



agrointeligencia



Specialization

Hispattec is a company which has maintained a commitment to specialized technology and innovation for crop rotation since it was founded in 1985.



Leadership

We're a leading company with customers on several continents which works every day to offer the best products and services possible.



Innovation

We're passionate about building and using tomorrow's agrifood technology. Our present is all about bringing it to your business.

1. FARM OPERATION CONTROL SYSTEMS	4
1.1 FIELD PRODUCTION CONTROL	5
1.2 PROCUREMENT, SUPPLY AND WAREHOUSE CONTROL	7
1.3 COST CONTROL AND FINANCIAL CONTROL	10
1.4 SEEDBED AND PLOT PRODUCTION CONTROL	13
1.5 PACKING CONTROL	15
1.6 SAFETY CONTROL	17
1.7 AGRONOMIC CONTROL	19
1.8 COMMERCIAL CONTROL	22
2. BUSINESS INTELLIGENCE SYSTEMS	24
2.1 BUSINESS INTELLIGENCE	25
2.2 FARM CONTROL PANEL	27
3. PRECISE DATA COLLECTION REMOTE SYSTEMS AND DEVICES	29
3.1 REMOTE PRODUCTION CONTROL VIA SENSORS	30
3.2 DIGITAL PEN	34
3.3 AUTOMATIC TRACEABILITY	38
3.4 PRESENCE CONTROL	40
4. MOBILITY SYSTEMS	42
4.1 ERPAGRO GO! MOBILE APPLICATION	43
4.2 ERPAGRO PLUS MOBILE APPLICATION	44
4.3 ERPAGRO NET WEB INTERFACE	45
4.4 BUSINESS INTELLIGENCE ON THE GO	47
5. TECHNICAL SCOPE OF ERPAGRO	49
6. SUCCESS STORIES	53
7. HISPATEC IS SYNONYMOUS TO INNOVATION	55
8. HISPATEC DOSSIER	57
9. CONTACT INFORMATION	60



ERPagro is a system that was developed by [Hispattec](#), a Spanish company that has been working to provide farm businesses with management technology since 1985.

ERPagro is integrated software specifically designed for use by agrifood businesses.

ERPagro connects to remote data collection tools such as [soil and plant sensors](#) and [digital pens](#) to fully monitor field information.

ERPagro is accessible using mobile applications to be able to work in real time from any out-of-office location.

ERPagro is a modular system that offers a global and comprehensive view of all of the information needed to manage a farm business.

ERPagro is the specialized solution used by more than 400 agrifood companies to comprehensively manage their business processes.

ERPagro includes a complete business intelligence system to manage accurate information on daily business operations and have a global perspective of all business processes (crops, procurement, packing, sales, logistics, accounting, finance, payroll, traceability, safety...) from a computer, smartphone or tablet in real time.

1. Farm operation control systems



Field production control

Procurement, supply and
warehouse control

Cost, profitability and
finance control

Seedbed and plot
production control

Packing operations control

Safety control and
monitoring

Technical and agronomic
crop control

Sales and commercial
operations control

1.1 Field Production Control

Why use it?

To collect information on the activities performed in fields, grids, sectors... and obtain results relating to Production Costs, Payroll Setup, Supplies, Employee Hours and Productivity, etc.

The [ERPagro Field Production Control](#) module handles crop production management: production economic and logistics control as well as production planning: the ability to record all tasks related to estates or crops (on a field, grid, sector or other level) done by workers and record the consumption of machinery and consumables; worker productivity control (pay by the hour, by task, by performance or any combination thereof); management of worker bonus pay; production cost control through a production report-

based system; record and monitor production forecasts by crop.

Advantages of ERPagro Field Production Control

- ✓ Knowing the work done for your operations at all times on a field, estate, crop or other level based on the activities performed.
- ✓ Having detailed information on all materials consumed for field work and cultivation operations.
- ✓ Knowing the yield harvested and the quantity of consumables used in real time.
- ✓ Obtaining the yield results crop by crop based on the work done in the field and knowing the profits obtained from the products harvested.
- ✓ Recording the price per hour of all workers based on their category and the task performed.
- ✓ If integrated with the Cost Control and Financial module, it may control detailed costs by Field, Property, Crop, Estate, Sector, Grid...

ERPagro Field Production Control Functionalities

- ➔ Manages payroll by controlling all operations done by workers by dates and crops (recorded in the system with the corresponding daily field report) and then applying the time invested for each worker or crew to establish the payroll cost.
- ➔ Controls stock of materials used for the different tasks carried out in the field (pest control treatment used, fuel, water...).
- ➔ Obtains reports and worker performance comparisons based on the task done and the yield obtained.
- ➔ Manages costs based on unlimited, user-defined daily Yield Reports
- ➔ Allocates costs to Yield Reports directly or through user-defined forms.
- ➔ Plans your yield with the "Crop planning" functionality.
- ➔ Generates all types of dynamic reports, in real time which are easily configurable using the Business Intelligence module.
- ➔ The Field Production control module is 100% compatible with remote and mobile capture systems (digital pen, smartphone, tablet...).

1.2 Procurement, Supply and Warehouse Control

Why use it?

To optimize your purchases from suppliers, control your inventory and improve your warehouse management.

The **ERPagro Procurement module** handles the management of all of your purchases. You will get complete coverage of the major processes involved with supplier relations as well as management and analysis.

Plus, managing your warehouses will make the supply chain and inventory management more efficient so your stock and inventory will be under control at all times.

Advantages of ERPagro Procurement

- ✓ Optimizes your purchases by managing each and every one of your suppliers' product catalogs.
- ✓ Improves your strategic vision of your business with comparative reports and graphs on purchases and warehouses situations.
- ✓ Complete control of the entire process of buying from suppliers including planning and monitoring forecasts and purchases made.
- ✓ Keeps tax repercussions of your transactions with suppliers under control because of the real time integration with the accounting and finance module
- ✓ Proper decision making for your business with a procurement database obtained using the analysis and information exploitation tools available.
- ✓ Optimizes warehouse performance with the management of all locations and real time control of global available stock by item or itemized availability for different batches.

ERPagro Procurement Functionalities

- ➔ Creation of hierarchical locations in N levels.
- ➔ User definition of multiple warehouses, stockpiling sites and locations.
- ➔ Item Family Hierarchy with N nesting levels.
- ➔ Management of barcodes, volumes and weights.
- ➔ Possibility of attaching technical data sheets for materials, an N number of attached files and photographs.
- ➔ Management of maximum and minimum stock levels.
- ➔ Reports and alerts for minimal level materials and a lack of stock by warehouse and/or stockpiling site.
- ➔ Forecasts of the materials expected to be consumed over defined periods for production planning.
- ➔ Reports with materials for suggested purchase based on inventory levels and forecasted yields by warehouse and/or stockpiling sites.
- ➔ Generates purchase orders and records delivery dates, delivery methods and payment methods, dispatch types (fleet, onsite collection, etc.).
- ➔ Tracks configurable purchase orders (to be authorized, to be confirmed by supplier, awaiting receipt, partially received, fully received, etc.)
- ➔ Streamlined and automatic historical reports of purchase orders by supplier
- ➔ Management of Product Catalogs manually and by importing files in different formats (XML, Excel, ASCII).
- ➔ Advanced Supplier configuration: type of supplier, billing groups, unlimited user-defined characteristics, blocked use...
- ➔ Management of Loans and Interim Payments to suppliers.
- ➔ Documented control of supplier relations: forecasted purchases, orders, requisitions, delivery notes and invoices.
- ➔ Forecasts purchases by periods defined by obtaining seasonal tracking reports and graphs and comparing different seasons.
- ➔ Management of purchase requisitions to send orders to suppliers.
- ➔ Management of goods returned to suppliers.
- ➔ Management and automatic generation of claims, purchase orders and other customs documentation.
- ➔ Goods reception based on one or several purchase orders, warning of cases where quantities higher than ordered are received.
- ➔ Automatic increase in the inventory as items are received.
- ➔ Records the supplier invoice/issue number on the receipt document.
- ➔ Enables acceptance of partial deliveries.
- ➔ Fully configurable receipt printing with any data required.
- ➔ Checks material input by shift, by day, by supplier, by category, etc.
- ➔ Controls the supplier goods receipt timeline.
- ➔ Manages material transfers between different warehouses and/or stockpiling sites.
- ➔ Authorization to complete transfer tasks.
- ➔ Management and configuration of different material transfer statuses (processing, in transit, received, etc.) which are not reflected in the inventory of another warehouse until the goods are received and enter the target warehouse.
- ➔ Statistics on the movement of materials between warehouses.
- ➔ Automated process for locating goods using strategies defined by item and storeroom (FIFO, LIFO...).
- ➔ Simple and compound items.

