RAJSHREE SUGAR IMPLEMENTS
MATRIX VIDEO SURVEILLANCE SOLUTION TO
AUTOMATE MATERIAL MANAGEMENT SYSTEM

Evidence Management System Using Video Surveillance to
Improve Productivity and Prevent Losses

PROJECT HIGHLIGHTS
- Integration: Matrix VMS with Weighbridge and SAP
- Why Matrix: Customized Solution without Changing Existing Processes
- IP Cameras: Capture Snapshot from Various Angles at Weighbridge and General Surveillance
- Video Recorders: Connect Camera and Switch (Manual Call Button) for LPR Trigger

COMPANY PROFILE:
Rajshree Sugars and Chemicals Limited (RSCL) is a public limited company listed on National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). The company has interests across integrated fields such as Sugar, Distillery, Power and Biotechnology.

RSCL, with its Head Office in Coimbatore, has three, modern sugarcane based integrated biorefinery complexes located at Varadaraj Nagar in Theni district, Mundiampakkam in Villupuram district, Gingee in Thiruvannamalai district of Tamil Nadu and one unit at Zaheerabad in Medak district of Andhra Pradesh with easy access to Tuticorin, Chennai and Visakhapatnam ports.
BUSINESS CHALLENGE:
With the increase in demand of processed sugar and distillery products in India and International market, it was difficult for RSCL to manage inflow/outflow of raw material with speed and accuracy using manual processes.

Moreover, RSCL was coming up with two more units at different locations to increase their operational capability to match the growing demand. With its dependency on seasonal agricultural products such as sugarcane, whose short life span made it necessary to automate their material inflow/outflow process for higher processing capacity and improved accuracy.

Despite having most of the system in place, there were some obstacles such as manual verification of vehicle, manual entry of critical data directly in ERP - etc., which had scope for manipulation of data. This led to disputes in payment and difficulty in auditing process.

Due to these complex requirements, RSCL was not only looking for just a video surveillance system, but for a solution that could support implementation of evidence management system to streamline and automate the entire material inflow/outflow process.

MATRIX SOLUTION
Matrix provided Video Surveillance Solution as a single interface to connect Weighbridge, SAP and Video Management Software to work in sync and function as an Evidence Management System. This project demanded certain modifications in Matrix VMS to adapt to the flow of processes at RSCL. Designing of the solution started with a joint site survey by Matrix, RSCL IT Head and System Integrator. After addressing some common concerns such as standardized number plates, integration of Matrix VMS with SAP database and customized reports, timeline for implementation was decided.

PROCESS FLOW
1. Vehicle Entry
2. License Plate Detection and Recognition
3. Vehicle at Weighbridge
4. Snapshots
5. Sync with SAP/ERP
6. Generate Receipt / Report

REPORT GENERATION
- Vehicle Number: 3080 9441
- Contractor Name: YY2
- Transportation: LOADED VEHICLE WEIGHT: 3000 KG
- Shipment Date: 01/01/2024
- Material Type: Rasmalai
- Entry Date: 01/01/2024
- Exit Date: 01/01/2024

7. Vehicle Exit
There are three important stations in the entire process, starting from the entry station, to the weighbridge, and finally the exit area.

Entry Reception Area: 2MP Cameras are installed to capture every vehicle entering the premises. It is connected to the VMS Server via SATATYA HVR0408P at reception area.

Weighbridge Area: Three 1.3MP Cameras are connected to cover the weighbridge area when vehicle comes on the platform. It captures face of the driver, material loaded and number plate of vehicle. All these Cameras are directly connected to the main VMS Server.

Exit Area: Same process is repeated at the exit point to fetch the data of the empty vehicle. 1.3MP Cameras take snapshot of the vehicle from same direction. It is connected via SATATYA HVR1624P to the main VMS Server.

**BENEFITS**

- Prevention of Loss
- Higher Yield with Improved Productivity
- Reduction of Operation Cost

**PRODUCTS**

<table>
<thead>
<tr>
<th>Matrix Products</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATATYA GE PLATFORM</td>
<td>VMS PLATFORM WITH 20 CAMERA LICENSES</td>
</tr>
<tr>
<td>LPR CAM 3</td>
<td>LICENSES FOR LICENSE PLATE DETECTION</td>
</tr>
<tr>
<td>SATATYA CIBR13FL40CW</td>
<td>1.3MP IP BULLET CAMERA</td>
</tr>
<tr>
<td>SATATYA CIBR20VL12CWP</td>
<td>2MP VARIFOCAL IP BULLET CAMERA</td>
</tr>
<tr>
<td>SATATYA HVR1624P</td>
<td>24-CHANNEL HYBRID VIDEO RECORDER WITH 24TB STORAGE SUPPORT</td>
</tr>
</tbody>
</table>

**ABOUT MATRIX**

Established in 1991, Matrix is a leader in Security and Telecom solutions for modern businesses and enterprises. As an innovative, technology-driven and customer-focused organization, the company is committed to keeping pace with the revolutions in the Security and Telecom industries. With around 40% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products like Video Surveillance Systems - Video Management System, Network Video Recorder and IP Camera, Access Control and Time-Attendance systems as well as Telecom solutions such as Unified Communications, IP-PBX, Universal Gateways, VoIP and GSM Gateways and Communication Endpoints. These solutions are feature-rich, reliable and conform to international standards. Having global footprints in Asia, Europe, North America, South America, and Africa through an extensive network of more than 2,500 channel partners, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration of customers representing the entire spectrum of industries. Matrix has won many international awards for its innovative products.

**For further information, please contact:**

**MATRIX COMSEC**

Head Office
394-GIDC, Makarpura, Vadodara-390 010, India.
Ph: +91 265 26137222
E-mail: Inquiry@MatrixComSec.com

Manufacturing
19-GIDC, Waghodia, Dist. Vadodara-391 760, India.
Ph: +91 7567875244

www.MatrixVideoSurveillance.com
Call: 1800-258-7747

Due to continuous technology upgradations, product specifications are subject to change without notice.