

Inertial Navigation Systems Market by Grade (Marine, Navigation, Tactical, Space, Commercial), Technology (Mechanical, Ring Laser, Fiber Optic, MEMS), Platform, End User (Commercial and Defence), Component and Region - Global Forecast to 2029

Market Report | 2024-05-16 | 259 pages | MarketsandMarkets

AVAILABLE LICENSES:

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

Report description:

The Inertial Navigation Systems market is estimated to grow from USD 13.5 billion by 2029 from USD 10.3 billion in 2024, at a CAGR of 5.6% from 2024 to 2029. The increasing demand for precise navigation solutions in various industries and applications drives the inertial navigation systems market. This demand stems from the need for accurate positioning, velocity, and orientation information, particularly in environments where GPS signals may be unreliable or unavailable. Industries such as aviation, marine, defense, and autonomous vehicles rely on INS for safe and efficient operations.

"Defense by end user is expected to hold the highest market share in 2024."

Based on end users, the inertial navigation systems market is categorized into commercial & government and defense. The defense segment has the highest market share of 60.0%. Defense agencies worldwide heavily rely on INS for a range of critical applications such as missile guidance, reconnaissance, target tracking, and battlefield navigation. The continuous modernization of military capabilities, coupled with evolving threats, necessitates the adoption of cutting-edge navigation technology to maintain strategic superiority. Additionally, the increasing complexity of modern warfare scenarios, including urban operations and asymmetric threats, underscores the importance of INS in providing accurate positioning and situational awareness for military operations.

"The Aircraft segment by platform is estimated to hold the highest market share in 2024."

Based on Platform, the market is further divided into aircraft, missiles, space launch vehicles, marine, military armored vehicles, unmanned aerial vehicles, unmanned ground vehicles, and unmanned marine vehicles. The aircraft segment holds the highest share of 33.3%. With the increasing complexity of airspace and the rise in air traffic, there is a growing demand for advanced navigation technologies that can support navigation in various weather conditions and environments. Furthermore, whether commercial airliners or military jets, aircraft require precise navigation systems to ensure accurate positioning, velocity, and

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

orientation information throughout their flights. INS plays a crucial role in providing continuous navigation data, especially in areas where GPS signals may be weak or unavailable.

"North America is expected to hold the highest market share in 2024."

Based on Region, North America holds the highest share of 33.2% in 2024. The region covers the US and Canada for market analysis. North America is home to leading aerospace and defense companies that continually invest in advanced navigation technologies to maintain their competitive edge globally. Additionally, the region's extensive network of military installations, research institutions, and government agencies drives significant demand for high-performance INS solutions. Moreover, North America's rapid adoption of autonomous technologies, including unmanned aerial vehicles (UAVs) and autonomous vehicles, further fuels the demand for precise navigation systems. Furthermore, supportive government policies, robust infrastructure, and a culture of innovation contribute to the growth of the INS market in North America.

The break-up of the profile of primary participants in the inertial navigation systems market:

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

-□By Designation: C Level - 35%, Director Level - 25%, Others - 40%

-□By Region: North America - 25%, Europe - 15%, Asia Pacific - 45%, Middle East - 10% & Rest of the World - 5%

Safran Electronic & Defense (France), Northrop Grumman (US), Teledyne Technologies (US), Collins Aerospace (US), Honeywell International Inc. (US). These key players offer connectivity applicable to various sectors and have well-equipped and strong distribution networks across North America, Europe, Asia Pacific, the Middle East, and Rest of the World.

Research Coverage:

In terms of the End user segment, the inertial navigation systems market is divided into commercial & government and defense. The Platform-based segmentation includes aircraft, missiles, space launch vehicles, marine, military armored vehicles, unmanned aerial vehicles, unmanned ground vehicles, and unmanned marine vehicles.

Based on components, the inertial navigation systems market is further segmented into accelerometers, gyroscopes, algorithms & processors. The technology segment is divided into mechanical gyro, ring laser gyro, fiber optic gyro, microelectromechanical systems, and others (HRG).

Based on grade, the inertial navigation systems market is divided into marine grade, navigation grade, tactical grade, space grade and commercial grade.

This report segments the inertial navigation systems market across six key regions: North America, Europe, Asia Pacific, the Middle East, and the Rest of the World along with their respective key countries. The report's scope includes in-depth information on significant factors, such as drivers, restraints, challenges, and opportunities that influence the growth of the inertial navigation systems market.

A comprehensive analysis of major industry players has been conducted to provide insights into their business profiles, solutions, and services. This analysis also covers key aspects like collaborations, new product launches, contracts, acquisitions, and partnerships associated with the inertial navigation systems market.

Reasons to buy this report:

This report serves as a valuable resource for market leaders and newcomers in the inertial navigation systems market, offering data that closely approximates revenue figures for both the overall market and its subsegments. It equips stakeholders with a comprehensive understanding of the competitive landscape, facilitating informed decisions to enhance their market positioning and formulating effective go-to-market strategies for Simulation. The report imparts valuable insights into the market dynamics,

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

offering information on crucial factors such as drivers, restraints, challenges, and opportunities, enabling stakeholders to gauge the market's pulse.