- ➔ Unlimited additional user-defined item characteristics: measurement units, brands, warranties...
- ➔ Item reservations.
- ➔ Item labelling with the possibility of printing barcodes in different formats (EAN-13, EAN-8...).
- ➔ Stock control by combination of warehouses/locations and item batches/serial numbers.
- ➔ Obtains inventory reports based on different criteria: average weighted price, price of most recent purchase, etc.
- ➔ Management of returnable item inventory: controls stock supplied to clients and suppliers, defines stock limits, obtains reports on balances and movements...
- ➔ Control of item expiration dates as well as unavailable units.
- ➔ Optimizes warehouse processes with the use of wireless devices and digital pens for goods counting, loading orders...
- ➔ Generates all types of dynamic reports, in real time and easily configurable using the Business Intelligence module.

1.3 Cost Control and Financial Control

Why use it?

To manage accounting (fiscal and electronic) and forecast and control operating costs.

The **ERPagro Finance** module includes not only fiscal and electronic accounting management but also analytical accounting functionalities you can use to analyze the revenue and expenses from the different areas of your business for accurate calculations of present and future profitability.

You'll be able to know the specific and overhead expenses of any critical element in your operations, forecast costs and anticipate budget deviations. And more importantly, you'll be able to make decisions well enough in advance so there are no unnecessary added costs.

Advantages of ERPagro Finance

- ✓ Optimal and automatic routine accounting tasks.
- ✓ Improved decision making with comprehensive and real time information.
- ✓ Optimizes time and saves work:
- ✓ Multi-company management of as many worksites as are necessary.
- ✓ Easy balancing and bank reconciliation.
- ✓ Knowing the state of your expenses and budget deviations in real time
- ✓ Decision making for future seasons and harvests.
- ✓ Compares the profitability of different areas of your business accurately.

ERPagro Finances Functionalities

- ➔ Unlimited tax years online.
- ➔ Check policies from different periods easily.
- ➔ Account structuring by levels and the possibility of establishing a number of digits for each one.
- ➔ Account lists verified against Mexican Tax Administration grouping codes.
- ➔ Records tax verifications and reviews your policies.
- ➔ Invoices issued and received as well as fixed asset amortizations are automatically entered in the books.
- ➔ Customization of automatic policies as far as the order, concept and type (credit/debit).
- ➔ Automatic policies based on templates with variable parameters.
- ➔ Generates electronic accounting files (xml).
- ➔ Creates weekly, monthly, quarterly budgets and plans... based on the accounts and obtains tracking reports and graphs by year or fiscal year.
- ➔ Conciliates accounting movements with customized conciliation marks.
- ➔ Annual accounts and analyses using customizable accounting ratios and formula-based calculation fields.
- ➔ Management based on the generation of payables and receivables documents with statuses: pending, grouped, divided, returned, received, paid...
- ➔ Automatic management and accounting with changes in the status of payables and receivables documents.
- ➔ Management of partial payables and receivables.
- ➔ Management of bank remittances.
- ➔ Preparation of supplier payments.
- ➔ Liquidations with payables and receivables compensation for a single individual.
- ➔ Generates all types of dynamic reports, in real time and easily configurable using the Business Intelligence module.

Financial analysis using key indicators (KPIs)

ERPagro Finance is the ideal tool if you want real time key information in order to make the best possible business decisions. The system features more than 30 financial indicators (KPIs) to get a very complete vision of your company's performance.

These financial indicators enable configurable and user-defined comparisons of time series to see how your business is evolving in time and classify them as positive or negative.

ERPagro Finance includes these indicators, among others:

- Gross financial profit
- Total debt
- Immediate liquidity
- Gross profit on sales
- General liquidity
- Solvency
- Short-term payables/receivables
- EBITDA
- Debt cost
- Cash flow
- Equity funds/endowment funds
- Stability
- Treasury
- Working capital
- Asset rotation

1.4 Seedbed and Plot Production Control

Why use it?

To manage business processes related to plot production.

The [ERPagro Seedbed](#) module is the perfect system for managing all operations related to plot production and starting a farm traceability system based on seed batches.

Advantages of ERPagro Seedbeds

- ✓ Detailed monitoring of sowing forecasts and actions.
- ✓ Controls seedbed occupation and the profitability of each location.
- ✓ Knows where your parcels, carts, trays and other reusable elements are at all times.
- ✓ Records treatments applied to batches to ensure traceability of the entire production process.

ERPagro Seedbed Functionalities

- ➔ Enables the configuration of N rates and sale prices by Item, Item Families and types of packing (Trays).
- ➔ Item Family Hierarchy with N nesting levels.
- ➔ Configuration of Germination Periods by Item or Item Family and Zone.
- ➔ The necessary magnitudes can be defined for comprehensive management of the work, for example: Seasonal Periods, cultivation operations, quality protocols, fertilizing elements, botanic species, pests, diseases and effects.
- ➔ Controls reusable items by client for trays as well as dispatching elements (pallets, carts...).
- ➔ Enables advanced sale order management with an indication of sowing and harvest dates.
- ➔ Enables management of the reception of client-provided seeds.
- ➔ Sowing planning and control of batches, orders, germination chambers...
- ➔ Compares and analyzes planning against later records of real sowing data.
- ➔ Flexible management and control in real time of the integrated grafting and chopping processes.
- ➔ Definition of N locations (greenhouses, warehouses, tables...) and management of the location of seed batches graphically.
- ➔ The application of Germination Controls over batches with the possibility of recalculating the quantities of plants obtained.
- ➔ Records of treatments applied to batches and automatic generation of a treatment log.
- ➔ Order collection instructions with the automatic generation of all associated documents by the system.
- ➔ Management of tray movements among the various locations as well as tray deletions upon expiration.
- ➔ Complete traceability of plants obtained from seedbeds: seed batches, treatments applied to batches, etc.
- ➔ Statistical queries and dynamic rankings in real time using the Business Intelligence dynamic reporting module.
- ➔ The module is 100% compatible with remote and mobile capture systems (digital pen, smartphone, tablet...).

1.5 Packing Control

Why use it?

To manage business processes related to the packing and creation of vegetable, fruit and other agrifood products.

The [ERPagro Packing](#) module covers all packing-related business processes, optimizes the management thereof and reduces operating and processing costs. ERPagro Packing manages products from production in the field to processing, always ensuring traceability and improving your company's yield and profitability.

