



# DRONE-DRIVEN INNOVATIONS IN STOCKPILE INVENTORY MANAGEMENT

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# IDENTIFYING THE PROBLEM

## INVENTORY INACCURACIES



What the **books say**  
vs. What the plant manager  
**thinks**  
vs. What we **actually have**

*(How much did you spend  
on vacation?)*

## INFREQUENT MEASUREMENTS



**Limited Reaction Time:**  
Difficult to quickly evaluate  
and address discrepancies

**Time Constraints:**  
Insufficient time before  
EOM/EOQ/EOY to make  
corrections

## LOST TIME + FINGER POINTING



**Time + Energy:** Wasted on  
determining who is "correct"

**Impact on Internal  
Relationships:** Damaging  
interactions and eroding  
mutual trust

*Controller vs. Plant Manager*



# WHY DOES THIS PROBLEM MATTER?



## → Financial Impact

- **Write-Offs:** Discrepancies between yard inventory and book records lead to significant write-offs.
- **Performance Consequences:** Large write-offs can affect performance bonuses and potentially lead to employee terminations.

## → Planning Challenges

- **Insufficient Time:** Limited time before EOM/EOQ/EOY makes it difficult to address issues proactively.
- **Last-Minute “Fixes”:** Quick adjustments to “make it look right” are often incorrect and can have long-term repercussions.

## → Erosion of Trust

- **CFO Trust Issues:** Unexpected large discrepancies at year-end erode trust in controllers.
- **Interdepartmental Skepticism:** Controllers may doubt plant or area manager reports, and plant managers may lose confidence in the QC department.



# DRONE SOLUTIONS: WHAT ARE MY OPTIONS?

## → Do It Yourself

- **In-House Setup:** Use drones and Kespry to measure volumes and manage stockpiles.
- **Flexible Measurement:** Measure as needed with access to your own tools and systems.

## → 3rd Party Measurements

- **Turn-Key Solution:** Utilizes drones for hands-off inventory measurement.
- **Minimal Coordination:** Requires only light interaction for ID piles.
- **Audit & Verification:** Ideal for external audits and company verification.

## → Hybrid Approach

- **Combined Effort:** Your company operates the drone and collects data.
- **Data Processing:** A third-party company processes and calculates the inventories from your data.





# IS THIS SOLUTION PROVEN?

## **Published Evidence:**

Most providers of 3rd party or DIY software packages share case studies demonstrating accuracy and repeatability.

## **Internal Validation:**

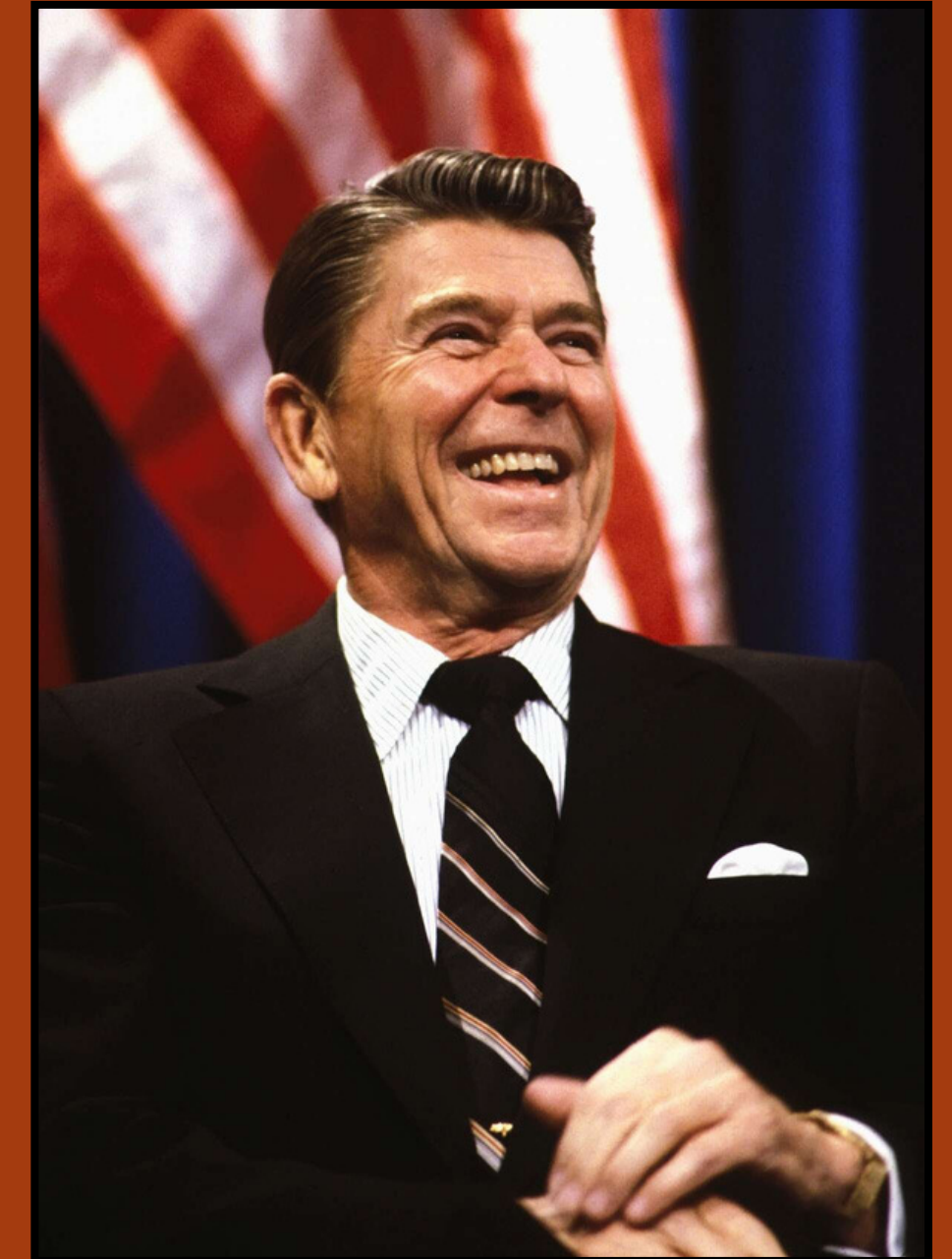
Companies like WestRock and International Paper conduct internal studies to verify accuracy.

## **Market Maturity:**

Industrial innovation is reaching a peak and beginning to stabilize.

15+  
YEARS

drone measurements have  
been utilized



*"Trust, yet verify"*

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# QUESTIONS?

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