WinterGreen Research, INC.

Agricultural Tractor Robots:

Market Shares, Strategies, and Forecasts,

Worldwide, 2018 to 2024

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CHECK OUT THESE KEY TOPICS

Agricultural Tractor Robots:

Agricultural Tractor Robots Agriculture Internet of Things Digital farming Self-driving tractors	Robotic Tractor Advanced Sensors and Guidance Systems Agriculture industry	Harvest Automation

Agricultural Tractor Robot Markets:

Worldwide Agricultural Tractor Robot markets are poised to achieve continuing growth as farmers respond to the advantages brought by precision farming. The quality and the customization of tractors using artificial intelligence are significant market growth drivers. Automation of process is a key efficiency tool for feeding the world's population.

Self-driving tractors require a human to monitor performance and speed. Innovations in the farm equipment field are moving in the direction of allowing complete remote control of these vehicles. The result promises to be a major increase in productivity for growers with large-scale farming operations.

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Figure 1. Agricultural Tractor Robots Market Shares, Dollars, Worldwide, 2017

	MM$	% $	Units
Company 1	xx	xx	xx
Company 2	xx	xx	xx
Company 3	xx	xx	xx
Company 4	xx	xx	xx
Company 5	xx	xx	xx
Company 6	xx	xx	xx
Company 7	xx	xx	xx
Company 8	xx	xx	xx
Company 9	xx	xx	xx
Company 10	xx	xx	xx
Company 11	xx	xx	xx
Company 12	xx	xx	xx
Company 13	xx	xx	xx
Company 14	xx	xx	xx
Total (MM$)	xx	xx	

Source: WinterGreen Research, Inc.

Figure 2. Large, Medium, Small Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Dollars, Worldwide, 2018-2024

Agricultural Tractor Robots with Self Driving Features Unit Analysis
Worldwide, 2018 - 2024
In Units
In Millions of Dollars

	2017	2018	2019	2020	2021	2022	2023	2024
Large Tractors MM$	xx	xx	xx	xx	xx	xx	xx	xx
$ per Unit	xx	xx	xx	xx	xx	xx	xx	xx
Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
Mid Size Tractor MM$	xx	xx	xx	xx	xx	xx	xx	xx
$ per Unit	xx	xx	xx	xx	xx	xx	xx	xx
Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
Small Tractors MM$	xx	xx	xx	xx	xx	xx	xx	xx
$ per Unit	xx	xx	xx	xx	xx	xx	xx	xx
Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
Total (Units)	xx	xx	xx	xx	xx	xx	xx	xx
Total (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

Figure 3. Precision Farming Market Forecasts Dollars and Percent, Worldwide, 2018-2024

Precision Farming Market Forecasts
Dollars, Worldwide, 2018 - 2024
In Millions of Dollars

	2017	2018	2019	2020	2021	2022	2023	2024
Precision Farming Market Forecasts	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx
Total (MM$)	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

Figure 4. Agricultural Tractors with Self-Driving Features and Tractor Robot Market Segments, Dollars, Worldwide, 2018-2024

Agricultural Tractors with Self-Driving Features and Tractor Robot Market Segments,
Dollars, Worldwide, 2018-2024
In Millions of Dollars

	2017	2018	2019	2020	2021	2022	2023	2024
MM$								
Tractors with Self Driving Features	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx
Driverless Tractors	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx
Total (MM$)	xx	xx	xx	xx	xx	xx	xx	xx

Note: Process precision agriculture includes plowing, harvesting, pruning, weeding, pick-and-place, aerial observation, sorting, seeding, spraying, precision fertilizer, planting, and materials handling by integrating advanced sensors,

Source: WinterGreen Research, Inc.

Figure 5. Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Units, Worldwide, 2018-2024

Agricultural Tractors with Self-Driving Features and Tractor Robot Installed Base Market Forecasts, Units, Worldwide, 2018-2024
In Number of Tractors

	2017	2018	2019	2020	2021	2022	2023	2024
Total Robotic Tractors	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx
Total Installed Robotic Tractors	xx	xx	xx	xx	xx	xx	xx	xx
Total Installed Tractors (000)	xx	xx	xx	xx	xx	xx	xx	xx
% Penetration	xx	xx	xx	xx	xx	xx	xx	xx

Note: Process precision agriculture includes plowing, harvesting, pruning, weeding, pick-and-place, aerial observation, sorting, seeding, spraying, precision fertilizer, planting, and materials handling by integrating advanced sensors,

Source: WinterGreen Research, Inc.

