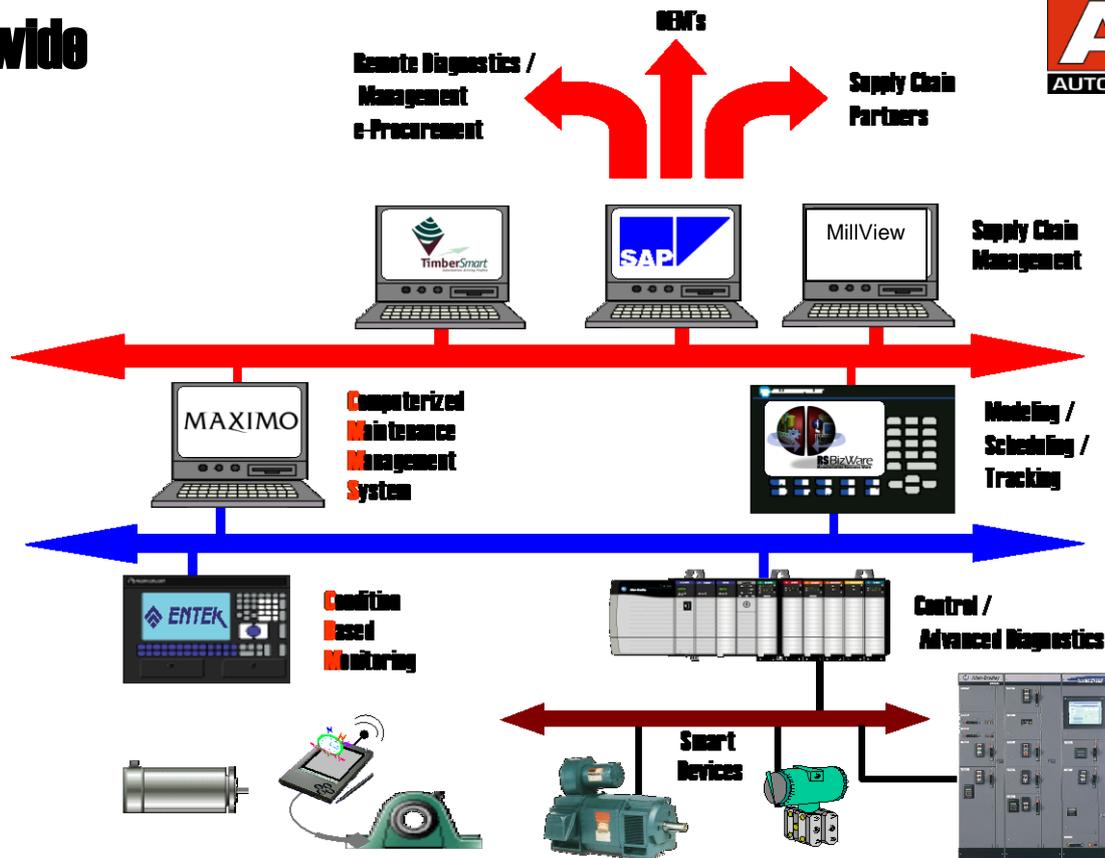# Millwide - e-Manufacturing

Millwide

AE MillView ™ (Millwide Web)

AE MillView is based on providing a Centralised SCADA PC that connects over the entire controls system , The PC comes with unlimited tag licence , multi-user client server (5 in the basic configuration) for access to Millwide reporting via Internet Explorer . This central PC will provide HMI screens for the Main Sawmill production line and connectivity to the various optimising reporting systems and connectivity to any of A&E 's downstream software products (ie:AE Setworks , BinView (Sorter Software) ,EdgerView ,TallyView , Dryspec /DryZone (Kilns) ,BoilerView etc. Features include Production Reporting ,Trending ,Conversion, Alarming and Downtime reports .The base system also incorporates Cellular Text alarming for remote monitoring of high risk equipment and alarm conditions Add on options such as OEE for Maintenance scheduling and Energy Management , Condition Based Monitoring

A&E has completed many installations that communicate over Ethernet into a mill reporting system . On smaller sites this may involve integration into the local users IT system such as TimberSmart or for larger applications SAP .Either way A&E can engineer and customise a gate way from real-time sawmill production to a comprehensive MS Access or SQL database .This data can be connected online or polled and uploaded by the IT network.

Ethernet provides a common architecture that is available for data collection, optimisation,controls systems and is supported by every major computer and peripheral manufacturer and will continue to evolve as a long term platform . We recommend you consider a VPN (Virtual Private Network) for remote a access and support , this allows us the ability to carry out software updates easily and email to vendors for support .

Connectivity should be over a hardwired LAN (F/Optic) however for some parts of the plant connectivity is available using wireless technology also . You may wish to also consider Ethernet based video systems for capture of production related information , we can offer a range of Ethernet IP compatible cameras and multiplexes from Panasonic .

Our MillView ™ Management system will enable you carry out some of the following functions:

- Collect data from Ethernet based PLCs
  (Alarms ,downtime etc)

- Collect comprehensive information in MS Access
  or SQL Database

- Collect production information from each machine
  centre (piece count, grades, dimensions ,packet data etc)

- Trend and graph Mill production and analyize versus
  previous days production

- Monitor data and alarms in real-time

- Customer created reports in Excel, Crystal Reports

- Autolog /MPM Interface for Log studies and Simulation,
  Compare actual results of Optimisation
  Study effects of changing board parameters, wane rules
  , Target dimensions and pricing.

