



ASSESS AND IMPROVE THE  
PERFORMANCE OF YOUR DMS  
with real-time tracing  
and monitoring.



DMS Auditing System

# AUTOMATED AND DIGITISED SOLUTIONS

ENABLING REAL-TIME PROCESS OPTIMISATION

**01**

PROJECT BASIC OVERVIEW

**02**

INTRODUCTION

**03**

SYSTEM OVERVIEW

**04**

TRACER SELECTION

**05**

EQUIPMENT SELECTION

**06**

CONTACT

# AUTOMATED AND DIGITISED SOLUTIONS



## PROJECT OBJECTIVE

Automated and digitised DMS auditing system, enabling online process control and machine efficiency. Assess, optimise and maximise ROI.



## PROJECT DURATION

ESTIMATED DURATION –  
6 to 8 weeks



## PROJECT SPECIFIC REQUIREMENTS

- + Supply, install and integrate an automated RFID DMS auditing system.
- + RFID specific density tracers, 1.1 – 4.7 RD.
- + Size ranges: 4 mm – 50 mm

# DMS AUDITING AND OPTIMISATION

## INTRODUCTION

### MINE SMARTER, NOT HARDER

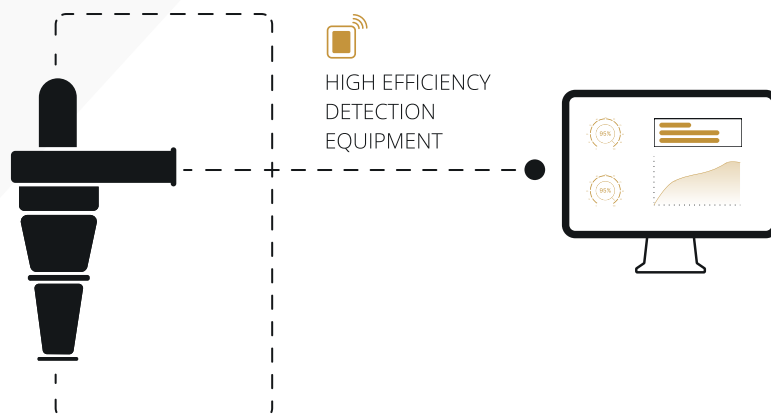
On-line QA/QC solution to assess the real-time performance of DMC and maximise your ROI.

### PROPRIETARY RFID TECHNOLOGIES

- + In-house developed RFID tracer, detection hardware and software.
- + Real-time management service and web interface ensure optimal metallurgical performance 24/7.