Advantages of ERPagro Packing

- ✓ Optimizes product input, production and output processes during packing, always with real time information.
- ✓ Absolute and intelligent business control with minimal effort.
- ✓ Optimizes sales management by giving your sales team a complete Control Plan with updated information on stock, orders, production and other relevant data to facilitate their sales work.
- ✓ Controls the profitability of your orders with a sales order cost calculator.
- ✓ Connects the production area to order management in your sales department.
- ✓ Thoroughly controls finished product inventory, including locations in cold chambers.

ERPagro Packing Functionalities

- ➔ Manages packing input separately by fields or crops and identifies the source of all goods purchased.
- ➔ Automatically captures input from scales for boxes, pallets and vehicles and applies the corresponding tare reduction.
- ➔ Manages goods input forecasts by field, grid, sector...and day.
- ➔ Obtains stock based on different criteria: Classification, Variety, Package, Pallet...
- ➔ Unlimited and adjustable item classification criteria for input and output.
- ➔ Item creation/production controlling the components and human resources used.
- ➔ Quality control of all production phases as well as management of product traceability in ascending and descending order.
- ➔ Management of general or client-customized offers.
- ➔ Statistical queries and dynamic rankings in real time using the Business Intelligence dynamic reporting module.
- ➔ The module is 100% compatible with remote and mobile capture systems (digital pen, smartphone, tablet...).

1.6 Safety Control

Why use it?

For automatic safety audits and to control the entire quality cycle.

The [ERPagro EasyAudit](#) module is the first product specifically developed to manage the entire quality cycle in a farm business. EasyAudit complies with the current standards for obtaining and maintaining the most prestigious agrifood certifications in the world: GLOBALGAP protocol, IFS International Food Standard protocol, BRC for Food protocol, UNE 155000 standard family, certification as Organic Farming Products, among others.

EasyAudit is the perfect tool for quality monitoring processes; used with a [digital pen](#), it can send the forms completed by technicians directly to the system. This prevents process duplication, unnecessary delays in data capture, transcription errors, etc.

Advantages of ERPagro EasyAudit

- ✓ Shortens the data capture times and minimizes errors: includes an automatic system for validating all data entered.
- ✓ Requires minimal training and implementation time because your staff will continue using paper and pens for checks and verifications.
- ✓ Reduces the use of paper because of the integrated document management system and use of a digital pen.
- ✓ You will have complete control monitoring the quality of your business: audit management, non-conformity management, alerts, control over the completion of corrective actions, resource assignment, etc.

- ➔ Quality audit management: sites, verification lists, non-conformities, samples, internal notes, attachments.
- ➔ Daybook: safety department technicians may check their tasks and directly record actions taken related to these tasks while directors may manage, distribute and modify the tasks assigned to each technician.
- ➔ Sample management: with sample management, all samples taken in the field may be recorded as well as data from the laboratory where they are tested and the results of the different analyses completed.
- ➔ Management of non-conformities: non-conformities may be recorded manually or automatically based on the results obtained from checking verification lists.
- ➔ Management of corrective actions: corrective actions may be planned for each one of the non-conformities detected and they may be monitored, assigning resources and responsible parties.
- ➔ Verification lists: besides the pre-configured lists in EasyAudit, you can create new verification lists that adapt to your needs.
- ➔ Forms: EasyAudit is preloaded with a number of valid forms and verification lists pursuant to the major quality standards in effect. But it's also possible to create and add new verification lists and modify already existing ones in EasyAudit. Once the changes are made, digital forms can be sent for printing or printed directly on a PostScript compatible laser printer.
- ➔ Generates all types of dynamic reports, in real time and easily configurable using the Business Intelligence module.
- ➔ The module is 100% compatible with remote and mobile capture systems (digital pen, smartphone, tablet...).

1.7 Agronomic Control

Why use it?

To optimize management of agronomists in the field and at the office.

The **ERPagro Agronomist** module handles technical management of crops as it quickly, easily and effectively captures and controls all types of information related to the field and crops: standards, field control and monitoring, third-party farmers, waste analysis, recommendation management and crop prescriptions.

Advantages of ERPagro Agronomist

- ✓ Quickly and easily tracks your fields and crops.
- ✓ Thoroughly controls waste analyses on crops and even batches produced from the field.
- ✓ Controls all operations each agronomist is responsible for.
- ✓ The possibility of configuring as many prescription models as are needed and customizes printing, deciding which specific information is printed in the document delivered to the field manager each time.
- ✓ Captures and manages operation logs used by agronomists.

ERPagro Agronomist Functionalities

- ➔ Management of a master field and crop catalog with all data: locations, surface areas, water sources, irrigation systems...
- ➔ Master control systems for irrigation, water sources, pests, diseases, effects, active substances, cultivation operations, fertilizers, botanic species, quality protocols, agronomists, crop managers, etc.
- ➔ Records and controls waste analyses and defines rules to block crops or items in the event of negative analyses.
- ➔ Records and manages sample taking for quality control.
- ➔ Manages field logs and prescriptions and recommendations.
- ➔ Loads digital files to the online records (forms, drawings, photos, identification, contracts, etc.).
- ➔ The necessary magnitudes may be defined for proper and complete work management, such as: seasons, cultivation operations, quality protocols crops are subject to, active substances, fertilizers, botanic species, pests, diseases, biological controls...
- ➔ Waste analysis: definition of the results of analyses: positive, negative, suitable, not

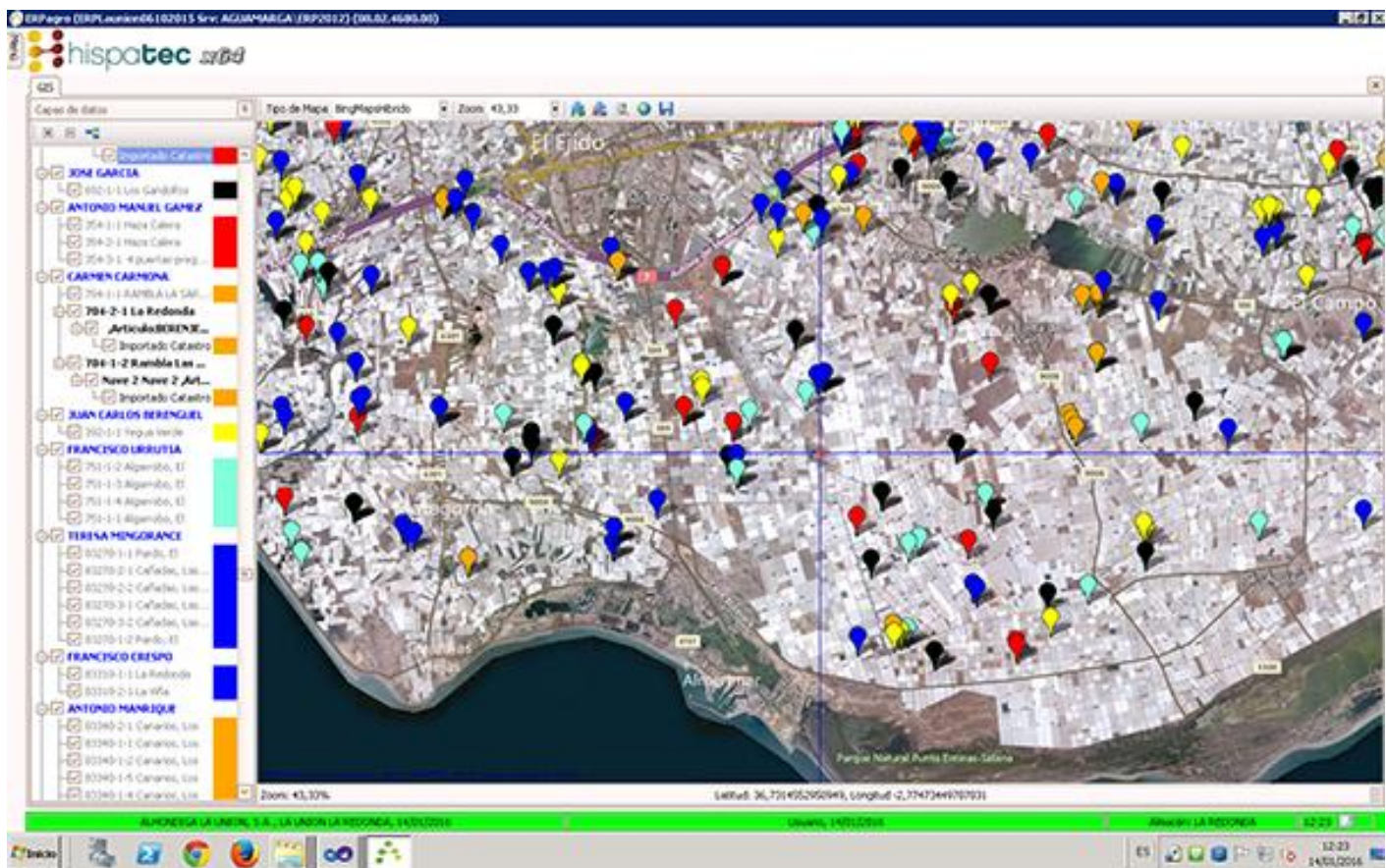
suitable; definition of rules to block crops/batches based on the results; records waste analyses, indicating active substances with waste and generates PDFs with the analyses... Manual or automatic blocking of crops and batches.

