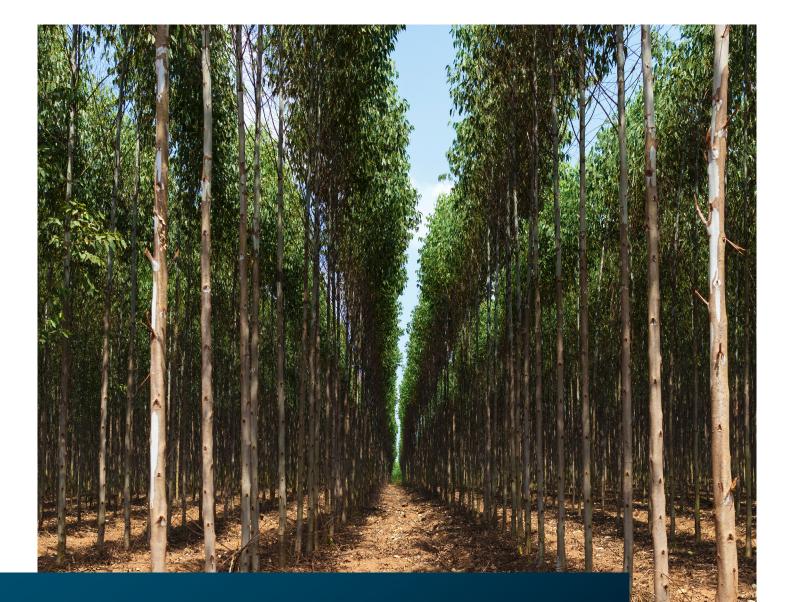


# HxGN AgrOn Platform

An integrated platform for intelligent management of agricultural and forestry operations.





# Smart Digital Reality in the field

Hexagon developed the **HxGN AgrOn platform** using the most advanced information technologies applied to the entire agricultural and forestry production process for **planning, automation, monitoring and management** of field operations: from soil preparation to crop treatments, through planning and operationalisation of planting and harvesting, and support and logistics operations.

# Reasons to choose Hexagon as your partner in your Digital Transformation

## • End-to-end solution:

We are the only supplier in the market that has a complete solution that covers everything from optimised long-term planning to the automation of operations in the field through onboard controllers in a synchronised way to reduce time lost in activities.

## • Experience in agricultural and forest market:

Our team has more than 20 years of experience in the market. We speak the same language of the field and know both the problems and the solutions, developing the best and most efficient strategies to solve them.

## • Hexagon Expertise:

We have at our disposal all the technologies developed by Hexagon, a global leader in sensors, software and autonomous solutions, allowing us to bring to the agricultural and forestry sectors the cutting-edge innovations in the areas of geopositioning, mapping, automation, embedded electronics, artificial intelligence and systems integration.

Scan the QR Code and access the AgrOn platform video.



# **Optimisation of integrated processess**

Our goal is always to anticipate and solve problems that may occur in the productive activities of your company. That is why we have structured the HxGN AgrOn platform aiming the application of the **PDCA Cycle of continuous quality improvement**, covering all the activities of planning, execution, control and analysis. As such, we guarantee the **complete integration** of our solution, without losing the modularity of each product, so that we can offer an **optimised management** of the entire agricultural and forestry process according to the needs of each customer.

# Plan

# **Planning & Optimisation**

Scan the QR Code and access our available digital flyers for the solution.



# Act

# **Analisys & Management**

Scan the QR Code and access our available digital flyers for the solution.



# Do

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# **Machine Control**

Scan the QR Code and access our available digital flyers for the solution.



# Check

# Monitoring

Scan the QR Code and access our available digital flyers for the solution.



# Benefits

Learn how the HxGN AgrOn platform can help your company's Digital Transformation.

## Synchronises and connects operations

Transporting raw materials from the field to industry is one of the most critical phases of agricultural and forestry operations, with many logistics risks involved - risks that can compromise the volume, quality and economics of production. Having tractors, harvesters and trucks connected and in sync is essential to minimise the damage that may be caused in the transportation and logistics of raw materials.

## Reduces waste of raw material

Developed to minimise all potential losses that may occur in the field, acting mainly in the planning and synchronisation of operations, bringing predictability in the flow of raw materials from the field to the industry, and in the allocation of machines and inputs.

## Maintains profitability as costs increase

Efficiency in the allocation of resources through the automation of machines and implements, and the use of inputs such as seeds, seedlings and stems, water, fertilisers, chemicals and fuels. All this while avoiding waste and maintaining profitability.