The report provides insights on the following pointers:

-□Analysis of the key driver (Growing space exploration missions, Increasing procurement of commercial aircraft, Rising demand for precise navigation systems, Increasing adoption of missiles due to geopolitical instabilities) restraint (Complex integration of inertial navigation systems, High initial cost) opportunities (Complex integration of inertial navigation systems, High initial cost) and challenges (Complex integration of inertial navigation systems, High initial cost) there are several factors that could contribute to an increase in the inertial navigation systems market.

-□Market Penetration: Comprehensive information on inertial navigation systems solutions offered by the top players in the market

-□Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the inertial navigation systems market

-□Market Development: Comprehensive information about lucrative markets - the report analyses the inertial navigation systems market across varied regions.

-□Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the inertial navigation systems market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players in the inertial navigation systems market

Table of Contents:

1□INTRODUCTION□39

1.1□STUDY OBJECTIVES□39

1.2□MARKET DEFINITION□39

1.2.1□INCLUSIONS AND EXCLUSIONS□40

TABLE 1□INCLUSIONS AND EXCLUSIONS□40

1.3□STUDY SCOPE□41

1.3.1□MARKETS COVERED□41

FIGURE 1□INERTIAL NAVIGATION SYSTEMS MARKET SEGMENTATION□41

1.3.2□REGIONS COVERED□41

1.3.3□YEARS CONSIDERED□42

1.4□CURRENCY CONSIDERED□42

TABLE 2□USD EXCHANGE RATES□42

1.5□STAKEHOLDERS□43

1.6□SUMMARY OF CHANGES□43

1.6.1□RECESSION IMPACT□43

2□RESEARCH METHODOLOGY□44

2.1□RESEARCH DATA□44

FIGURE 2□REPORT PROCESS FLOW□44

FIGURE 3□RESEARCH DESIGN□45

2.1.1□SECONDARY DATA□45

2.1.1.1□Key data from secondary sources□46

2.1.2□PRIMARY DATA□46

2.1.2.1	Primary sources	46
2.1.2.2	Key data from primary sources	47
2.1.2.3	Breakdown of primary interviews	47
2.1.2.4	Key industry insights	48
2.2	FACTOR ANALYSIS	48
2.2.1	INTRODUCTION	48
2.2.2	DEMAND-SIDE INDICATORS	48
2.2.3	SUPPLY-SIDE INDICATORS	49
2.3	MARKET SIZE ESTIMATION	49
2.3.1	BOTTOM-UP APPROACH	49
TABLE 3		MARKET SIZE ESTIMATION PROCEDURE
FIGURE 4		BOTTOM-UP APPROACH
2.3.2	TOP-DOWN APPROACH	50
FIGURE 5		TOP-DOWN APPROACH
2.4	DATA TRIANGULATION	51
FIGURE 6		DATA TRIANGULATION
2.5	RESEARCH ASSUMPTIONS	52
2.6	RESEARCH LIMITATIONS	52
2.7	RISK ASSESSMENT	53
3	EXECUTIVE SUMMARY	54
FIGURE 7		AIRCRAFT TO SURPASS OTHER PLATFORMS DURING FORECAST PERIOD
FIGURE 8		RING LASER GYRO TO SECURE LEADING MARKET POSITION DURING FORECAST PERIOD
FIGURE 9		NAVIGATION TO BE LARGEST SEGMENT DURING FORECAST PERIOD
FIGURE 10		DEFENSE TO HOLD DOMINANT SHARE DURING FORECAST PERIOD
FIGURE 11		NORTH AMERICA TO BE LARGEST MARKET FOR INERTIAL NAVIGATION SYSTEMS DURING FORECAST PERIOD
4	PREMIUM INSIGHTS	58
4.1	ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN INERTIAL NAVIGATION SYSTEMS MARKET	58
FIGURE 12		GOVERNMENT INITIATIVES TOWARD DEVELOPMENT OF ADVANCED NAVIGATION SYSTEMS TO DRIVE GROWTH
4.2	INERTIAL NAVIGATION SYSTEMS MARKET, BY AIRCRAFT	58
FIGURE 13		FIXED-WING TO BE LARGER SEGMENT THAN ROTARY-WING DURING FORECAST PERIOD
4.3	INERTIAL NAVIGATION SYSTEMS MARKET, BY MISSILE	59
FIGURE 14		CRUISE MISSILES TO ACQUIRE HIGHER SHARE IN 2029
4.4	INERTIAL NAVIGATION SYSTEMS MARKET, BY MARINE VESSEL	59
FIGURE 15		MERCHANT SHIPS TO BE PREVALENT DURING FORECAST PERIOD
4.5	INERTIAL NAVIGATION SYSTEMS MARKET, BY MILITARY ARMORED VEHICLE	60
FIGURE 16		MILITARY COMBAT VEHICLES TO BE DOMINANT DURING FORECAST PERIOD
4.6	INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY	60
FIGURE 17		ISRAEL TO BE FASTEST-GROWING MARKET DURING FORECAST PERIOD
5	MARKET OVERVIEW	61
5.1	INTRODUCTION	61
5.2	MARKET DYNAMICS	61
FIGURE 18		INERTIAL NAVIGATION SYSTEMS MARKET DYNAMICS
5.2.1	DRIVERS	62
5.2.1.1	Rising space exploration missions	62
FIGURE 19		ORBITAL LAUNCHES, 2020-2023
5.2.1.2	Increasing procurement of commercial aircraft	62
FIGURE 20		AIRCRAFT DELIVERIES BY BOEING AND AIRBUS, 2019-2023

