



Strengthening the Supply Chain RFID for IRON ORE Tracking – A Live Case



Customer Background

Sesa Goa Limited established in 1954 exports iron ore, fines and lumps. The transportation of ore span a complex network of mines, transit plots and ports located on both the east and west coasts of India. The need to be able to effectively control the logistics across these routes led to the adoption of the RFID technology.

Highlights of Benefits

- ❖ **Reduction of 55% of transactional time at the weighbridge**
- ❖ **Automatic upload into the SAP ERP system with less than 100% Connectivity**
- ❖ **Online DMG E-Permit system integrated**
- ❖ **Integrated with SAP ERP System**
- ❖ **Authentic & Reliable Information**
- ❖ **Automated & Granular Reports**
- ❖ **Real Time SMS Alerts**
- ❖ **100% Secure Data**
- ❖ **Faster Contractor Payouts**

The Challenges

The objective for Sesa Goa Limited was to automate the existing system of ore tracking which was subject to manual errors. Besides this, with network connectivity being an issue at the mines and the remote destination points, it was practically difficult to reconcile the transported ore on a real time basis thus inherently having an opportunity for potential pilferage. The existing harsh environment was consequential to the failure of various other similar systems.

The Solution

Recognizing this need, Perceptron Software Labs customized the CHASE™ framework for the mining vertical. The Ore Tracking System (OTS) was installed at the weighbridges, the security gates and the destination points of Sesa's operations. With passive RFID tags mounted on the trucks and RF hardware installed at each of these points, PSL was able to log critical process level information in real time. The framework was also extended to support peripheral devices like Weighbridges, Printers, Traffic Lights, Fingerprint Readers (as a safety requirement to authenticate valid drivers as they enter the mines) and Boom Barriers. OTS has been integrated with the DMG E-Permit system and SAP ERP.

With the success of OTS for over two years, Sesa has leveraged the advantages of RFID to streamline and enhance logistics efficiency.

Hardware Partners



MOTOROLA



Results

Jotted below are only a few of the benefits derived from the OTS:

- ✚ **Unmanned weighbridges at destination points**
- ✚ **Increase in number of trucks handled per weighbridge**
- ✚ **Process validation for enhanced control**
- ✚ **100% data accuracy and automation**