## Reduces machine downtime

Maximising the efficiency, performance and productivity of agricultural machinery, transport trucks and support vehicles through interconnectivity and synchronisation of operations and deviation alerts.







# More profitability for your Business<sup>\*</sup>







# **Plannning & Optimisation**

Allows planning in short, medium, and long term; and optimise agricultural and forestry processes, generating better dimensioning of investments, cost control of preparation, planting, harvesting and transportation operations; and better achievement of production goals.

# Learn what it is possible to do with Planning & Optimisation products:



Analysis of bottlenecks and capacity conflicts



Monitoring, and re-planning throughout the year



Agility in the simulation of different scenarios



Optimisation of the return on production



Reduction of expenses with fuels and support fleets



Better quality of production and harvest





Intelligent management of resources and inputs



Better raw material



# **AgrOn Expansion Planning**

Optimisation system that takes account of the total cultivation area.



Scan the QR Code and watch the video.

# **AgrOn Plant Planning**

Allocation system for ideal planting.





Scan the QR Code and watch the video.



# AgrOn Operation Planning

Optimisation system of resources for operations in the field.



Scan the QR Code and watch the video.

# AgrOn Logistics Support Planning

Coordination system for the production support resources.



# AgrOn Harvest Planning

System that plans and optimises the harvest schedule.

### Modules:

AgrOn Harvest Planning | Logistic Sync AgrOn Harvest Planning | Straw Management



**Scan the QR Code** and watch the video.



# **AgrOn Transport Opstimisation**

Synchronised system for transport and cutting operations in the field.



# AgrOn Service Order Management

System that performs the planning of agricultural and forestry operations through service orders.





# Monitoring

Generate reports of operating times, productivity indexes, and yields of each machine in the field, guaranteeing complete and accurate traceability, from the origin of the raw material to the processing industry.

# Learn what it is possible to do with Monitoring products:



Remote and real-time monitoring of all activities performed by machines



Intelligent management of agricultural and forestry operations



Generates reports of operating times



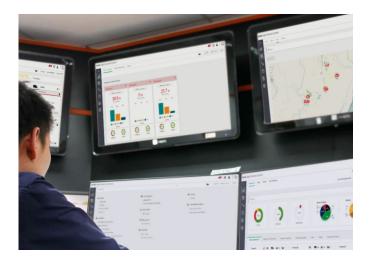
Productivity indexes, and yields of each machine in the field



Quick and immediate action is possible



Synchronisation of all agricultural and forestry operations



# AgrOn Control Room

Centralised control system that monitors in real-time the harvesting and transportation operations performed in the field.

### Modules:

AgrOn Control Room | Cultivation AgrOn Control Room | Soil Preparation AgrOn Control Room | Planting AgrOn Control Room | Harvesting AgrOn Control Room | Mobile



**Scan the QR Code** and watch the video.



# AgrOn Raw Material Traceability

Executes and monitors the tracking of raw materials from the origin in the field, to the delivery in the industry.







# **Machine Control**

Acting with precision agriculture, the solution allows better alignment of machines with GPS, ensuring the accuracy of the tractors and implements passes, improving the performance of machines and cultivation, harvesting, and transportation operations.

# Learn what it is possible to do with Machine Control products:



Helps the operator to perform his tasks accurately



Better use of work areas and intelligent use of resources and inputs



Provides a high-quality operation



Reduces damaged seeds, seedlings and/or blanks



Decreases planting failures



Management of the productive times of the machines



Less equipment working at the same time in the field



# AgrOn ISOBUS Display

Standardised connection between display, electronic systems, implements and machines.

### Module:

Remote Access



**Scan the QR Code** and watch the video.



# **AgrOn Auto Steering**

Automated precision navigation system for tractor, machinery and agricultural and forestry equipment.

Module: Remote Access



**Scan the QR Code** and watch the video.



# AgrOn Guidance

Orientation system that maintains positioning for tractors, machinery and agricultural and forestry equipment during routes.

Module: Remote Access



# AgrOn Sprayer Control

Automated control system for spray sections during application.

Module: Remote Access



**Scan the QR Code** and watch the video.



# **AgrOn Fertilisation Control**

Automated control system for fertiliser and limestone applications.

Module:

Remote Access



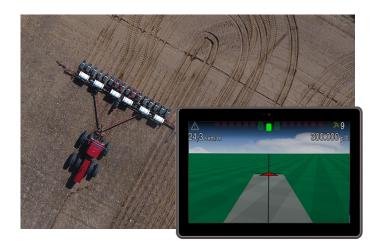
**Scan the QR Code** and watch the video.



# AgrOn Planting Monitor

Monitoring system for spacing of seed and sugarcane billets.