5.2.1.3	Escalating demand for precise navigation systems	63
5.2.1.4	Growing adoption of missiles due to geopolitical instabilities	63
5.2.2	RESTRAINTS	64
5.2.2.1	Complex integration of inertial navigation systems	64
5.2.2.2	High development costs	64
5.2.3	OPPORTUNITIES	64
5.2.3.1	Trend of driverless cars	64
5.2.3.2	Increasing deployment of unmanned maritime vehicles	65
5.2.3.3	Innovations in sensor design and data processing algorithms	65
5.2.4	CHALLENGES	65
5.2.4.1	Calibration and alignment issues	65
5.2.4.2	High initialization time	65
5.3	VALUE CHAIN ANALYSIS	66
FIGURE 21	VALUE CHAIN ANALYSIS	66
5.4	TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES	67
FIGURE 22	TRENDS AND DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES	67
5.5	CASE STUDY ANALYSIS	68
5.5.1	HONEYWELL'S LASEREF INERTIAL REFERENCE SYSTEM	68
5.5.2	SBG SYSTEMS' ELLIPSE-D INERTIAL NAVIGATION SYSTEM	68
5.5.3	ADVANCED NAVIGATION'S BOREAS DIGITAL FOG TECHNOLOGY	69
5.6	PRICING ANALYSIS	69
5.6.1	INDICATIVE PRICING ANALYSIS, BY TECHNOLOGY	69
TABLE 4	INDICATIVE PRICING ANALYSIS, BY TECHNOLOGY, 2023 (USD MILLION)	69
5.6.2	INDICATIVE PRICING ANALYSIS, BY REGION	70
TABLE 5	INDICATIVE PRICING ANALYSIS, BY REGION, 2023 (USD MILLION)	70
5.7	ECOSYSTEM ANALYSIS	70
5.7.1	PROMINENT COMPANIES	70
5.7.2	PRIVATE AND SMALL ENTERPRISES	70
5.7.3	END USERS	70
FIGURE 23	ECOSYSTEM ANALYSIS	71
TABLE 6	ROLE OF COMPANIES IN ECOSYSTEM	71
5.8	TRADE ANALYSIS	72
FIGURE 24	IMPORT DATA, BY COUNTRY, 2020-2023 (USD THOUSAND)	72
TABLE 7	IMPORT DATA, BY COUNTRY, 2020-2023 (USD THOUSAND)	73
FIGURE 25	EXPORT DATA, BY COUNTRY, 2020-2023 (USD THOUSAND)	73
TABLE 8	EXPORT DATA, BY COUNTRY, 2020-2023 (USD THOUSAND)	74
5.9	KEY CONFERENCES AND EVENTS, 2024-2025	74
TABLE 9	KEY CONFERENCES AND EVENTS, 2024-2025	74
5.10	REGULATORY LANDSCAPE	75
TABLE 10	NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	75
TABLE 11	EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	75
TABLE 12	ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	76
TABLE 13	MIDDLE EAST: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	76
TABLE 14	REST OF THE WORLD: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	77
5.11	KEY STAKEHOLDERS AND BUYING CRITERIA	77
5.11.1	KEY STAKEHOLDERS IN BUYING PROCESS	77
FIGURE 26	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP FOUR PLATFORMS	77

