 151

13.1.7 LOCKHEED MARTIN CORPORATION 152

TABLE 59 LOCKHEED MARTIN CORPORATION: COMPANY OVERVIEW 152 FIGURE 63 LOCKHEED MARTIN CORPORATION: COMPANY SNAPSHOT 153

TABLE 60 LOCKHEED MARTIN CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED 153

TABLE 61 LOCKHEED MARTIN CORPORATION: PRODUCT LAUNCHES 154

13.1.8 MITSUBISHI ELECTRIC CORPORATION 155

TABLE 62 MITSUBISHI ELECTRIC CORPORATION: COMPANY OVERVIEW 155 FIGURE 64 MITSUBISHI ELECTRIC CORPORATION: COMPANY SNAPSHOT 156

TABLE 63 MITSUBISHI ELECTRIC CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED 156

TABLE 64 MITSUBISHI ELECTRIC CORPORATION: PRODUCT LAUNCHES 157

13.1.9 CRP TECHNOLOGY S.R.L 158

TABLE 65 CRP TECHNOLOGY S.R.L: COMPANY OVERVIEW 158

TABLE 66 CRP TECHNOLOGY S.R.L: PRODUCTS/SOLUTIONS/SERVICES OFFERED 158

TABLE 67 CRP TECHNOLOGY S.R.L: PRODUCT LAUNCHES 159

 $13.1.10 \verb||SWISSTO12||160$

TABLE 68 SWISSTO12: COMPANY OVERVIEW 160

TABLE 69 SWISSTO12: PRODUCTS/SOLUTIONS/SERVICES OFFERED 160

TABLE 70[SWISSTO12: DEALS[]161
TABLE 71[SWISSTO12: OTHERS[]162

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13.1.11 REDWIRE CORPORATION 163

TABLE 72□REDWIRE CORPORATION: COMPANY OVERVIEW□163
FIGURE 65□REDWIRE CORPORATION: COMPANY SNAPSHOT□163

TABLE 73 REDWIRE CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED 164

?

13.1.12 RUAG GROUP 165

TABLE 74 RUAG GROUP: COMPANY OVERVIEW 165
FIGURE 66 RUAG GROUP: COMPANY SNAPSHOT 166

TABLE 75 RUAG GROUP: PRODUCTS/SOLUTIONS/SERVICES OFFERED 166

TABLE 76 RUAG GROUP: OTHERS 167

13.1.13 \(MOOG \) INC. \(\) 168

TABLE 77 MOOG INC.: COMPANY OVERVIEW 168
FIGURE 67 MOOG INC.: COMPANY SNAPSHOT 168

TABLE 78 MOOG INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED 169

13.1.14 RENISHAW PLC 170

TABLE 79□RENISHAW PLC: COMPANY OVERVIEW□170 FIGURE 68□RENISHAW PLC: COMPANY SNAPSHOT□171

TABLE 80 RENISHAW PLC: PRODUCTS/SOLUTIONS/SERVICES OFFERED 171

13.1.15 ZENITH TECNICA 172

TABLE 81 TECNICA: COMPANY OVERVIEW 172

TABLE 82[]ZENITH TECNICA: PRODUCTS/SOLUTIONS/SERVICES OFFERED[]172

TABLE 83 ZENITH TECNICA: OTHERS 173

13.2∏OTHER PLAYERS∏174

13.2.1 OC OERLIKON MANAGEMENT AG 174

TABLE 84 OC OERLIKON MANAGEMENT AG: COMPANY OVERVIEW 174

13.2.2□STRATASYS□174

TABLE 85 STRATASYS: COMPANY OVERVIEW 174

13.2.3□SIDUS SPACE□175

TABLE 86 SIDUS SPACE: COMPANY OVERVIEW 175

13.2.4∏EXONE∏175

TABLE 87 EXONE: COMPANY OVERVIEW 175

13.2.5 | HEXCEL CORPORATION | 176

TABLE 88 HEXCEL CORPORATION: COMPANY OVERVIEW 176

13.2.6 NANO DIMENSION 177

TABLE 89 NANO DIMENSION: COMPANY OVERVIEW 177

 $13.2.7 \verb||OPTOMEC INC||178$

TABLE 90 OPTOMEC INC: COMPANY OVERVIEW 178

13.2.8 OPTISYS INC 178

TABLE 91 OPTISYS INC: COMPANY OVERVIEW 178

 $13.2.9 \verb||TRUMPF|| 179$

TABLE 92 TRUMPF: COMPANY OVERVIEW 179

13.2.10 ANYWAVES 179

TABLE 93 ANYWAVES: COMPANY OVERVIEW 179

13.2.11 DAWN AEROSPACE 180

TABLE 94 DAWN AEROSPACE: COMPANY OVERVIEW 180

*Details on Business Overview, Products/Solutions/Services offered, Recent Developments, MnM View might not be captured in case of unlisted companies.

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? 14\|\text{APPENDIX}\|\text{181}

14.1 DISCUSSION GUIDE 181

 $14.2 \verb|||KNOWLEDGESTORE: MARKETSANDMARKETS'| SUBSCRIPTION PORTAL || 183$

14.3 CUSTOMIZATION OPTIONS 185

14.4 RELATED REPORTS 185

14.5 AUTHOR DETAILS 186

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