

## FORTAI **INNOVATION** HIGHLIGHT

# FORTAL

## **COMPANY OVERVIEW**

FORTAI is an advanced technology and product manufacturing company focused on delivering innovative value chain management and savings to the mining industry while providing profitable growth to investors and shareholders.

FORTAI developed the ADMMIT® family of products designed to transform how mines are designed and run.

## LOCATION: SUDBURY, ON

## **TECHNOLOGY**



## **Internet of Things**

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### LACK OF MANAGEMENT CAUSING **UNACCOUNTED INVENTORIES**

EXPLOSIVES ONLY

SmartCube

WARNING 2,000 kg

EXPLOSIVES ONLY

SmartCube

ADMMIT is delivered to global mining companies with underground and surface operations that want to improve inventory management, security, and safety, while at the same time increasing production output, dependability, and just-in-time delivery of material to work locations. Many mining operations lose track of material once they're distributed from the central warehouse, creating unaccounted inventories. Mining operations are interrupted or delayed because the right materials are not available and therefore must be expedited to the work site. This causes significant financial loss when untracked and unused inventories are scrapped at the end of the mining operation.

## THE ADMMIT SOLUTION

The ADMMIT platform eliminates material loss and removes unaccounted or "shadow" inventory of roughly \$10M to \$20M per mine. ADMMIT also reduces inventory carrying costs, improves accuracy and transparency for all production materials, transforms mining processes/ design, makes operations more predictable, increases face time and the probability of meeting production targets, and increases availability (uptime) with utilization of assets (e.g. machines).

#### **TESTING FORTAI'S NETWORK COMMUNICATION CAPABILITIES**

Through a CENGN project, FORTAI tested their SmartCube and SmartModule devices to validate each devices' network communication capabilities under real mining conditions, in the CENGN Smart Mining Living Lab located at the NORCAT mining facility. FORTAI efficiently pivoted their current platform's cloud capacity after identifying some challenges during scenario testing. The SmartCube hardware monitored logs and communicated with their platform stored on the CENGN Cloud using the NORCAT/Nokia LTE network. Platform reliability tests were performed to simulate possible scenarios on-site and FORTAI demonstrated that their strong wireless network connectivity and hardware capacity is fully functional within mining operations.

"While at **CENGN**, we completed allour hardware and communications testing; everything went well, and the testing was completed successfully."

> **Trang Tran-Valade** President, FORTAI