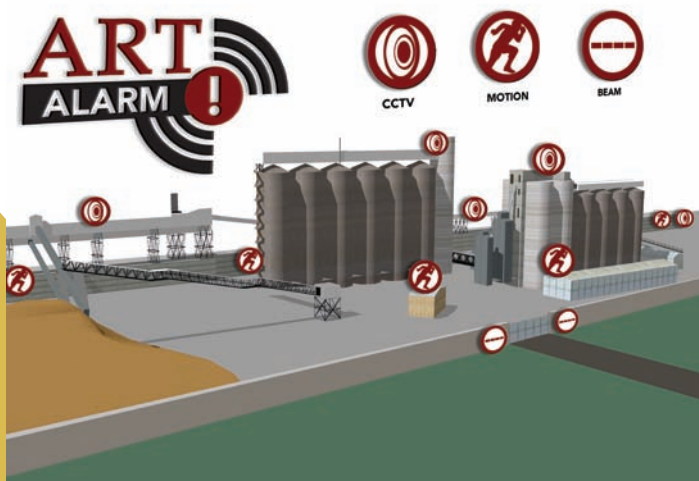




STOP after-hours grain theft with the Ronin ART ALARM! *Security Solution. ART ALARM! is a robust, reliable and cost effective system designed to operate unobtrusively in all weather conditions.*

ART ALARM! utilises infrared cameras and motion sensors placed at key points around the silo to ensure that your grain remains secure. The system is designed to interface with **Ronin's Art software** and thus offers **head office awareness of after-hour movements of grain** and will also send out a **silent alarm** whenever **movement is detected** at **key points** around the silo. Video recorded is instantly viewable online. **ART ALARM!** can be installed within 4 to 5 working days. Contact **Ronin GMS** for a quotation and **STOP afterhour losses** today.



Infra Red CCTV Cameras



Beams



Motion Detectors

Ronin GMS is an innovator of **SOLUTIONS** that ensure unsurpassed 24 hour risk control over stock and commodities. *Regardless if your commodity is stored in a silo bin, a storage bunker or on a commodity stock pile we will have the solution that delivers control firmly back into your hands . . .*
MINIMISE RISK LIKE NEVER BEFORE.

Our **proprietary software** provides a front end to our in-bin or bunker laser architectures and it is this combination of **purpose engineered hardware and specialised software** that delivers you the unsurpassed control that only our solutions can provide.

Ronin GMS also supplies various analysis instruments to the grain industry and other related industries. Prominent amongst these are the **BRUINS** range of constituent analysers, **Dickey-John** moisture metres and the **PERTEN** range of RVA instruments.

Ronin GMS also has three sister companies: **Ronin PFS** are the leaders in precision farming, **Ronin IS** specialises in spatial imaging and **Ronin Argentina** takes care of business in South America.

For more information please visit our web site at:

www.roningms.com

or view our sister companies at:

www.roninpfs.com

www.roninis.com

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GRAIN & COMMODITY RISK CONTROL SOLUTIONS

ART

Artemis
Laser Scanning System

Ams



ART, ARTEMIS, AIMS & LOSS STOP

**UNSURPASSED CONTROL
FROM RECEIVAL TO AFTER-HOURS**

24 HOUR RISK CONTROL

ART is the first independent stock management system of its kind and was developed to incorporate all grading criteria and daily transactional information from the client into a complete solution. The **ART** software functions as the front end to an in-bin laser architecture* that provides continuous measurements of stock levels inside the grain storage bins. All movements within storage bins are recorded on a single bin history page and compared daily with the matching transactions for the relative vessel. This information is readily available to head office and easily distributed. **ART** allows you to manage risk like never before, giving you unparalleled control and security.

* ART Lite is the exception.