- ➔ Analyses and Actions: these processes indicate other useful information for fields and crops in addition to that which is already found with the respective maintenance.
- ➔ When doing treatments, the product to use may be determined based on the botanic species, quality protocol, active substance.
- ➔ When setting up irrigation and fertilizing, you may control the quantity of product used as well as the volume of water used.

➔ Recommendations (Prescriptions): engineers may make recommendations for crops based on the analyses and actions defined in the application. Recommendations already made may be checked and frequencies may be established.

- ➔ Mass recommendations are possible.
- ➔ Generates all types of dynamic reports, in real time and easily configurable using the Business Intelligence module.
- ➔ The Field Production control module is 100% compatible with remote and mobile capture systems (digital pen, smartphone, tablet...).

Information exploitation using a georeference system (GIS)



The [ERPagro Agronomist](#) module includes a geographic information system (GIS) to organize, store, process, analyze and model data related to fields and crops.

It is a powerful information system for storing, editing, analyzing, sharing and displaying geographically referenced information.

This functionality makes it possible to view information on estates, plots, grids, etc. on a map (you can see the types of crops planted, treatments made, production costs...) and perform interactive queries and analyze the business information spatially. All you have to do is click on any position on the map.

1.8 Commercial Control

Why use it?

To manage your commercial and sales processes.

The **ERPagro Sales and Distribution** module handles sales processes (price lists, estimates, quotes, orders and invoices) and client relations (receivables). You'll be able to improve your strategic decision making based on dynamic analyses of the sales information from different perspectives and in real time.

ERPagro Sales and Distribution makes it possible to manage the entire sales cycle and comprehensively track your commercial cycle.

Advantages of ERPagro Sales and Distribution

- ✓ Optimizes sales management through a number of sales rate combinations and billing frequencies.
- ✓ Plans and monitors your client sales forecasts and results through comparative reports and graphs.
- ✓ Controls client credit limits at all times.
- ✓ Offers complete and intelligent control of your commercial relationships with clients.

- ➔ Records sales orders manually or automatically.
- ➔ Sales Prices may be configured in a number of ways by client, type of client... and variations in sales prices may be defined for different, configurable time periods.
- ➔ Advanced Client configuration: billing groups, client types, unlimited user-defined characteristics, blocked use...
- ➔ Complete support for the client sales process: Order - Dispatch - Sales Account - Invoice.
- ➔ A calculator to calculate sales prices.
- ➔ Management of Loans and Deliveries by client account.
- ➔ Client Risk control pursuant to user-defined concepts.
- ➔ Documental control of client relations: sales estimates, orders, remittances, delivery notes, invoices...
- ➔ A completely adjustable system based on credits and debits to be applied to sales documents including those applicable to creditors (carriers, brokers, etc.).
- ➔ Forecasts sales by months by obtaining seasonal tracking reports and graphs and comparing different seasons.
- ➔ Management of goods returns from clients.
- ➔ Management of goods reservations for client orders.
- ➔ Prints dispatch and customs documentation: CMR, Bills of Lading, Permits, Consignments...
- ➔ Manages customs documents.
- ➔ Generates all types of dynamic reports, in real time and easily configurable using the Business Intelligence module.
- ➔ The module is 100% compatible with remote and mobile capture systems (digital pen, smartphone, tablet...).

2. Business Intelligence Systems



Business Intelligence
System

Farm Control Panel

2.1 Business Intelligence

Why use it?

To obtain real time information, data and reports on all business activities.

The **ERPagro BI** module is an easy-to-use and revolutionary Information Exploitation or Business Intelligence system with access to ERPagro data in real time and completely oriented towards dynamic management of specific information by end users.

The **ERPagro BI** system enables the immediate generation of dynamic or static reports in tabular, multi-dimensional or file format.

It is a very easy-to-use system (barely requires any training) which offers extensive customization possibilities as you can create, edit, share and export documents (PDF, XLS, TXT, HTML...).

The **ERPagro BI** system can be integrated with other management systems or auxiliary databases and is capable of managing aggregate and real time information.

Advantages of ERPagro BI

- ✓ Decision making based on completely updated real data.
- ✓ Analyzes your business from any perspective dynamically through multi-dimensional information blocks.
- ✓ Establishes indicators using attributes and colors to be able to know the business situation in real time at a glance.
- ✓ Displays relevant indicators graphically with a wide range of customization options available.
- ✓ Unlimited definitions for your own queries and you can design reports without needing any programming knowledge.
- ✓ Increases production and efficiency by sending reports and information to other users via email, our mobile application, web interfaces or SMS.

- ➔ Can do multiple groupings with any data.
- ➔ Enables ascending/descending arrangement of any data and can even nest arrangements.
- ➔ The information may be exploited in tabular, multi-dimensional (OLAP blocks) and graphic formats in different formats.
- ➔ The fields can be hidden/displayed at any time and inserted/dragged to any position.
- ➔ Auto-filters each one of the display fields.
- ➔ Masks and display formats can be applied to the numerical and alphanumerical data and dates as well as fonts and font sizes.
- ➔ Totals and subtotals can be defined by group to indicate: counts, sums, average values, maximums, minimums, absolute and percentage deviations, etc.
- ➔ Customized colors and attributes may be used to highlight values depending on different conditions.
- ➔ Fields may be created and data may be calculated using formulas much like Excel.
- ➔ Information is presented in a graphic format that is completely integrated with the numerical information represented.
- ➔ Customized graphs may be created using an assistant; you can select different types (bar, line, pie, 2D, 3D...), insert keys, etc.
- ➔ Customized print design: you may insert logos, headers, blow-up images, footers, margins, watermarks, fonts...
- ➔ May be exported to PDF, Excel, CSV...