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 15	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP FOUR PLATFORMS	77
5.11.2	BUYING CRITERIA	78
FIGURE 27	KEY BUYING CRITERIA, BY END USER	78
TABLE 16	KEY BUYING CRITERIA, BY END USER	78
5.12	TECHNOLOGY ANALYSIS	78
5.12.1	KEY TECHNOLOGY	78
5.12.1.1	Sensor fusion algorithms	78
5.12.1.2	Optical gyroscopes	79
5.12.2	ADJACENT TECHNOLOGY	79
5.12.2.1	Global navigation satellite systems	79
5.12.2.2	Barometric altimeters	79
5.13	TECHNOLOGY ROADMAP	80
FIGURE 28	INTRODUCTION TO TECHNOLOGY ROADMAP	80
FIGURE 29	EVOLUTION OF KEY TECHNOLOGIES	80
FIGURE 30	EMERGING TRENDS RELATED TO INERTIAL NAVIGATION SYSTEMS	81
5.14	OPERATIONAL DATA	82
TABLE 17	AIRCRAFT ACTIVE FLEET, BY REGION, 2020-2023	82
5.15	BILL OF MATERIALS	82
FIGURE 31	BILL OF MATERIALS FOR INERTIAL NAVIGATION SYSTEMS	82
5.16	TOTAL COST OF OWNERSHIP	83
FIGURE 32	TOTAL COST OF OWNERSHIP OF INERTIAL NAVIGATION SYSTEMS	83
FIGURE 33	AVERAGE BREAKDOWN OF MAJOR COST CATEGORIES AS PERCENTAGES OF TOTAL LIFECYCLE COST	84
TABLE 18	TOTAL COST OF OWNERSHIP OF INERTIAL NAVIGATION SYSTEMS OVER 10-YEAR LIFECYCLE (USD MILLION)	84
5.17	BUSINESS MODELS	85
FIGURE 34	BUSINESS MODELS OF INERTIAL NAVIGATION SYSTEMS MARKET	85
5.17.1	DIRECT SALE MODEL	85
FIGURE 35	DIRECT SALE MODEL	86
5.17.2	SERVICE MODEL	86
FIGURE 36	SERVICE MODEL	86
5.18	INVESTMENT AND FUNDING SCENARIO	87
TABLE 19	VENTURE CAPITAL AND DEALS, 2019?2023	87
FIGURE 37	VENTURE CAPITAL AND DEALS, 2019?2023	87
?		
6	INDUSTRY TRENDS	88
6.1	INTRODUCTION	88
6.2	TECHNOLOGY TRENDS	88
FIGURE 38	TECHNOLOGY TRENDS	88
6.2.1	ADVANCED MICROELECTROMECHANICAL SYSTEM	88
6.2.2	GNSS-AIDED INERTIAL NAVIGATION SYSTEM	89
6.2.3	QUANTUM SENSING TECHNOLOGY	89
6.2.4	MINIATURIZATION AND LOW POWER CONSUMPTION	90
6.2.5	HIGH-END INERTIAL NAVIGATION SYSTEM	90
6.2.5.1	Ring laser gyro	90
6.2.5.2	Fiber optic gyro	90
6.3	IMPACT OF MEGATRENDS	91
6.3.1	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	91
6.3.2	MODERN CALIBRATION TECHNIQUES	91

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

6.4	PATENT ANALYSIS	92
FIGURE 39	PATENT ANALYSIS	92
TABLE 20	PATENT ANALYSIS	93
7	INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM	95
7.1	INTRODUCTION	96
FIGURE 40	INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2024-2029	96
TABLE 21	INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2020-2023 (USD MILLION)	96
TABLE 22	INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2024-2029 (USD MILLION)	97
TABLE 23	INERTIAL NAVIGATION SYSTEM VOLUME, BY PLATFORM, 2020-2029 (UNITS)	97
FIGURE 41	INERTIAL NAVIGATION SYSTEM VOLUME, BY PLATFORM, 2020-2029 (UNITS)	98
7.2	AIRCRAFT	98
7.2.1	INCREASING AUTONOMY IN AIRCRAFT NAVIGATION TO DRIVE GROWTH	98
FIGURE 42	FIXED-WING TO BE LARGEST SEGMENT DURING FORECAST PERIOD	98
TABLE 24	INERTIAL NAVIGATION SYSTEMS MARKET, BY AIRCRAFT, 2020-2023 (USD MILLION)	99
TABLE 25	INERTIAL NAVIGATION SYSTEMS MARKET, BY AIRCRAFT, 2024-2029 (USD MILLION)	99
7.2.2	FIXED-WING	99
TABLE 26	FIXED-WING INERTIAL NAVIGATION SYSTEMS MARKET, BY TYPE, 2020-2023 (USD MILLION)	99
TABLE 27	FIXED-WING INERTIAL NAVIGATION SYSTEMS MARKET, BY TYPE, 2024-2029 (USD MILLION)	100
7.2.2.1	Commercial aircraft	100
7.2.2.1.1	General aviation	100
7.2.2.1.2	Commercial passenger & cargo aircraft	100
7.2.2.2	Military aircraft	101
7.2.2.2.1	Fighter aircraft	101
7.2.2.2.2	Transport aircraft	101
7.2.3	ROTARY-WING	101
TABLE 28	ROTARY-WING INERTIAL NAVIGATION SYSTEMS MARKET, BY TYPE, 2020-2023 (USD MILLION)	101
TABLE 29	ROTARY-WING INERTIAL NAVIGATION SYSTEMS MARKET, BY TYPE, 2024-2029 (USD MILLION)	102
7.2.3.1	Military helicopters	102
7.2.3.2	Civil helicopters	102
7.3	MISSILES	102
7.3.1	NEED FOR PRECISION STRIKE CAPABILITIES AGAINST TIME-SENSITIVE TARGETS TO DRIVE GROWTH	102
FIGURE 43	CRUISE MISSILES TO BE LARGEST SEGMENT DURING FORECAST PERIOD	103
TABLE 30	INERTIAL NAVIGATION SYSTEMS MARKET, BY MISSILE, 2020-2023 (USD MILLION)	103
TABLE 31	INERTIAL NAVIGATION SYSTEMS MARKET, BY MISSILE, 2024-2029 (USD MILLION)	103
7.3.2	BALLISTIC MISSILES	103
7.3.3	CRUISE MISSILES	103
7.4	SPACE LAUNCH VEHICLES	104
7.4.1	RIISING SPACE EXPLORATION ACTIVITIES TO DRIVE GROWTH	104
7.5	MARINE VESSELS	104
7.5.1	EMPHASIS ON OPERATIONAL EFFICIENCY TO DRIVE GROWTH	104
FIGURE 44	MERCHANT SHIPS TO BE LARGEST SEGMENT DURING FORECAST PERIOD	104
TABLE 32	INERTIAL NAVIGATION SYSTEMS MARKET, BY MARINE VESSEL, 2020-2023 (USD MILLION)	105
TABLE 33	INERTIAL NAVIGATION SYSTEMS MARKET, BY MARINE VESSEL, 2024-2029 (USD MILLION)	105
7.5.2	MERCHANT SHIPS	105
7.5.3	NAVAL SHIPS	105
7.6	MILITARY ARMORED VEHICLES	105
7.6.1	INCREASING ADOPTION OF NAVIGATION SYSTEMS IN COMBAT OPERATIONS TO DRIVE GROWTH	105