ART OFFERS THE FOLLOWING:

- A real time knowledge of stock levels inside bins.
- Daily reconciliations between both physical and recorded stock
- Alarms on after hour movements inside storage bins.
- An indicator of possible illegal storage or capacity theft.
- Site operating times with manager log-on and log-off function.
- A control for overtime worked on site.
- Surplus/shortage management and deciding when to sell or buy.
- A head office awareness of actions taken on site.
- Determination of statistics like available capacity, bin occupation and fumigation history.
- An easily accessible database with stock reports available in Excel and Lotus formats.

ART is available in three versions. **ART Lite**, **ART** and **ART+**. Each of these solutions are applicable to different sized silo bins. The numbering on the illustration below correlates to the numbering of the following solutions:

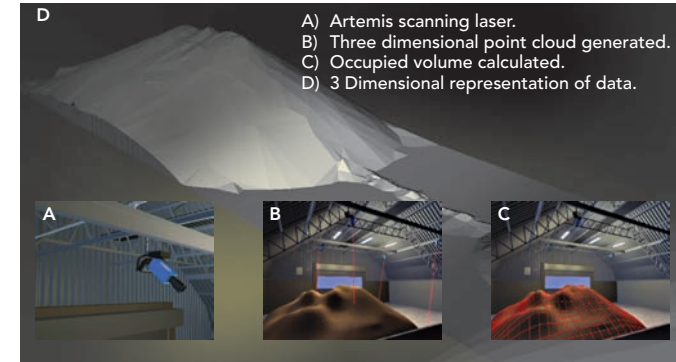
0) **ART^{Lite}** : **ART Lite** is the ART solution at its most basic. No in-bin laser architecture is installed as all measurements are taken manually. This information is entered by an operator into relevant fields on the **ART Lite** user interface. Basic bin profiles are projected utilising flow dynamics and by keeping track of movement in the bin. **ART Lite** is recommended for small silo bins only.

1) **ART** : **ART** is the original solution that was developed to address the shortfalls inherent in traditional methods of risk management in the grain industry. The **ART** solution is comprised of a stationary laser that is mounted at the top of a silo bin. The laser constantly measures the grain level and sends this information directly to the **ART** software where it is recorded and displayed on screen. Basic bin profiles are projected utilising flow dynamics and by keeping track of movement in the bin. **ART** is recommended for small to medium sized silo bins.

2) **ART⁺** : **ART+** is the next step in a development curve for **ART**. A single-axis in-bin laser architecture replaces the stationary laser to ensure that an accurate profile is recorded in large to very large bins where the significantly larger surface areas necessitate exact profile accuracy.

3) **Artemis**: Ronin Grain Management Solutions has designed the **ARTEMIS** multi-axis laser scanning system to scan large areas in grain bunkers and bulk handling warehouses.

By applying the **ARTEMIS** solution you are able to dynamically calculate the occupied volume inside a storage bunker or warehouse. Data from each **ARTEMIS** multi-axis laser is imported by the on-site **ARTEMIS** computer where all calculations and comparisons to book stock masses are made. Monitoring movement and volume in a bunker has never been easier.



AIMS Moment in Time Audits

4) **Aims** : By utilising the **AIMS** system our operators conduct speedy and accurate moment in time audits, displacement audits as well as supply verification audits indoor or outdoors. These audits are of huge value to all bulk commodity handlers as ships, railway and road transport can be planned with greater ease. **AIMS** audits are done with laser range finders that are mounted on top of free standing tripods. Mounted on the tri-pods and connected to the lasers are laptop computers running our proprietary Ronin **AIMS** software. The software records and transforms the measurements into a 3D object. Once a survey has been completed an **AIMS** Report will be supplied to the client. Typically an **AIMS** report will contain a 3D product profile and height graphs, along with bulk density* reports and overall volume in metric tons.

* Obtained with the in-house developed Bulk Density Analyser (BDA)

Left: A computer running windows is used as a platform to run ART, AIMS & ARTEMIS software.



NOTE: The number on the image above indicates the number under which a description can be found in the copy.