Figure 6. Small Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Dollars, Worldwide, 2018-2024

Small Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Dollars, Worldwide, 2018-2024
In Millions of Dollars

	2017	2018	2019	2020	2021	2022	2023	2024
Small Robotic Tractor (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
% growth $	xx	xx	xx	xx	xx	xx	xx	xx
$ per Small Tractor (000)	xx	xx	xx	xx	xx	xx	xx	xx
Small Robotic Tractor Units	xx	xx	xx	xx	xx	xx	xx	xx
Small Robotic Tractor Installed Base (000)	xx	xx	xx	xx	xx	xx	xx	xx

Note: A robotic tractor is one that has self driving featers and capabilities but still needs some human control either direct or remote, or a fully autonomous tractor.

Source: WinterGreen Research, Inc.

Figure 7. Mid Size Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Dollars, Worldwide, 2018-2024

Mid Size Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Dollars, Worldwide, 2018-2024
In Millions of Dollars

	2017	2018	2019	2020	2021	2022	2023	2024
Mid Size Robotic Tractor (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
% growth $	xx	xx	xx	xx	xx	xx	xx	xx
$ per Mid Size Tractor (000)	xx	xx	xx	xx	xx	xx	xx	xx
Mid Size Robotic Tractor Units	xx	xx	xx	xx	xx	xx	xx	xx
Mid Size Robotic Tractor Installed Base (000)	xx	xx	xx	xx	xx	xx	xx	xx

Note: A robotic tractor is one that has self driving featers and capabilities but still needs some human control either direct or remote, or a fully autonomous tractor.

Source: WinterGreen Research, Inc.

Figure 8. Large Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Dollars, Worldwide, 2018-2024

Large Agricultural Tractors with Self-Driving Features and Tractor Robot Market Forecasts, Dollars, Worldwide, 2018-2024
In Millions of Dollars

	2017	2018	2019	2020	2021	2022	2023	2024
Large Robotic Tractor (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
% growth $	xx	xx	xx	xx	xx	xx	xx	xx
$ per Large Tractor (000)	xx	xx	xx	xx	xx	xx	xx	xx
Large Robotic Tractor Units	xx	xx	xx	xx	xx	xx	xx	xx
Large Robotic Tractor Installed Base (000)	xx	xx	xx	xx	xx	xx	xx	xx

Note: A robotic tractor is one that has self driving featers and capabilities but still needs some human control either direct or remote, or a fully autonomous tractor.

Source: WinterGreen Research, Inc.

Figure 9. Agricultural Tractor Robots Regional Segment Analysis Revenue, Worldwide, Dollars, 2018 to 2024

	MM$ 2017	MM$ 2016	MM$ 2015	MM$ 2014	MM$ 2013	MM$ 201
US	xx	xx	xx	xx	xx	x
Europe	xx	xx	xx	xx	xx	x
Japan	xx	xx	xx	xx	xx	x
China	xx	xx	xx	xx	xx	x
India	xx	xx	xx	xx	xx	x
Southeast Asia	xx	xx	xx	xx	xx	x
Rest of World	xx	xx	xx	xx	xx	x
Total MM$	xx	xx	xx	xx	xx	x
% Growth	xx	xx	xx	xx	xx	x

Source: WinterGreen Research, Inc.

WinterGreen Research, Inc.

Agricultural Tractor Robots: Market Shares, Strategies, and Forecasts, Worldwide, 2018-2024

LEXINGTON, Massachusetts (May 25, 2018) – WinterGreen Research announces that it has published a new study Agricultural Tractor Robots: Market Shares, Strategy, and Forecasts, Worldwide, 2018 to 2024. The 2018 study has 210 pages, 110 tables and figures. Worldwide markets are poised to achieve continuing growth as Agricultural Tractor Robots proves its value by managing digital farming and implementing self-driving capabilities and features in real time provide farming management.

The agriculture industry is a $5 trillion industry representing 10% of global consumer spending, 40 percent of employment and 30 percent of greenhouse gas emissions globally. Robotic tractors are positioned to help agriculture to be more precise, more efficient, and more productive.
Use of much small tractors will help the soil base, creating less impact on compaction. Agricultural efficiency improvement is impactful to humanity, changing the size of population, quality of life and making a better future.