2.2 Farm Control Panel

Why use it?

To have a management tool that improves short and long-term business efficiency and control.

The **ERPagro CMI** module is a comprehensive control panel for the farm business which can be integrated with the other ERPagro system modules. It's a management tool that goes beyond the financial aspect used by many managers to assess how their business is performing. Manage a company only considering traditional financial indicators does not take into account the importance of intangible assets (relations with clients, employee skills and motivation...).

ERPagro CMI measures farm business activities in terms of the vision and strategy so managers can have a comprehensive look at their business performance.

ERPagro CMI is based on "Strategy Control" which makes it an effective tool for making strategic plans, tracking whether the results defined in a strategic plan are obtained and detecting deviations.

With **ERPagro CMI**, each user can quickly and easily define outlooks, objectives and indicators by areas to create a Strategy Map.

Advantages of ERPagro CMI Comprehensive Control Panel

- ✓ Having a simple and transparent strategy.
- ✓ Coordinating the company's different objectives among all work areas more efficiently.
- ✓ Quick and visual monitoring of the achievement of established objectives.
- ✓ Forecast the future through different key indicators.

- ➔ All components are completely adjustable and configurable.
- ➔ It is integrated with ERPagro, although access to any third-party database with a known structure is also allowed.
- ➔ Part or all of the results may be entered manually.
- ➔ You can work simultaneously with several Control Panel configurations using different structures to access the same data.
- ➔ You can work with different views of the same structure.
- ➔ It analyzes information from one or several companies simultaneously.
- ➔ The basic control panel structure is comprised of Outlook, Objectives, Indicators, Results and Data Browsing views.
- ➔ It allows for an optional module to Control Initiatives adopted to achieve the objectives established.
- ➔ The results are obtained graphically as well as numerically and visually.
- ➔ Reports: A Strategy Map (monthly position), Status of Objectives, Status of Indicators, Detailed reports on Indicators and the Achievement of Initiatives.

3. Precise Data Collection Remote Systems and Devices



Remote Production Control
via Sensors

Digital Pens and Forms

Automatic Traceability

Presence Control

3.1 Remote Production Control via Sensors

Why use it?

To control the status of your crops in real time and from a distance.

The [ERPagro Hortisys Precision Agriculture](#) module allows you to precisely and remotely control your crops at any given time and in any situation. With this module, you'll always know the biological parameters of your crops in real time and from a distance.

With [ERPagro Hortisys](#), you'll improve your farm decision making based on data obtained from sensors (soil and plant), indoor and

outdoor meteorology data and local and regional climate models.

The information collected via the sensors and climate stations is sent by radio links to a data logger that works as a data collector and information transmitter via a standard mobile communication protocol, GSM (Global System for Mobile communications), to the ERPagro system.



[ERPagro Hortisys](#) is a comprehensive system integrated with plant, soil, climate and weather observation and forecast sensors, field data collection systems and climate forecast models to obtain exact diagnostics of crop statuses and help field technicians make key decisions.



Alejandro Sánchez, técnico de Parque Natural.

“Hortisys te permite conocer la situación real de la planta para alcanzar su máximo potencial de producción”

Alejandro Sánchez, técnico de Parque Natural S.C.A. ha podido comprobar en una finca de esta comercializadora las ventajas que ofrece el sistema Hortisys, mediante el cual se puede conocer en tiempo real y con datos reales la situación de la planta para aportarle lo que necesite. Gracias a Hortisys se logrará que la planta ofrezca su máximo potencial de producción. En la actualidad, Parque Natural es una de las empresas que más apuestan por la modernización y la tecnología para lograr una agricultura más eficiente y rentable para el productor.

Alejandro Sánchez, técnico de Parque Natural, ha podido comprobar en una finca de esta comercializadora las ventajas que ofrece el sistema Hortisys, mediante el cual se puede conocer en tiempo real y con datos reales la situación de la planta para aportarle lo que necesite. Gracias a Hortisys se logrará que la planta ofrezca su máximo potencial de producción.

-¿En qué invernadero se ha instalado Hortisys?

-El proyecto se ha realizado en un invernadero de raspa y amagao básico, de unos cuatro metros en el que se está cultivando tomate. La superficie es de 11.000 metros, tiene ventilación cenital, y con una estructura lo más eficiente posible.

-Desde el punto de vista técnico ¿Qué ventajas destacaría de este sistema?

-Hortisys te hace una radiografía de cómo se encuentra el cultivo, el suelo y el ambiente del invernadero mostrándote lo que precisa y lo que tienes que hacer para mejorar eso. Con

toda esta información que te aporta, evitamos que disminuya ni un gramo la productividad de nuestro cultivo, por el mal manejo del agua que es lo típico que suele ocurrir. Es muy importante porque por ese desconocimiento casi nunca llegamos al potencial total que puede ofrecer la planta.

-¿Cómo es el manejo de este sistema?

-Principalmente es una herramienta dirigida a técnicos, que serán quienes consulten el informe que se genere y se lo expliquen al agricultor. Para los técnicos es muy fácil y sencillo el manejo, permitiendo que lo puedan consultar desde el móvil o tablet. Además pueden acceder a la plataforma donde se encuentran los datos que continuamente va generando el sistema y consultar en tiempo real las condiciones del invernadero.

A los técnicos que lo usen le permitirán al mismo tiempo gestionar varias fincas a la vez desde cualquier punto del campo, siempre y cuando tengan cobertura.

With tri-parametric plant sensors and soil sensors (installed at different depths) and a connection to climate stations, the following data may be obtained:

- Soil moisture
- Solar radiation
- Ambient temperature
- Soil temperature
- Leaf temperature
- HNO_3 (nitric acid)
- Soil pH
- Soil electrical conductivity
- Dendrometry

All of the agronomic and meteorology data collected via the sensors are accessible from the Internet and managed and monitored in the [ERPagro system](#). Not only will you be able to record and control your agronomic data but also use them to record calculated variables such as the vapor pressure deficit (VPD).



[ERPagro Hortisys Precision Agriculture](#) is a solution based on decision making software - this software is capable of processing the data and "learning" over time- which provides field technicians with advanced knowledge of their work and crop management criteria on a very precise and detailed level.

Thus, they can act at any time or early in the event

of pest conditions, for example, or plan the idea harvest time, provide the exact nutrients needed by a plant, generate customized alerts...

The system is configured based on the crop, variety and species to be monitored and criteria are defined to generate alerts.

[ERPagro Hortisys Precision Agriculture](#) makes it possible to better manage potential crop production and increase crop yields based on the analysis of different parameters (VPD, soil moisture at 15 and 30 depth, electrical conductivity at 15 and 30 cm, sap analysis...).

If an alert is generated due to a crop problem, the system can directly interact with electromechanical systems (supervision, control and data acquisition systems - SCADA-, automated irrigation systems, etc.) to unchain automatic actions (remote activation of unscheduled irrigation, for example).

All of the information on the crop parameters can be checked at any time via the Internet from a computer or mobile device. In short, [ERPagro Hortisys Precision Agriculture](#) is a comprehensive control panel showing biological and climate indicators that offer information on "the profit and loss account for each plant"; in other words, how a plant is behaving and the production it is able to generate in order to get the most out of its productive potential.