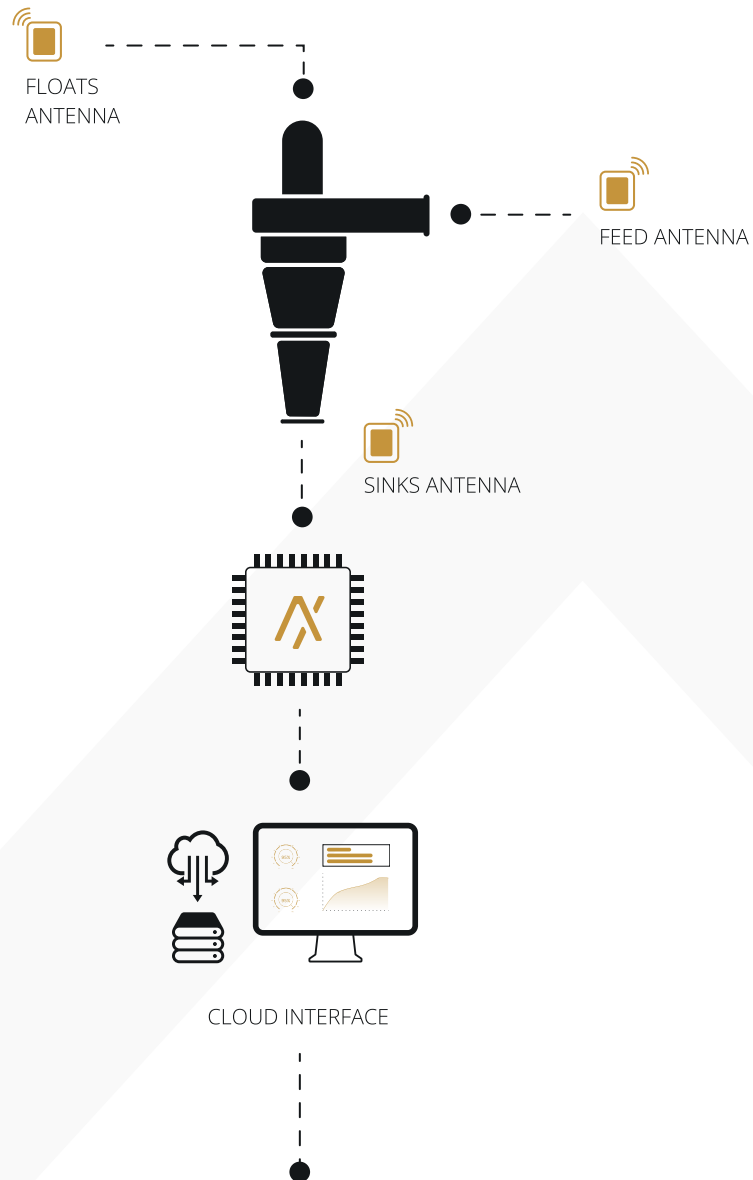
### BENEFITS

- + Live running plant testing.
- + Real-time results.
- + Application specific particle size and density RFID tracers.
- + Real-time monitoring of feed blend to the DMS plant.
- + Modern technology for plant performance monitoring.
- + Performance data (efficiency curves) for individual and combined size classes.

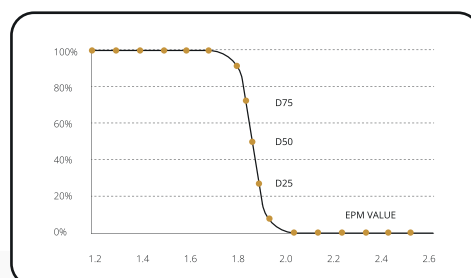


# SORTER AUDITING AND OPTIMISATION

## SYSTEM OVERVIEW



## ONLINE PARTITION CURVE



- + EPM VALUE
- + D25, D50, D75
- + CUT POINT

# TRACERS SELECTION

## RFID VARIOUS DENSITY TRACERS

The RFID density tracers provide online and accurate results for your dense medium beneficiation processes.

This enables real-time process control with the STARK proprietary dense media optimisation system.

- + Embedded with unique RFID tags
- + Sizes ranging from 4 – 50 mm
- + Relative density ranging from 1.3 – 4.7 RD
- + Density increments of 0.05 RD
- + Lead free
- + Each tracer undergoes a verified QC/QA process
- + Suitable with STARK dense media optimisation system or machine performance audit



# EQUIPMENT SELECTION

## DETECTION EQUIPMENT | ANT2501

POLARISATION TYPE:

CIRCULAR

FORM FACTOR:

STATIONARY FIXED

CONNECTOR TYPE:

TNC FEMALE

CONNECTION LOCATION:

BACK PANEL MOUNTED

PRIMARY FREQUENCY RANGE:

915 MHZ – 919 MHZ

VSWR  $\leq$  1.8:1:

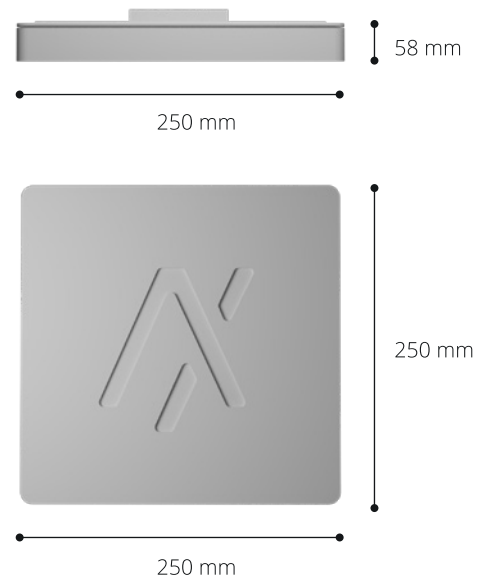
1.3 – 1.5

INPUT IMPEDANCE:

50 OHM

DIMENSIONS:

250 MM X 250 MM X 58 MM / L X B X H



Market leading, in-house designed, engineered and manufactured, high-efficiency smart antennas. Compatible with Audex's RFID auditing solutions.

Robust radio frequency antennas designed for superior readability and overall increased durability, enabling high RFID tag read rates.



