TECHNOLOGY FOR AUTOMATIC CONTROL OF VEHICLES ACCESS, RECEPTION AND DISPATCH OF MATERIALS IN INDUSTRIAL SITES.

Twenty years of innovation in industrial measurement systems to transform the processes of our customers.
**Results**
Vehicle type recognition, load status, height profile and image capture.

**User-friendly**
Fast and intuitive interface.

**Automatic**
Does not require operator intervention.

**Systematic**
Objective measurements, does not depend on operators.

**Real time**
Results in under 2 minutes per measurement.

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**Auditable**
Auditing web application. Easy results review.

**Uptime**
High uptime level (99%).

**Alerts**
Generation and delivery of alerts notifications.

**Easy transportation**
Collapsible structure allows transportation on trailer.

**Easy integration**
Easy integration with other systems (ERPs).
SENTINEL

Sentinel is an automatic system designed to capture and control inbound and outbound vehicles in real time.

It features automatic license plate recognition, laser scanner vehicle profiling and photographic capture of the vehicle from various angles.

Using its self-service kiosk (optional), drivers can input required information such as transported cargo, ID and type of transaction. The kiosk includes a touchscreen, a pin-hole camera (at the user’s eye level), a document scanner and a barcode reader (1D and 2D).
Why Sentinel?

DIRECT BENEFITS
- Inbound and outbound real time information of trucks and smaller vehicles.
- Auditing records of 100% of inbound and outbound trucks.
- Control of inbound according to business rules.
- Decrease in time associated with manual review of reception and dispatch.
- Decrease in the number of operators involved in the reception / supervision process.

INDIRECT BENEFITS
- Improves reception and dispatch management: Obtaining objective and clear information of each inbound and outbound activity of vehicles eliminates subjectivity in the process.
- Material waste reduction: The system captures information automatically and employs a web audit application to avoid frauds.
- Relevant information for business management: Once the gathered data is processed, it generates relevant information for stock control process related management, logistic, security and surveillance.
- Centralized information: When acquiring Sentinel Dashboard (optional), the client has access to all plants' information, allowing operational analysis of each one.

Sentinel is a product developed entirely by Woodtech, it does not require third-party licensing.
Main Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Basic</th>
<th>Optional</th>
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<tbody>
<tr>
<td>Automatic trigger for information capture</td>
<td>✔</td>
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<tr>
<td>Photographic capture of the vehicle’s different angles</td>
<td>✔</td>
<td></td>
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<tr>
<td>Inbound and outbound vehicle video capture</td>
<td>✔</td>
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<tr>
<td>License plate photographic capture and recognition</td>
<td>✔</td>
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<tr>
<td>Control access based on each client business variables</td>
<td>✔</td>
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<td>Real time alert trigger forewarning possible frauds (*)</td>
<td>✔</td>
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<tr>
<td>Self-service kiosk</td>
<td>✔</td>
<td></td>
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<tr>
<td>Bi directionality</td>
<td>✔</td>
<td></td>
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<tr>
<td>Ticket printing</td>
<td>✔</td>
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<tr>
<td>Integration with identification systems (ANPR and RFID)</td>
<td>✔</td>
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<tr>
<td>Data import from external sources</td>
<td>✔</td>
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<tr>
<td>Additional pictures</td>
<td>✔</td>
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<tr>
<td>Multi installation Sentinel Dashboard</td>
<td>✔</td>
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</table>

(*) Alerts are sent via e-mail according to client configuration.
Base Software

Measurement system
The measurement system is responsible for coordinating and controlling all the different tasks that will take place every time a new measurement event is initiated.

Kiosk interface (optional)
User interface that allows the user to enter information manually according to business needs (i.e. type of vehicle, rol number, and others). Additionally, the software scans PDF417.
Utility Software

Auditing System
Web interface that allows reviewing information and evidences of each measurement event. It allows searching for historical data, generating reports, and filtering information per business criteria.

Sentinel Dashboard (optional)
Web platform that centralizes business and operational relevant information of different facilities of each client.

The information is made available once the measurement is finished, and it cannot be modified.
Centralized information Web Application.
Check your facilities information in one place.
Download data in .xls and .pdf formats.
Sentinel Dashboard

Health status
Allows the user to monitor the health status of each facility online.

Alerts list
Displays a list of the latest alerts generated for each facility. Access to a detailed list with filter options for each facility.

Geographic location
Displays the location of each facility on the map. By clicking the location icon it displays information about each facility status.

KPI board
Graphs and indicators of business according to information raised by each system - automatically and manual entry.

Detailed event view
Review each event with detailed information and images. In addition, filters can be applied for a more efficient search.

Reports
Download reports of each event with historical data, both in PDF and Excel formats.
**Process**

1. **Capture start**
   
   Vehicle approaches the barrier until light changes to red. System detects a vehicle and activates the self-service interface.

2. **Manual data entry (optional)**
   
   The driver enters required information in self-service kiosk, according to the flow defined by the client.

3. **Information processing**
   
   The system processes the information and generates the answer according to business rules.
Process

4a. Access allowed
The self-service kiosk shows an “allowed” message. The traffic light changes to green and the barrier rises.

4b. Access denied
The self-service kiosk shows a “denied” message. The traffic light remains red and the barrier does not rise.

5. Automatic data capture
Automatic capture of vehicle type, load status, profile height and images. The barrier closes once the vehicle moves away.

6. Auditing system
Enables reviewing the results of each measurement, and exporting reports in Excel and PDF formats.
Deployment
**Hardware**

- License plate camera
- Laser scanner
- Wide angle camera
- Wifi antenna
- Mast
- LED floodlights
- Traffic light
- License plate camera
- Folding jack
- Self-service kiosk
- Vehicular barrier
- Reinforced concrete base
Woodtech provides a complete support and maintenance plan for the Sentinel system, which allows operational continuity as well as excellent performance and reliability. The support plan includes remote monitoring to evaluate key performance indicators and allows taking preventive actions.

The following table lists the optional services offered by Woodtech, which will be agreed upon based on the needs of the client.

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
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<tbody>
<tr>
<td>Support 24/7</td>
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<tr>
<td>Remote support response time</td>
<td>during business hours</td>
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<tr>
<td>Remote support response time</td>
<td>outside business hours</td>
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<tr>
<td>On-site assistance response time</td>
<td>during business hours</td>
</tr>
<tr>
<td>On-site assistance response time</td>
<td>outside business hours</td>
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<tr>
<td>On-site support</td>
<td></td>
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<tr>
<td>Basic software updates</td>
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<tr>
<td>Software version upgrades</td>
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<tr>
<td>Online operational monitoring</td>
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<tr>
<td>Laser Calibration Service</td>
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<tr>
<td>Preventive maintenance</td>
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<tr>
<td>Spare parts</td>
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</table>
Woodtech has over twenty years of experience in the development of measurement systems mainly for the forestry industry. Its main customers are located in Chile, Argentina, Brazil, the United States, and Germany.

Being a company of technological innovation, Woodtech invests between 10% - 15% of its revenue in R+D projects to keep the products current and develop new solutions.

Woodtech was recently acquired by the Angelini Group, which is one of the main business consortiums in Chile. Through its two main investment vehicles - Antarchile S.A., and Inversiones Siemel - the group is the majority shareholder and controller of companies such as Arauco, Copec, Abastible, and Orizon, which are all leading companies in Chile and other countries in Latin America, with assets over USD $20 billion as of December 2015.

Antarchile S.A. and Inversiones Siemel hold 90% of the stock of Red To Green, while Red To Green owns 99.7% of Woodtech.
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