Advantages of ERPagro Horstisys

- ✓ Saves on the consumption of nutrients, water and energy.
- ✓ Optimizes fertilization and irrigation tasks: doses and the frequencies of watering and fertilizing are optimized.
- ✓ More accurate control of a plant's nutritional needs.
- ✓ Gets the most out of a crop's productive potential which increases yield.
- ✓ Monitors crop phenology in real time.
- ✓ Offers precise data on the volume, status and quality of your production.
- ✓ Decision making based on data, not intuitions.
- ✓ Updated data for meteorological observation and forecasting.
- ✓ Provides alerts and indicators for crop management decision making.
- ✓ Makes accurate harvesting forecasts.
- ✓ Predicts diseases and other problems.
- ✓ The ability to respond to crisis situations faster.

ERPagro Hortisys Functionalities

- ➔ It includes a completely customizable alert generation system.
- ➔ Multi-channel alerts: via email, SMS messages or push notifications to cellphones
- ➔ A log that records all incidents in crop parameters.
- ➔ It can generate zoned climate estimate / forecast models.
- ➔ The data collected by the sensors are accessible in real time via the web using any device with an Internet connection.
- ➔ Integration with weather stations.
- ➔ Integration with SCADA (Supervisory Control and Data Acquisition) fertilization and irrigation systems to record all irrigation and check and contrast later against the crop conditions.
- ➔ The capacity to control irrigation machines to begin new irrigation cycles automatically or in the event of a crop-related emergency condition requiring immediate irrigation.
- ➔ Integration with any electro-mechanical environmental control element that can be used with crops.

3.2 Digital Pen

Why use it?

To collect data in the field and digitize them while writing.

The [ERPagro Digital Pen](#) is the perfect solution for data collection. It's an electronic data collection device that looks, feels and writes like a normal pen. But it's much more than just a pen because it not only contains ink but also a digital micro-camera, advanced image micro-processor, pressure sensor, internal data storage memory, a Bluetooth™ module for wireless connection and a battery.



The digital pen captures, stores and sends what you write securely. It's the easiest way to collect information as it converts the ink into immediately accessible digital data.

The digital pen begins digitizing the handwritten text as soon as it is entered on a form, recording all of the pen movements.

As you write, the built-in digital micro-camera takes photos at a speed of between 50 and 100 images per second. Each photo contains enough data for the pen's micro-processor to determine the exact position of the digital pen on the paper and identify what it being written.

Besides capturing handwriting, a digital pen attaches other key data: the exact date and time when the text was written, the writer's identity - each digital pen is associated with a unique ID- and geolocation, as an option.

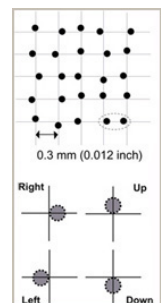
The data are saved in the pen's internal memory, which can store up to 100 full letter-size pages of handwritten text.

A digital pen can transfer data to [ERPagro](#) in two possible ways: via a wireless connection (Bluetooth™) through a cellphone or via a USB connector through a computer.

In addition to a digital pen for writing, the digital data collection system also needs a [paper form](#).

Any paper can be used to print the form. No special digital pen or expensive digital ink system is required: you just need to print it on an office laser printer compatible with PostScript or at a print shop (depending on the volume of print-offs you need), which greatly lowers the cost.

The technology used by Hispatec to design the forms prints with a microdot pattern.



These small dots are interpreted by the digital pen micro-camera which uses them as a guide to capture them, the positions on the paper, the coordinates and the vectors. While writing on the form with normal ink, the digital pen collects everything written. The Automatic Handwritten Data Capture technology used by Hispatec for its digital forms makes it possible to interpret the writing captured by a digital pen and convert it to digital data.

The combination of a digital pen and form capture technology means the information is recorded simultaneously in written and electronic form. Once a form has fulfilled its role in the handwritten data capture process, it is converted into a conventional paper copy which may be left at the site where it was written, if necessary.

This technology eliminates the risk of losing written information in the lapse of time that passes between writing and capture in a company's information systems.

Advantages of the ERPagro Digital Pen

- ✓ The pen is light and robust at the same time; it doesn't change user behavior and requires minimal training for use (you just need to know how to write).
- ✓ Pens are socially accepted, easy-to-handle tools: you don't have to slide over menus or touchscreens which can barely be seen in outdoor environments.
- ✓ Allows you to know the exact time when the data were captured.
- ✓ Reduces or eliminates information capture steps for more efficient processes.
- ✓ Enables quick integration of the information captured digitally in management system areas (payroll, accounting...).

3.3 Automatic Traceability

Why use it?

To have a system that guarantees product traceability.

The [ERPagro Automatic Traceability](#) module is a complete automated traceability system that combines hardware (scales, barcode readers, barcode scanners, labelling printers, buttons, concentrators...) and ERPagro management software.

With this system, you'll be able to automatically identify and record each sales unit (item or batch), know all of the details on a supplier, the batch number of the products used (including the materials needed to create them), maintain a register in real time of the batch number which is sent to each client, uniquely identify pallets created, etc. so you can automatically trace each pallet dispatched from the field, plot, grid, sector... (forward traceability) to the client (backward traceability).

Advantages of ERPagro Automatic Traceability

- ✓ The ability to immediately detect possible problems related to food safety, perfectly separating the products involved from those not affected.
- ✓ Quick action and reaction to alerts and food crises.
- ✓ Increased credibility and prestige towards the market and clients.

- ➔ A completely automatic process system based on production line modeling.
- ➔ Two levels of traceability: by the box and by the pallet.
- ➔ Configuration of traceability elements: production line, dumping point, production output, pallet output, palleting points, straps, scales, transfer areas...
- ➔ Identifies each pallet with a serial number for unequivocal identification which means it can be located accurately in warehouses or cold chambers.
- ➔ Locates traceability devices (barcode scanner, RFID readers, scales, labelling printers, buttons, palleting robots, concentrators, sirens...) in the corresponding production elements.
- ➔ A communication and signal system that indicates the task that must be done for each type of device in each type of production element
- ➔ Discriminates each entry with a signal pattern.
- ➔ Links tasks so the input value of the second is the output value generated by the first task.
- ➔ Fast management processes: assigning workers, dumping points and packing types.
- ➔ Can be integrated with third-party software.
- ➔ A traceability listener that starts traceability device drivers to listen in on events. Each time a signal is received from a device, it obtains the task to be done and completes it.
- ➔ Path configuration to indicate the way in which data is sent from each device.
- ➔ Automatic filtering of poor signals or interferences.
- ➔ System configuration by request, business group, company, worksite or user.
- ➔ A control panel that displays information on events that occur in the production lines, configuration of each element and device and production information for each production element.
- ➔ Configurable alert system.

3.4 Presence Control

Why use it?

To control employees' attendance and absenteeism.

ERPagro Presence Control is a workforce monitoring system that combines hardware (access carousels, biometric readers, motion detectors, magnetic strips...) and ERPagro management software.

The system uses clock-ins on a presence control terminal to monitor employee attendance, their arrivals and departures, their justified and unjustified absences, their delays... and organizes and manages employee shifts. The system streamlines employee presence control with detailed summaries of the number of hours worked which prevents the hardly effective task of calculating hours manually or with spreadsheets. It can also be used to better control your workforce's pay.

ERPagro Presence Control Functionalities

- ➔ Shift control, shift assignment by dates, rounding.
- ➔ Makes it possible to define break periods.
- ➔ Monitors employees at different worksites.
- ➔ Monitors arrivals, departures, justified and unjustified absences, vacation, leaves, days off...
- ➔ Integrated with fixed clock-in devices or handheld devices.
- ➔ Manages prices by hour and worker.
- ➔ Manages schedules at different worksites.
- ➔ Manages absences.
- ➔ Includes a daybook with holidays and non-business days.
- ➔ Can be integrated with third-party software.
- ➔ Generates all types of dynamic reports, in real time and easily configurable using the Business Intelligence module.
- ➔ Configurable alert system.