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FIGURE 45	MILITARY COMBAT VEHICLES TO BE LARGEST SEGMENT DURING FORECAST PERIOD	106
TABLE 34	INERTIAL NAVIGATION SYSTEMS MARKET, BY MILITARY ARMORED VEHICLE, 2020-2023 (USD MILLION)	106
TABLE 35	INERTIAL NAVIGATION SYSTEMS MARKET, BY MILITARY ARMORED VEHICLE, 2024-2029 (USD MILLION)	106
7.6.2	MAIN BATTLE TANKS	107
7.6.3	MILITARY COMBAT VEHICLES	107
7.7	UNMANNED AERIAL VEHICLES	107
7.7.1	SURGE IN R&D INVESTMENTS IN DEFENSE INDUSTRY TO DRIVE GROWTH	107
FIGURE 46	TACTICAL UNMANNED AERIAL VEHICLES TO BE LARGEST SEGMENT DURING FORECAST PERIOD	107
TABLE 36	INERTIAL NAVIGATION SYSTEMS MARKET, BY UNMANNED AERIAL VEHICLE, 2020-2023 (USD MILLION)	108
TABLE 37	INERTIAL NAVIGATION SYSTEMS MARKET, BY UNMANNED AERIAL VEHICLE, 2024-2029 (USD MILLION)	108
7.7.2	ENTERPRISE UNMANNED AERIAL VEHICLES	108
7.7.3	TACTICAL UNMANNED AERIAL VEHICLES	108
7.8	UNMANNED GROUND VEHICLES	109
7.8.1	ESCALATING DEMAND FOR AUTONOMOUS SYSTEMS TO AUGMENT HUMAN CAPABILITIES TO DRIVE GROWTH	109
FIGURE 47	MILITARY UNMANNED GROUND VEHICLES TO BE LARGEST SEGMENT DURING FORECAST PERIOD	109
TABLE 38	INERTIAL NAVIGATION SYSTEMS MARKET, BY UNMANNED GROUND VEHICLE, 2020-2023 (USD MILLION)	109
TABLE 39	INERTIAL NAVIGATION SYSTEMS MARKET, BY UNMANNED GROUND VEHICLE, 2024-2029 (USD MILLION)	110
7.8.2	COMMERCIAL UNMANNED GROUND VEHICLES	110
7.8.3	MILITARY UNMANNED GROUND VEHICLES	110
7.9	UNMANNED MARITIME VEHICLES	110
7.9.1	NEED FOR AUTONOMOUS MARINE OPERATIONS TO DRIVE GROWTH	110
FIGURE 48	UNMANNED SURFACE VEHICLES TO BE LARGEST SEGMENT DURING FORECAST PERIOD	111
TABLE 40	INERTIAL NAVIGATION SYSTEMS MARKET, BY UNMANNED MARITIME VEHICLE, 2020-2023 (USD MILLION)	111
TABLE 41	INERTIAL NAVIGATION SYSTEMS MARKET, BY UNMANNED MARITIME VEHICLE, 2024-2029 (USD MILLION)	111
7.9.2	REMOTELY OPERATED VEHICLES	112
7.9.3	AUTONOMOUS UNDERWATER VEHICLES	112
7.9.4	UNMANNED SURFACE VEHICLES	112
8	INERTIAL NAVIGATION SYSTEMS MARKET, BY COMPONENT	113
8.1	INTRODUCTION	114
FIGURE 49	INERTIAL NAVIGATION SYSTEMS MARKET, BY COMPONENT, 2024-2029	114
TABLE 42	INERTIAL NAVIGATION SYSTEMS MARKET, BY COMPONENT, 2020-2023 (USD MILLION)	114
TABLE 43	INERTIAL NAVIGATION SYSTEMS MARKET, BY COMPONENT, 2024-2029 (USD MILLION)	114
8.2	ACCELEROMETERS	115
8.2.1	INTEGRATION OF INERTIAL NAVIGATION SYSTEMS INTO UNMANNED VEHICLES TO DRIVE GROWTH	115
8.3	GYROSCOPES	115
8.3.1	INCREASING DEMAND FOR AUTONOMOUS NAVIGATION SOLUTIONS TO DRIVE GROWTH	115
8.4	ALGORITHMS & PROCESSORS	115
8.4.1	RIISING INVESTMENTS IN RESEARCH AND DEVELOPMENT TO DRIVE GROWTH	115
9	INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY	116
9.1	INTRODUCTION	117
FIGURE 50	INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029	117
TABLE 44	INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	117
TABLE 45	INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	118
9.2	MECHANICAL GYRO	118
9.2.1	RESISTANCE TO ENVIRONMENTAL FACTORS TO DRIVE GROWTH	118
9.3	RING LASER GYRO (RLG)	118

