TINAMU Analytics

Commodity monitoring with deep tech — precise, traceable, fraud-free & real-time

> 99%

Measured precision · +/- 0.17% error

THE PROBLEM

Commodity owners lack accurate, real-time data on physical inventories of raw materials, semi-finished and finished goods

- Planning uncertainty across logistics, operations, finance and sales
- Lack of accountability, transparency, trust and fraud protection
- Cost and inefficiencies, partially hidden in legacy workarounds

Today's fix are manual checks on site; slow, costly, including operational stoppages, up to 25% error and exposure to fraud

TINAMU SOLUTION

Real-time inventory monitoring as a service, assuring > 99% precise, fraud-free inventory data in real-time

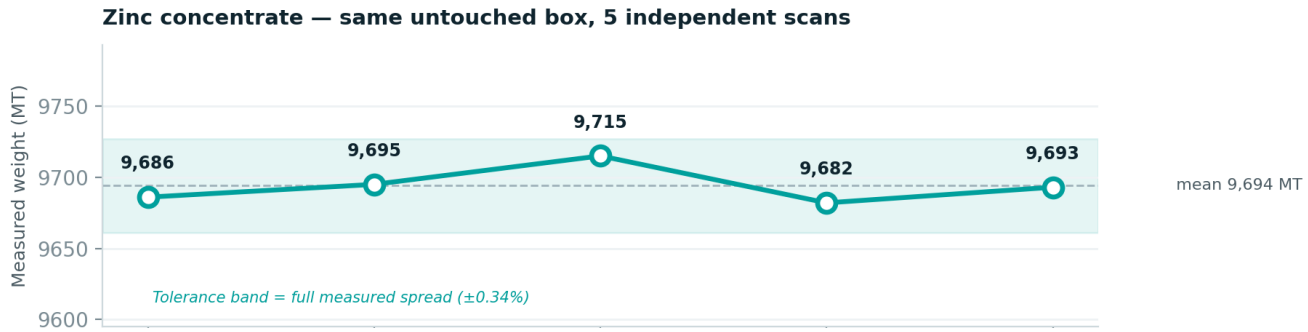
- Planning certainty built on trusted data in real-time (single source of truth)
- Cost improvement, higher production throughput and improved sales
- Baseline for continuous improvements and digitization / Industry 4.0

Trust Through Technology for operational excellence with latest sensor and Physical AI at over 99% precision

PROOF OF PRECISION — 5 scans of the same untouched box

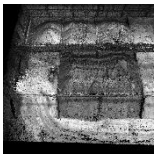
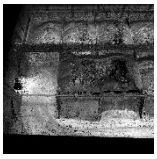
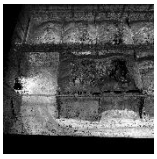
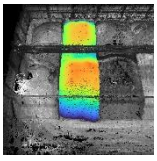
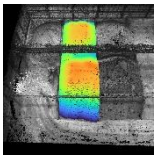
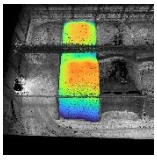
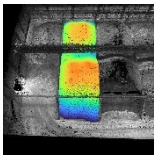
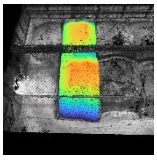
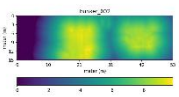
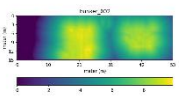
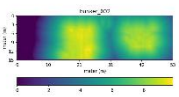
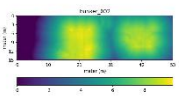
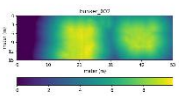
The box was not touched between scans, so inventory is physically identical each time. The full spread across measures are errors, yielding 99.7% precision

Material	CoO	Density	Day 1	Day 2	Day 3	Day 4	Day 5	Variance = error	Precision
Zinc concentrate	Peru	2.177 MT/m³	9,686 MT	9,695 MT	9,715 MT	9,682 MT	9,693 MT	+/- 0.17%	99.66%



CAPTURED IN REAL-TIME · PROCESSED AUTOMATICALLY (TINAMU Tools + Analytics)

Each scan generates three automatically processed outputs: a digital twin, a visualization of the material in the box, and a ground-area view with measurements.

	Day 1	Day 2	Day 3	Day 4	Day 5
Digital Twin (captured with TINAMU Tools; LiDAR on drone or as handheld)					
Physical inventory (automatically processed with TINAMU Analytics)					
Detailed measurements (coloured material and box dimensions)					

TINAMU — Trust Your Data Through Technology. Inventory monitoring precision validated on an untouched zinc-concentrate box, 5 independent scans