4. Mobility Systems



ERPagro Go! mobile
application

ERPagro Plus mobile
application

ERPagro Net web interface

Business intelligence on
the go

4.1 ERPagro Go! Mobile Application

Why use it?

To collect data or query data available on the ERPagro server from a mobile device.

The mobile application **ERPagro Go!** is an application (available for Android and iOS) designed by Hispatec to interact with the data available in ERPagro using mobile devices (tablets or smartphones).

With **ERPagro Go!** users can:

1. **Check** any data or reports available in the ERPagro system and view the information alphanumerically or graphically. For example, managers may check the sales rankings by any unit (dollars, kilos, boxes...), production forecasts, bank account balances, production orders pending processing at packing, pallets stored in cold chambers, etc. Or, suppliers may receive notifications and check



expected payment dates, for example. The versatility and flexibility of the applications means you can configure and adapt it to your needs.

2. **Collect data** for business processes on the go. Any business process can be configured for data collection using a mobile device and the mobile application will send the information captured to the ERPagro system. For example, use **ERPagro Go!** to control and record supply input and output at your warehouse, manage field logs, monitor safety, control fuel consumption, make it possible for your clients to order...

ERPagro Go! is a flexible and versatile tool that is only limited by your imagination.

4.2 ERPagro Plus Mobile Application

Why use it?

To control production in the field using a mobile device.

The [ERPagro Plus](#) mobile application is an application (available for Android) designed by Hispatec to manage production in the field using a mobile device (tablet or smartphone).

This application is integrated with the [ERPagro Field Production Control](#) module in order to maintain real time control over the production process from the field using a mobile device.



With the [ERPagro Field Production Control](#) module, you can generate and plan different future production orders and send them to mobile devices through [ERPagro Plus](#). This way, field managers are always aware of the production orders pending fulfillment

4.3 ERPagro Net Web Interface

Why use it?

To collect data or check data available on the ERPagro server from a web browser.

The [ERPagro Net](#) web interface is a web-based service for interacting with the data available in ERPagro from a web browser.

The multi-channel architecture of ERPagro makes it possible to use different channels to run and collect data associated with business processes: computers, cellphones, the Internet...

For example, you can program the automatic generation of certain reports and send them through the mobile channel (via ERPagro Go!) or

the web channel (via ERPagro Net).



With [ERPagro Net](#), Internet sites are built with a responsive web design (they automatically adapt to the device being used to view them).

The versatility and flexibility of the [ERPagro Net](#) tool means you can completely configure and adapt it to your needs. The ERPagro web channel can essentially be used to perform the following actions:

1. [Collect data](#) for business processes. Any farm business process can be configured for collection via a web interface: client order management, packing entry control, production order management, waste analysis records, field logs...
2. [Check](#) any data or report available in the ERPagro desktop system.

4.4 Business Intelligence On The Go

Why use it?

To analyze information on how your business is evolving using a mobile device in real time.

The **ERPagro BoB (Business on Board)** module is a business intelligence tool for mobile devices (available for Android and iOS) and web browsers that can be used by managers to access analytical information anywhere and anytime to support their decision making on the go: sales information, turnover, accounting, treasury...

The market already offers BI solutions, but the information is only available at the office or, at the very most, on a remote computer connected to a server via the Internet.

ERPagro BoB (Business on Board) is a BI tool designed for mobility which works with a connection (online) and without (offline).

ERPagro BoB (Business on Board) is the perfect complement to our BI desktop solution **ERPagro BI** as it has



access to ERPagro data in real time and is completely aimed at end users dynamically managing specific

Advantages of ERPagro Business on Board

- ✓ Exploiting information relevant to a business area from different perspectives.
- ✓ Browsing business information easily and intuitively.
- ✓ Configuring Scenario-based data sets for any business area: billing, sales, accounting, treasury, human resources, project management, tracking the application of company policies...

information.

- ➔ Based on OLAP (On-Line Analytical Processing).
- ➔ Streamlines the consultation of large quantities of data with multi-dimensional structures (or OLAP blocks).
- ➔ Scenarios: information that is relevant to a specific business area is organized into scenarios – sales, production, costs...- which record specific facts for the area as well as the data related to the facts.
- ➔ Dimensions: The facts recorded in a scenario can be consulted by the various dimensions characterizing them. These dimensions may be time-based –year, quarter, month...-, geographic –country, province, city...- or related to the specific characteristics of a scenario.
- ➔ Measures. Certain numerical measures are recorded for each fact. These measures can be consulted aggregately by the various dimensions comprising the scenario.
- ➔ Filters. Conditions can be specified that the dimensions of a particular scenario must meet to filter the information displayed by determining the aggregates and measures calculated.
- ➔ Browsing sequence. This is given by the order in which the dimensions are organized in order to get deeper into them by selecting one element of a dimension and accessing the elements corresponding to the following dimension. The browsing sequence can be rearranged pursuant to the user's interests in order to perform operations such as pivoting between two dimensions, for example.

5. Technical Scope of ERPagro

ERPagro is a comprehensive robust, reliable and very technologically advanced system that manages business processes throughout the entire agricultural business value chain. ERPagro is based on Microsoft .NET (Microsoft C# .Net) technology and features a multi-layer, multi-channel component architecture model.



ERPagro is Multi-company

It can be used to manage individual farms or business groups.

It offers information coherency on all levels: users can define business groups, companies, worksites and warehouses.

Warehouses may belong simultaneously to more than one company.

ERPagro is Multi-currency

Work can be done simultaneously with different currencies (peso, dollar, euro...).

Any currency can be used as the reference for all modules and different currencies can be applied to specific commercial transactions.

It features an exchange rate control system which may be updated manually or remotely via the Internet.

Functional Features

Some of the main functional features of ERPagro are:



- The information and processes can be managed and structured completely differently for each one of the various Business Activities.
- All business processes on any level can be parametrized globally for all users or user groups, all the way down to the user level.
- It stores a log of all business process parameter settings for recovery and re-application.
- There is a menu that can be customized and adapted by each user, with the possibility of each one creating their own favorites menu.
- It includes a security system that is based on two major blocks: Permission Management and Audit Management.



Document Management

ERPagro includes an advanced system to handle all **Business Documents** generated completely automatically with just one click (purchase orders, requisitions, shipping notes, account statuses, licenses, polices, invoices, delivery notes, customs documents, tax documents...) needed for daily operational management.



Software Architecture

→ ERPagro is developed in layers (multi-layer), by components and with object-oriented programming which makes it a highly scalable system.

→ The modules meet specific needs in different sectors and types of business and are developed over a powerful general management processing core.

- It uses next-generation tools and methods: .NET, Unified Modeling Language (UML), etc.
- It supports different database management systems: MS-SQL Server, ORACLE, etc.
- It allows for business process transactional management which ensures the integrity of all data processed in the system.
- A high degree of parametrization, designed for the configuration of processes, permissions and screens all the way to the user level.
- Designed to enable specific adaptations made by our clients which are fully integrated with the processes and data managed by the system.

Electronic Accounting

ERPagro meets the requirements of Mexican Tax Administration electronic accounting procedures and the Periodic Tax Amendment provisions and generates xml files with electronic accounting itemization.

ERPagro is Multi-channel

Business processes can be configured so they may be run via different channels: desktop, cellphone apps, handheld, web...