9.3.1	CONTINUOUS ADVANCEMENTS IN LASER TECHNOLOGY TO DRIVE GROWTH	118
9.4	FIBER OPTIC GYRO (FOG)	119
9.4.1	INNOVATIONS IN FIBER OPTIC TECHNOLOGY AND MANUFACTURING PROCESSES TO DRIVE GROWTH	119
9.5	MICROELECTROMECHANICAL SYSTEM (MEMS)	119
9.5.1	EMERGENCE OF ADVANCED FABRICATION TECHNOLOGIES TO DRIVE GROWTH	119
9.6	OTHER TECHNOLOGIES	119
10	INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE	120
10.1	INTRODUCTION	121
	FIGURE 51 INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029	121
	TABLE 46 INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	121
	TABLE 47 INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	121
10.2	MARINE	122
10.2.1	COMPLIANCE WITH REGULATORY REQUIREMENTS AND INDUSTRY STANDARDS TO DRIVE GROWTH	122
10.3	NAVIGATION	122
10.3.1	NEED FOR RELIABLE NAVIGATION SOLUTIONS IN COMPLEX ENVIRONMENTS TO DRIVE GROWTH	122
10.4	TACTICAL	122
10.4.1	STRINGENT PERFORMANCE REQUIREMENTS TO DRIVE GROWTH	122
10.5	SPACE	123
10.5.1	CRITICALITY OF SPACE MISSIONS TO DRIVE GROWTH	123
10.6	COMMERCIAL	123
10.6.1	TREND TOWARD AUTOMATION TO DRIVE GROWTH	123
	?	
11	INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER	124
11.1	INTRODUCTION	125
	FIGURE 52 INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029	125
	TABLE 48 INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	125
	TABLE 49 INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	125
11.2	COMMERCIAL & GOVERNMENT	126
11.2.1	ADVANCEMENTS IN SENSOR TECHNOLOGY AND INTEGRATION CAPABILITIES TO DRIVE GROWTH	126
11.3	DEFENSE	126
11.3.1	NEED FOR ACCURATE POSITIONING, NAVIGATION, AND GUIDANCE IN MODERN WARFARE TO DRIVE GROWTH	126
12	INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION	127
12.1	INTRODUCTION	128
12.2	REGIONAL RECESSION IMPACT ANALYSIS	128
	FIGURE 53 INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION, 2024-2029	128
	TABLE 50 INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION, 2020-2023 (USD MILLION)	129
	TABLE 51 INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION, 2024-2029 (USD MILLION)	129
12.3	NORTH AMERICA	129
12.3.1	RECESSION IMPACT ANALYSIS	130
12.3.2	PESTLE ANALYSIS	130
	FIGURE 54 NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET SNAPSHOT	131
	TABLE 52 NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2020-2023 (USD MILLION)	132
	TABLE 53 NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2024-2029 (USD MILLION)	132
	TABLE 54 NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2020-2023 (USD MILLION)	132
	TABLE 55 NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2024-2029 (USD MILLION)	133
	TABLE 56 NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	133
	TABLE 57 NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	133

