# SCAD Software

## MANUFACTURING CASE STUDIES Integration with Low Level Plant Systems



Inspired by life

Sappi is a global diversified woodfibre company focused on providing dissolving pulp, packaging and speciality papers, graphic papers, as well as biomaterials and biochemicals to direct and indirect customer base across more than 150 countries.

Amongst the 1,000 plus legacy systems inside their Enstra Paper Mill, they had customer facing systems that would allow sales people" to "customer facing systems for sales people. These orders will then move through to the plant where the paper will be manufactured, cut, wrapped (e.g. reams of paper) and barcoded with motion detection ink jet printers and packed and wrapped automatically on pallets based on the ordering system.

The systems range from Operational Business Systems through to low level systems that integrated closely with the SCADA systems that would drive the plant. They also had weigh bridges and many other types of pieces of plant that had to be controlled and managed by the systems.

Having initially supplied additional technical resources, they approach us to work alongside a couple of other suppliers to rewriting many of these legacy systems into modern systems. The majority of the legacy systems had been developed in Oracle forms, Visual Basic and dBase. This whole initiative was part of their Y2K Readiness Programme.



#### DE BEERS GROUP

De Beers Group is an international corporation that specialises in diamond mining, diamond exploitation, diamond retail, diamond trading and industrial diamond manufacturing sectors.

On the back of some existing work, they approach us to help them develop a system that would restrict the level of access and the amount of time that people were allowed in the high risk (red) areas of the mine.

The risk being a combination of safety risk as well as the potential for thefts. This system was designed specifically to reduce the level of access to a very limited time window when maintenance jobs were scheduled.

The system we developed enabled them to schedule preventative maintenance jobs and assign job teams to an individual job. This required complex integration with Siemens and Johnson Controls SCADA system for access control and camera integration. It allowed them to monitor job teams, correlate tasks done in the mine, tagging videos when there were some suspect activities.

The successful system became an integral part of making the mine run seamlessly and limiting losses by theft.

The system was developed and deployed by us in 4 months and was live in the mines for over 10 years.



#### **Huguenot Tunnel**

The Huguenot Tunnel constitutes a major transportation link between the coastal plains of the Western Cape and the interior and is an important part of the National Road network in South Africa.

The almost 4-kilometre-long tunnel reduces the distance between Paarl and Worcester by 11 kilometres, and eliminates a climb of 500 meter over the Du Toits Kloof Pass. The tunnel gives savings in travel time, less wear and tear for vehicles, and a reduction of accidents.

We were chosen to develop a traffic control system for the tunnel. The purpose of this system was to control the traffic and in the event of an accident to divert traffic to safety. Our system also provided motion detection lighting at SOS booths along the way should people break down and have to phone.

This mission critical project involved working closely with another Partner who was commissioned to develop the PLC/SCADA systems that controlled the key infrastructure. As part of our project we needed to build complex integrations with a wide range of systems including the SCADA and PLC based systems.

We are always happy to have a chat, please book a time at:

### www.scadsoftware.com

If we can help great...if we can't, we will say so and we will see if we can point you in the right direction.