HxGN AgrOn Platform

An integrated platform for intelligent management of agricultural and forestry operations.
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.
LEARN MORE ABOUT OUR PORTFOLIOS

• **HxGN AgrOn Cultivation**

  Planning and automation of the entire cultivation cycle.
  • Resources allocation optimisation
  • Increased productivity
  • Reduction of inputs
  • Guaranteed production quality
  • Maximisation of operational control
  • Detailed and accurate view of each stage of cultivation

• **HxGN AgrOn Harvesting**

  Optimisation and synchronisation of logistics operations.
  • Complete management of harvesting, transportation and logistics operations
  • Reduction of raw material losses
  • Synchronisation of operations
  • Increases the quality and profitability of the process
  • Improves strategic and operational logistical control
  • Solves the complexities of harvesting
OPTIMISATION OF INTEGRATED PROCESSES

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.
**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.

**BENEFITS**
Learn how the HxGN AgrOn platform can help your company’s Digital Transformation
MORE PROFITABILITY FOR YOUR BUSINESS*

- 15% reduction in fertilisation deviations
- 25% reduction in harvesting and transportation machines
- Optimisation of 15% of support fleets
- Average increase of 5% in the planted area
- Prevention of 17% of expenses in cultivation operations
- Speed 4 weeks in the harvest season
- 10% savings in fuel usage
- 15% reduction in fertilisation deviations

* the values may vary according to the work precision, maturity and efficiency of the current production.
PLANNING & 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.

AgrOn Expansion Planning
Optimisation system that takes account of the total cultivation area.

AgrOn Plant Planning
Allocation system for ideal planting.

AgrOn Operation Planning
Optimisation system of resources for operations in the field.

AgrOn Logistics Support Planning
Coordination system for the production support resources.

AgrOn Harvest Planning
System that plans and optimises the harvest schedule.

Add-on module:
AgrOn Harvest Planning | Logistic Synch
AgrOn Harvest Planning | Straw Management

AgrOn Transport Optimisation
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.

**AgrOn Raw Material Traceability**

*System of automated raw material tracing from the origin all the way to delivery in the industry.*

**AgrOn Control Room**

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

**Add-on module:**

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

- HxGN AgrOn Cultivation
- HxGN AgrOn Harvesting
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.

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

**AgrOn Machine Monitoring**
Information management system for machines and fleets in the field.

**AgrOn Auto Steering**
Automated precision navigation system for tractor, machinery and agricultural and forestry equipment.

**AgrOn Sprayer Control**
Automated control system for spray sections during application.

**AgrOn Fertilisation Control**
Automated control system for fertiliser and limestone applications.

**AgrOn Bait Control**
Automated system that controls the application of the formicidal bait during forestry operations.

**AgrOn Planting Monitor**
Monitoring system for spacing of seed and sugarcane billets.

**AgrOn Planting Control**
Automated planter control system leveraged during agricultural operations.
**AgrOn Seedling Marker**
System that uses georeferencing to generate maps of seedlings and pits for forestry operation.

**AgrOn Subsoiling Control**
Subsoiling depth monitoring system.

**AgrOn Haul-Out Dynamic Allocation**
Synchronised system for allocation of haul-out transporter and the cutting pace of harvesters.

**AgrOn ISOBUS Display**
Standardized connection between display, electronic systems, implements and machines.

**Add-on module:**
Remote Access

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- HxGN AgrOn Cultivation
- HxGN AgrOn Harvesting
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.

**AgrOn Operational Management**
Analytical management of forestry and agricultural operations.

**AgrOn Data Integration**
Middleware that allows you to configure and deploy connection interfaces for different data sources.

**AgrOn BI**
Service for configuring dashboards, reports and data extraction customised according to customer needs.
Ti5 AND Ti7 DISPLAYS

The onboard controllers allow users to leverage Hexagon’s precision agriculture solutions and meets the needs of each customer, making it possible to include only one or even all products in a single equipment.

<table>
<thead>
<tr>
<th>Features</th>
<th>Ti5</th>
<th>Ti7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen size</td>
<td>5”</td>
<td>7”</td>
</tr>
<tr>
<td>Multi-touch screen</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Rugged aluminum case</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Contrast screen for viewing in daylight or in low visibility</td>
<td>Yes</td>
<td>Yes</td>
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<td>Multiple language support</td>
<td>Yes</td>
<td>Yes</td>
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<td>Detailed operation information record</td>
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<td>Yes</td>
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<tr>
<td>Wi-Fi 2.4GHz</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Digital Radio 900 or 433MHz</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Cellular 4G+ with 28 band support (700MHz)</td>
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<tr>
<td>ISOBUS Connection</td>
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<td>Quantity of products per equipment</td>
<td>Up to 3</td>
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<td>Reading maps in Shape format (.shp)</td>
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<td>Yes</td>
</tr>
<tr>
<td>Protection Index</td>
<td>IP65</td>
<td>IP64</td>
</tr>
</tbody>
</table>

* Check the communication available for each model
** Ti5 compatible with AgrOn Auto Steering electric, AgrOn Guidance and a product to choose
FARMING ACCURACY

• GNSS L1 10Hz - GPS/Glonass 28cm (pass to pass, 15min)
• GNSS L1/L2 20Hz - GPS/Glonass 15cm (pass to pass, 15min)
• GNSS L1/L2/Lband 20Hz - GPS/Glonass/TerraStar (4cm absolute)
• GNSS L1/L2/Lband 20Hz - GPS/Glonass/TerraStar (2,5cm absolute)
• GNSS L1/L2 20Hz - GPS/Glonass/RTK - 2 cm (absolute)

OPERATION MODE

A-B Line  A + Heading  Parallel A-B Curve  Adaptative Curve  Pivot
Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications. Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon’s Agriculture division develops and delivers information technology solutions that unleash the full potential of agricultural assets, driving big gains in efficiency, productivity and sustainability. Our solutions convert data into intelligent, actionable information that enables smart planning, efficient field execution, precise machine controls and automated workflows that optimise operations.

Our aim is to accelerate innovation within the agriculture sector with solutions that challenge the status quo — what is — and point our customers towards what should be, the digital transformation of agriculture.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.9bn EUR.

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