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 58	NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	134
TABLE 59	NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	134
TABLE 60	NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	134
TABLE 61	NORTH AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	134
12.3.3		
US		
12.3.3.1		
Need for precision navigation and targeting systems to drive growth		
TABLE 62	US: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	135
TABLE 63	US: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	135
TABLE 64	US: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	136
TABLE 65	US: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	136
TABLE 66	US: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	136
TABLE 67	US: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	136
12.3.4		
CANADA		
12.3.4.1		
Shift toward self-driving cars to drive growth		
TABLE 68	CANADA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	137
TABLE 69	CANADA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	137
TABLE 70	CANADA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	138
TABLE 71	CANADA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	138
TABLE 72	CANADA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	138
TABLE 73	CANADA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	138
12.4		
ASIA PACIFIC		
12.4.1		
RECESSION IMPACT ANALYSIS		
12.4.2		
PESTLE ANALYSIS		
FIGURE 55	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET SNAPSHOT	141
TABLE 74	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2020-2023 (USD MILLION)	142
TABLE 75	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2024-2029 (USD MILLION)	142
TABLE 76	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2020-2023 (USD MILLION)	142
TABLE 77	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2024-2029 (USD MILLION)	143
TABLE 78	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	143
TABLE 79	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	143
TABLE 80	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	144
TABLE 81	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	144
TABLE 82	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	144
TABLE 83	ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	144
12.4.3		
CHINA		
12.4.3.1		
Rising production of high-performance inertial navigation systems to drive growth		
TABLE 84	CHINA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	145
TABLE 85	CHINA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	145
TABLE 86	CHINA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	146
TABLE 87	CHINA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	146
TABLE 88	CHINA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	146
TABLE 89	CHINA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	146
12.4.4		
INDIA		
12.4.4.1		
Indigenous development of inertial navigation systems to drive growth		
TABLE 90	INDIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	147
TABLE 91	INDIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	147
TABLE 92	INDIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	148

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 93	INDIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	148
TABLE 94	INDIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	148
TABLE 95	INDIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	148
12.4.5	JAPAN	149
12.4.5.1	Ongoing research and development of advanced navigation technologies to drive growth	149
TABLE 96	JAPAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	149
TABLE 97	JAPAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	149
TABLE 98	JAPAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	150
TABLE 99	JAPAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	150
TABLE 100	JAPAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	150
TABLE 101	JAPAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	150
12.4.6	SOUTH KOREA	151
12.4.6.1	Increasing demand for inertial navigation systems from defense sector to drive growth	151
TABLE 102	SOUTH KOREA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	151
TABLE 103	SOUTH KOREA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	151
TABLE 104	SOUTH KOREA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	152
TABLE 105	SOUTH KOREA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	152
TABLE 106	SOUTH KOREA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	152
TABLE 107	SOUTH KOREA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	153
12.4.7	TAIWAN	153
12.4.7.1	Government incentives for domestic production to drive growth	153
TABLE 108	TAIWAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	153
TABLE 109	TAIWAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	154
TABLE 110	TAIWAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	154
TABLE 111	TAIWAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	154
TABLE 112	TAIWAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	155
TABLE 113	TAIWAN: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	155
12.4.8	REST OF ASIA PACIFIC	155
TABLE 114	REST OF ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	155
TABLE 115	REST OF ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	156
TABLE 116	REST OF ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	156
TABLE 117	REST OF ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	156
TABLE 118	REST OF ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	157
TABLE 119	REST OF ASIA PACIFIC: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)	157
12.5	EUROPE	157
12.5.1	RECESSION IMPACT ANALYSIS	157
12.5.2	PESTLE ANALYSIS	158
FIGURE 56	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET SNAPSHOT	159
TABLE 120	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2020-2023 (USD MILLION)	160
TABLE 121	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2024-2029 (USD MILLION)	160
TABLE 122	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2020-2023 (USD MILLION)	160
TABLE 123	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2024-2029 (USD MILLION)	161
TABLE 124	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)	161
TABLE 125	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)	161
TABLE 126	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)	162
TABLE 127	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)	162
TABLE 128	EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)	162

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 129 EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION) 162
12.5.3 UK 163