# EQUIPMENT SELECTION

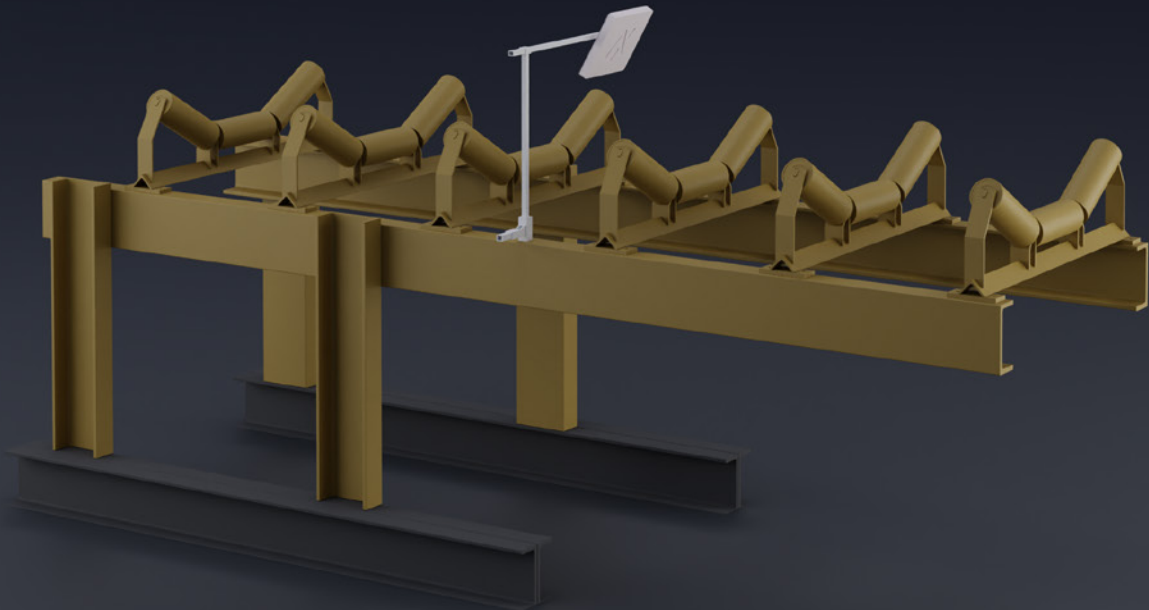
DETECTION EQUIPMENT | HARDWARE ATTACHMENT



## OVER CONVEYOR DETECTION

Custom engineered and accessible fixing methods to ensure safe and easily maintained hardware.

Adjustable mounting positions for optimal readability and quickest read rates.





# EQUIPMENT SELECTION

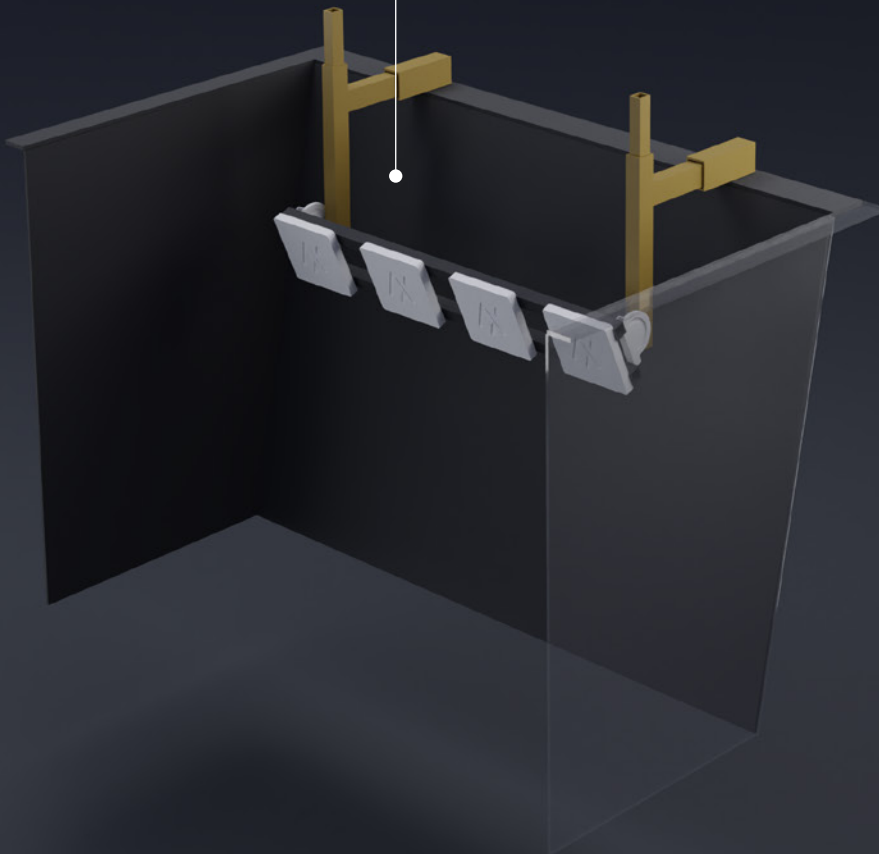
DETECTION EQUIPMENT | HARDWARE ATTACHMENT



## SCREEN DISCHARGE CHUTE

Custom engineered and accessible fixing methods to ensure safe and easily maintained hardware.

Adjustable mounting positions for optimal readability and quickest read rates.



# STARK

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GET IN TOUCH!