Module: Remote Access



# AgrOn Planting Control

Automated planter control system leveraged during agricultural operations.

**Module:** Remote Access



Scan the QR Code and watch the video.

# AgrOn Haul-Out Dynamic Allocation

Synchronised system for allocation of haul-out transporter and the cutting pace of harvesters.

Module: Remote Access



**Scan the QR Code** and watch the video.



# AgrOn Machine Monitoring

Information management system for machines and fleets in the field.

Module:

Remote Access



**Scan the QR Code** and watch the video.

# AgrOn Bait Control

Automated system that controls the application of the formicidal bait during.

**Module:** Remote Access





# AgrOn Planting Assistant

Excavator operator assistance system for forestry planting.

**Module:** Remote Access



# AgrOn Seedling Marker

System that uses georeferencing to generate maps of seedlings and pits for forestry operation.

Module:

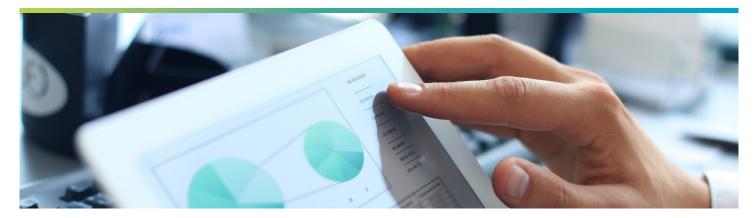
Remote Access



# AgrOn Subsoiling Control

Subsoiling depth monitoring system. Module: Remote Access





# **Analysis & Management**

Technology and innovation to make intelligent analysis and assertive management of field operations, used in activities after the execution of activities in the field, aiming to assess whether the result was positive or negative, generate reports and views with aggregated/consolidated data and compare the planned with the accomplished.



# Learn what it is possible to do with Analysis & Management products:



Corrective action for uncalibrated machines



Reports with graphical data visualisation, and filtering and grouping resources



Better performance, and reducing input costs



Generates quality indicators



Integration with Cloud Platforms and BI Tools



It is possible to ideally plan the trajectory of maneuvers



Monitors what has been planned and what is being executed



Open for configuring scripts and rules for transforming data



Connectivity with mobile devices and embedded software





Development and implementation of new reports at run time, without the need for coding



# AgrOn Operational Management

Analytical management of forestry and agricultural operations.



**Scan the QR Code** and watch the video.



# AgrOn Bl

Service for configuring dashboards, reports and data extraction customised according to customer needs.



# Ti5, Ti7 and Ti10 Displays

Unit of software, sensors and actuators used to monitor and automate agricultural operations.

Understand the differences between our displays below, and discover the best option for your operation:

Do you want to discover the differences between technical specifications of each model? Scan the QR Code and acccess the table with all the features of each display model.







## Ti5 Display

This model is available in a 5" screen with IP65 and is indicated for simpler operations, such as spreading limestone in a distributor. In Ti5 Display it is possible to include AgrOn Electric Auto Steering, AgrOn Guidance and just another product to choose from.

# Ti7 Display

This model is available in a 7" screen with IP64 and optional mobile communication items such as Wi-Fi and/or 4G. The Ti7 Display is ideal for operations that require high precision in the execution or when you want to have the combination of two or more activities at the same time since it is possible to include all the precision agriculture resources in a single equipment.



**Scan the QR Code** and watch the Ti10 Display video.



# Ti10 Display

Developed with disruptive technologies and high processing capacity, Ti10 enables greater connectivity between field operations. With a friendly and easy to use interface, it is ideal for any type of operation and conditions of use. Ti10 has a 10" screen and accepts all the features of precision agriculture in a single device.

# **Farming Accuracy**

- GNSS L1 GPS/Glonass Autonomous: 15 cm (pass to pass, 15min)
- GNSS L1 GPS/Glonass EGNOS\*/WAAS\*\*: 50 cm (with repeatability)
- GNSS L1/L2 GPS/Glonass: 10cm (pass to pass, 15min)
- GNSS L1/L2/Lband GPS/Glonass TerraStar: 3 cm (with repeatability)
- GNSS L1/L2 GPS/Glonass RTK: 2 cm (with repeatability)

\* available only in Europe

\*\* available only in the United States.

# **Operation Mode**



A-B Line

A+Heading

## Parallel A-B Curve

# Adaptative Curve

Pivot





Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and Mobility applications.

Hexagon provides technologies that convert data into intelligent information that enables smart planning, efficient execution, precise machine controls and automated workflows that optimise operations and increase profits.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.2 bi EUR.

Learn more at hexagon.com and follow us @HexagonAB.

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