12.5.3.1 Continuous technological advancements in inertial navigation systems to drive growth 163

TABLE 130 UK: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION) 163

TABLE 131 UK: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION) 163

TABLE 132 UK: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION) 164

TABLE 133 UK: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION) 164

TABLE 134 UK: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION) 164

TABLE 135 UK: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION) 164

12.5.4 GERMANY 165

12.5.4.1 Ongoing developments by iMAR Navigation to drive growth 165

TABLE 136 GERMANY: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION) 165

TABLE 137 GERMANY: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION) 165

TABLE 138 GERMANY: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION) 166

TABLE 139 GERMANY: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION) 166

TABLE 140 GERMANY: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION) 166

TABLE 141 GERMANY: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION) 166

12.5.5 FRANCE 167

12.5.5.1 Collaborations between industry leaders to drive growth 167

TABLE 142 FRANCE: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION) 167

TABLE 143 FRANCE: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION) 167

TABLE 144 FRANCE: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION) 168

TABLE 145 FRANCE: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION) 168

TABLE 146 FRANCE: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION) 168

TABLE 147 FRANCE: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION) 168

12.5.6 ITALY 169

12.5.6.1 Increasing development and production of advanced navigation systems to drive growth 169

TABLE 148 ITALY: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION) 169

TABLE 149 ITALY: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION) 169

TABLE 150 ITALY: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION) 170

TABLE 151 ITALY: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION) 170

TABLE 152 ITALY: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION) 170

TABLE 153 ITALY: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION) 170

12.5.7 RUSSIA 171

12.5.7.1 Focus on developing cutting-edge navigation technologies to drive growth 171

TABLE 154 RUSSIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION) 171

TABLE 155 RUSSIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION) 171

TABLE 156 RUSSIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION) 172

TABLE 157 RUSSIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION) 172

TABLE 158 RUSSIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION) 172

TABLE 159 RUSSIA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION) 172

12.5.8 REST OF EUROPE 173

TABLE 160 REST OF EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION) 173

TABLE 161 REST OF EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION) 173

TABLE 162 REST OF EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION) 174

TABLE 163 REST OF EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION) 174

TABLE 164 REST OF EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION) 174

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 165□REST OF EUROPE: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)□174

12.6□MIDDLE EAST□175

12.6.1□RECESSION IMPACT ANALYSIS□175

12.6.2□PESTLE ANALYSIS□175

FIGURE 57□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET SNAPSHOT□176

TABLE 166□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION, 2020-2023 (USD MILLION)□177

TABLE 167□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION, 2024-2029 (USD MILLION)□177

TABLE 168□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2020-2023 (USD MILLION)□177

TABLE 169□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2024-2029 (USD MILLION)□178

TABLE 170□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)□178

TABLE 171□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)□178

TABLE 172□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)□179

TABLE 173□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)□179

TABLE 174□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)□179

TABLE 175□MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)□179

12.6.3□GULF COOPERATION COUNCIL (GCC)□180

TABLE 176□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2020-2023 (USD MILLION)□180

TABLE 177□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2024-2029 (USD MILLION)□180

TABLE 178□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)□180

TABLE 179□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)□181

TABLE 180□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)□181

TABLE 181□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)□181

TABLE 182□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)□182

TABLE 183□GCC: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)□182

?

12.6.3.1□UAE□182

12.6.3.1.1□Government initiatives supporting indigenous development to drive growth□182

12.6.3.2□Saudi Arabia□182

12.6.3.2.1□Ongoing military upgrades to drive growth□182

12.6.4□REST OF MIDDLE EAST□182

TABLE 184□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2020-2023 (USD MILLION)□183

TABLE 185□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY COUNTRY, 2024-2029 (USD MILLION)□183

TABLE 186□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)□183

TABLE 187□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)□184

TABLE 188□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)□184

TABLE 189□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)□184

TABLE 190□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)□185

TABLE 191□REST OF MIDDLE EAST: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)□185

12.7□REST OF THE WORLD□185

12.7.1□RECESSION IMPACT ANALYSIS□185

12.7.2□PESTLE ANALYSIS□186

FIGURE 58□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET SNAPSHOT□187

TABLE 192□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION, 2020-2023 (USD MILLION)□187

TABLE 193□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY REGION, 2024-2029 (USD MILLION)□188

TABLE 194□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2020-2023 (USD MILLION)□188

TABLE 195□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY PLATFORM, 2024-2029 (USD MILLION)□188

TABLE 196□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)□189

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 197□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)□189

TABLE 198□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)□189

TABLE 199□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)□190

TABLE 200□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)□190

TABLE 201□REST OF THE WORLD: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)□190

?

12.7.3□LATIN AMERICA□190

12.7.3.1□Untapped market potential to drive growth□190

TABLE 202□LATIN AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2020-2023 (USD MILLION)□191

TABLE 203□LATIN AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY TECHNOLOGY, 2024-2029 (USD MILLION)□191

TABLE 204□LATIN AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2020-2023 (USD MILLION)□191

TABLE 205□LATIN AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY GRADE, 2024-2029 (USD MILLION)□192

TABLE 206□LATIN AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2020-2023 (USD MILLION)□192

TABLE 207□LATIN AMERICA: INERTIAL NAVIGATION SYSTEMS MARKET, BY END USER, 2024-2029 (USD MILLION)□192

Inertial Navigation Systems Market by Grade (Marine, Navigation, Tactical, Space, Commercial), Technology (Mechanical, Ring Laser, Fiber Optic, MEMS), Platform, End User (Commercial and Defence), Component and Region - Global Forecast to 2029

Market Report | 2024-05-16 | 259 pages | MarketsandMarkets

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	\$4950.00
	Multi User	\$6650.00
	Corporate License	\$8150.00
	Enterprise Site License	\$10000.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Date

2025-05-20

Signature

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com