Agricultural self-driving features for tractors are the beginning of a full rollout of robot technologies. Self-driving features in place depend on having a human control the tractors initially. This is a first step in building fully autonomous tractors. One of the main objections to completely trusting self-driving tractors seems to be the fear of potential accidents. When the vehicles are running unattended there are often obstacles encountered that may cause problems, raising the specter of ruining the tractor.

A $185 million market worldwide in 2017, the Agricultural Tractor Robots market is expected to reach $3.2 billion by 2024.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, Research and Markets, and Report Linker.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

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WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

Key Words: Agricultural Tractor Robots Markets, Agricultural Tractor Robots Markets, , Agricultural Tractor Robots, Agriculture Internet of Things, Digital farming, Self-driving tractors, Robotic Tractor Advanced Sensors and Guidance Systems, Agriculture industry, Harvest Automation

Agricultural Tractor Robots: Market Shares, Strategies, and Forecasts, Worldwide, 2018 to 2024

Report Methodology

This is the 798th report in a series of primary market research reports that provide forecasts in technology, communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are priorities in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

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Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2017. With 2012 and several years prior to that baseline, market projections were developed for 2018 through 2023. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes reference to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

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WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

YOU MUST HAVE THIS STUDY

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WINTERGREEN RESEARCH

ABOUT THE COMPANY

WinterGreen Research, research strategy relates to identifying market trends through reading and interviewing opinion leaders. By using analysis of published materials, interview material, private research, detailed research, social network materials, blogs, and electronic analytics, the market size, shares, and trends are identified. Analysis of the published materials and interviews permits WinterGreen Research senior analysts to learn a lot more about markets. Discovering, tracking, and thinking about market trends is a high priority at WinterGreen Research. As with all research, the value proposition for competitive analysis comes from intellectual input.

WinterGreen Research, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care, Software, Internet, Energy Generation, Energy Storage, Renewable energy, and advanced computer technology.

Industry reports focus on opportunities that expand existing markets or develop major new markets. The reports access new product and service positioning strategies, new and evolving technologies, and technological impact on products, services, and markets. Innovation that drives markets is explored. Market shares are provided. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

The studies provide primary analytical insight about the market participants. By publishing material relevant to the positioning of each company, readers can look at the basis for analysis. By providing descriptions of each major participant in the market, the reader is not dependent on analyst assumptions, the information backing the assumptions is provided, permitting readers to examine the basis for the conclusions.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

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About The Principal Authors

Susan Eustis, President, co-founder of WinterGreen Research, is a senior analyst. She has done research in communications, healthcare equipment, and computer markets and applications. She holds several patents in microcomputing and parallel processing. She has the original patents in electronic voting machines. She has new patent applications in format varying, mulitprocessing, electronic voting, and oxygen management. She is the author of recent studies of the drone and robot marketing strategies, Internet equipment, biometrics, biomaterials, a study of Internet Equipment, Artificial Intelligence, IoT, Worldwide Telecommunications Equipment, Top Ten Telecommunications, Digital Loop Carrier, Web Hosting, Web Services, and Application Integration markets. Ms. Eustis is a graduate of Barnard College. Ms. Eustis was named Top Woman CEO in 2012 by Who's Who Worldwide. She was named Top Woman Market Research Analyst in 2012, 2013,2014,2015, and 2016. She has been twice featured on the cover of the Women of Distinction magazine. She was cited in a recent Time Magazine article and major media articles on Youth Sports market growth. Recently she has been quoted by Bloomberg and others on blockchain and cybercurrency.

About the WinterGreen Research Team: The WinterGreen Research Team is comprised of senior analysts that prepare the market research and analysis that is offered to the client and developed using an iterative process to achieve a final study. Typical projects include providing market/viability research. The team can look at how drones can be applied to critical infrastructures safety, including: type of market existing, Barriers, Forecast demand and competitors, SWOT and competitive advantages, Price Analysis, product design recommendations (marketing orientation).

Research is typically for many different regions or localities, for example EU countries including Spain, UK, Nordic, Germany, and France. Typical projects profile the United States and areas of Asia. It is common to three representative countries from South America, Brazil, Argentina, Chile, and Mexico. Representative countries from Asia APAC typically include Japan, China, India, and Australia.

Critical infrastructure safety, including: type of market existing, barriers to entry and to faithful execution of product provision, forecast of demand, market share, SWOT, competitive advantage of major competitors, identification of new technologies and new companies, price performance analysis, product design recommendations, and marketing considerations are typical topics covered.