Technical features

- ERPagro allows deployment in Terminal Server, Client/Server or Single-Station modes or a combination thereof in a single installation.
- It allows automatic Internet-based updates. ERPagro is updated remotely through a connection to the Hispatec update server.
- It allows clients to develop their own modules and make improvements and integrate them with ERPagro using Microsoft C# .Net.
- Handles Business Logic which is unconnected to the technology implemented.
- Business Process Transactional Management.
- Flexible, with a high degree of adaptation to each client's needs.
- Easily connects to other third-party systems: SAP, Oracle, Dynamics, Contpaq...
- It is operationally Robust, Reliable and Secure.
- It is independent of any database management system (SQL Server, ORACLE...).
- It includes an internal ERPagro Security system or is integrated in Windows (*Single Sign-on*), so users do not have to sign into ERPagro once they have signed into Windows.
- Can block access to certain users temporarily or permanently.
- Can define and limit accessible environments for each user.
- Allows for customized Access to the options in each Module and individual Operational Permission management.
- It includes a Data and Process Monitoring system and an adjustable Functional Log.

Each Datum is Unique in ERPagro

The ERPagro database manager guarantees Referential Integrity.

Automatic Updates

ERPagro is updated remotely with a connection to the Hispatec update server.



Usability

As far as the user friendliness, the ERPagro system features the following, among others:

- Control activation: ERPagro allows users to hide or disable form fields to adapt them to their own needs.
- Menu: ERPagro allows each user to select the visible options, create a completely personalized favorites menu, search for text options, and differentiate the environment (business group, company, worksite) with a combination of completely configurable colors.
- Terminology customization: form and report labels can be completely changed by users.
- Appearance: ERPagro includes several preloaded display style configurations (skins). This also means each user can preset the interface appearance they most prefer.
- Shortcut keys: the shortcut keys in ERPagro allow users to navigate the system with key combinations for less mouse use. The shortcut keys can be quickly found for each process.

Configurable Business Activities

ERPagro makes it possible to manage and structure information and processes in a completely different way for each different Business Activity.

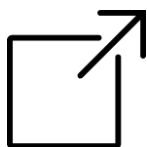
Business Intelligence System

Flexible and dynamic as each user can quickly and easily configure their own reports based on their own needs.

6. Success Stories



Hispatec not only implements software and systems so agricultural companies may better manage their businesses, it also specializes in developing custom solutions to make their processes more efficient.



Success story: an automatic traceability system that uses barcodes on pallets and controls truck loading via radiofrequency www.hispatec.es/trops-trazabilidad-en-palets-y-rfid-en-muelles-de-carga

Company

Trops, a Spanish avocado, mango, lychee, cherimoya, loquat, carambola and kumquat producer, which is certified pursuant to GlobalGAP, IFS Food, BRC Food and ISO 9001 protocols.

Scope of the project

To make the packing process automatic in order to improve traceability and how the fruit entering and leaving the packing area is controlled and handled.

Solution implemented

1. A system that identifies all of the fruit that enters the packing and palleting area based on barcode readings.
2. A trailer loading control system based on radiofrequency identification (RFID) technology.

How it works

The fruit that arrives from the fields is unloaded onto pallets identified with unique barcodes.

The pallet code is scanned and it is assigned a weight which is captured in ERPagro via a radio frequency terminal.

While the pallet goes into the next processing phase, ERPagro has already recognized the product input and has automatically activated the necessary requests and notified packing operators of the volume about to enter on the processing conveyor belt.

Each pallet that comes off the conveyor belts is identified with an RFID label that includes information on the content and destination.

When a loading notification is generated, the pallet reaches the loading dock, the scanners read the RFID label information and if the destination on the label does not coincide with the loading dock assigned, an alarm goes off warning operators that there is a truck loading error.

Benefits

Accurately tracking fruit as it goes through the processing chain, anticipating supply needs, gaining better control over the establishment of prices, saving on packaging, lower fuel consumption, thorough control over which pallets are loaded on which dock, practically reducing incidents due to dispatching mistakes to zero as trucks are loaded in a more precise way.

7. Hispatec is Synonymous to Innovation



[Hispatec](#) is a company that is committed to innovation. It is currently leading a series of innovative projects in areas related to:

- The creation of farm production simulation models so production may coincide with the ideal periods for commercialization on the market;
- The optimization of farm irrigation and the energy used for irrigation;
- The use of precision agriculture and the integration of our technology with tractors and field machinery in order to monitor crops, cultivation operations, sowing processes and pesticide use.

Some of the projects led by Hispatec have been declared as strategic projects for the agricultural sector by both the Spanish Government and the European Union. One example is our [Agronauta Project](#).



Agronauta Project

Automated farm work on intensive farming operations using robotics.

This is an innovative project aimed at transforming the tomato production model by harvesting and creating tomato vines onsite using a mobile robotic system with the support of a smart production environment.

Agronauta is endowed with a budget of 8 million dollars and 14 different partners are participating from various areas – businesses, research centers, universities and public organizations – in Spain.

The objective of the project is to create a robot to help grow tomato vines in greenhouses with an automatic cutting system and an artificial vision system to determine qualities and calibres. In a view to bringing the production cycle full-circle, Agronauta will be completed with the development of a new packing system that will be set up in the fields with a global production system based on smart software –developed by Hispatec- to forecast demand.

More information

www.hispatec.es/proyectos/proyecto-agronauta

8. Hispatec Dossier

más de **25**
años aportando
valor al sector agro
y medio ambiental

Hispatec is a Spanish information technology provider which specializes in the development and implementation of technology solutions for the agricultural world. Since its foundation in Almeria (Spain) more than 25 years ago, it has focused on providing technology and services aimed at improving crop growing, supply, marketing and distribution processes for agricultural companies.

The specialized management solutions offered by Hispatec facilitate product traceability and differentiation from the field to consumers, as well as management of field operations, payroll, packing, traceability, procurement, cost control, sales, logistics, business relations...

Clients

Hispatec is the leading technology company in Spain and currently provides its services to some 500 clients in the agricultural world including some of the most representative success stories in the Hispanic country in addition to companies in Mexico and Africa.

The Hispatec client portfolio is comprised of agriculturalists, packers, agricultural suppliers, marketers, farmers with small and medium operations...

The annual turnover generated by Hispatec clients totals more than 3.6 billion dollars.

Hispatec has developed a client-oriented culture: the idea is not only installing a software system but rather helping our clients streamline their processes and accompanying them on the road to a more profitable and efficient business.



The Hispatec team is made up of more than 100 experts, technicians and engineers who specialize in the application of information and communication technologies and are perfectly trained and qualified to respond to any of our clients' needs, anytime and under any circumstance.

Our co-operative is headquartered in Almeria (Spain). Our national and international clients are served by a network of national and international business partners.

Economic and financial solvency



Hispatec is an associate company of the Spanish financial institution Cajamar Caja Rural¹, meaning it is economically and financially solvent.

Cajamar is the leading credit co-operative in Spain with a market share of 50%, 4 million customers, 1.3 million associates, 1300 offices and 6000 employees.

Cajamar has a total managed portfolio of nearly 100 billion dollars, assets totaling 50 billion dollars and a solvent core capital of 11.42% (data as of March 31, 2014).

Hispatec has more than 400 clients in the agrifood sector in Spain, Portugal, Mexico and Africa and direct sales representation in 13 regions of Spain as well as in Mexico, Peru and Morocco.

Thus, Hispatec reflects proven technical and economic solvency as the leader in the provision of technology-based solutions for the Agricultural and Environmental sectors.

¹ www.cajamar.es



Preferred Partner



9. Contact Information



Hispatec

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