- Send alarms via Cellular text message

- Displaying real-time production information
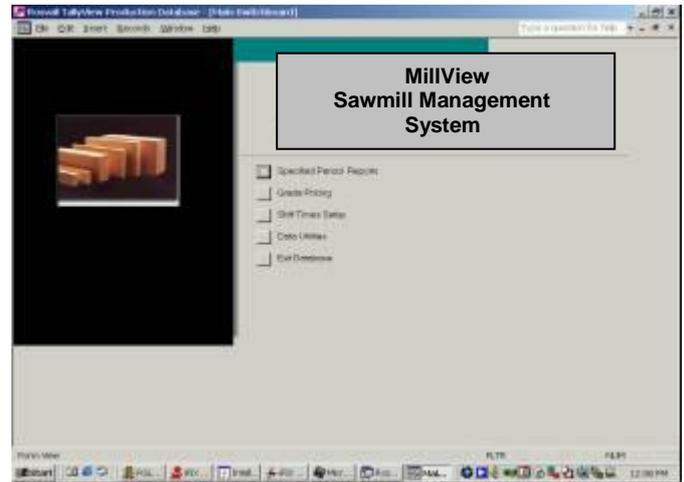
  The Mill View ™ management reporting system can be
  configured on various SCADA platforms inc iFix
  , RSView ,Wonderware and is customized to the clients
  requirements .

HMI – Human machine Interface

  The HMI interface provides operators and production
  Management with a user friendly interface to the
  Control system.

  The maybe password protected to ensure that only
  Qualified personnel may be able to enter relevant data
  That is critical to target production .

  The HMI also reduces the time required for basic
  Troubleshooting,fault analysis and provides access to
  The routine tuning of the Setworks and various timers
 And counters ,
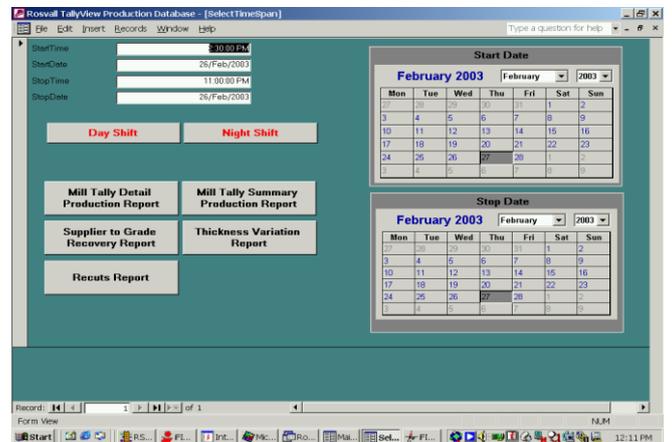
Real-time Display - A&E manufacture a range of super bright LED displays that can be remotely mounted
At various locations throughout the mill . The super bright 100mm high displays can be seen
From upto 30 metres away and can display alarms, production, piece counts, lug speeds and
Bin status and various other information that can be communicated to factory floor personnel

Using OEE to Increase Efficiencies

OEE - Drilling into the data

Root Cause
Analysis
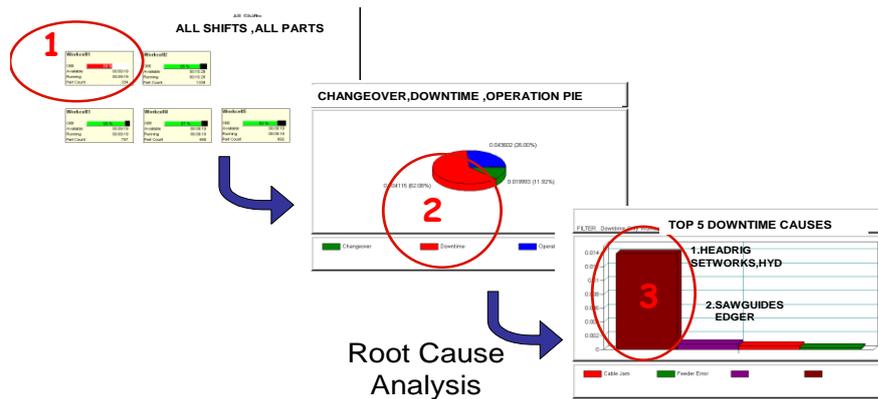
 MillView ™ - OEE enables your mill the ability to divided your process into multiple
Sectors and drill down on performance inefficiencies . This means identifying
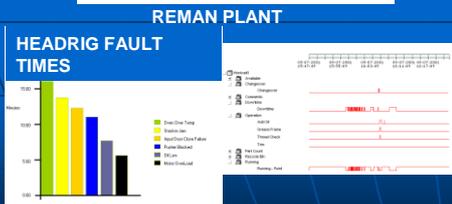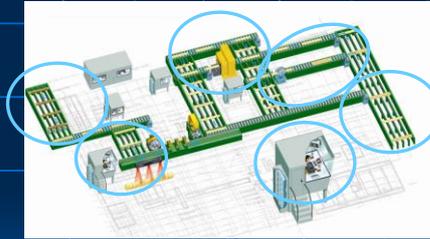Causes of downtime caused through operators, plant machinery , electrical
Equipment .

OEE enables Mill management and maintenance personnel to identify re –occurring
Problems that contribute to plant downtime.

Sawmill Downtime
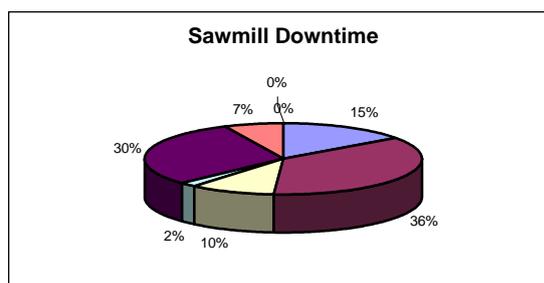
Using OEE to Increase Efficiencies

Asset Model & Report Levels

- The factory is broken down into a plant model.

- Reports are been broken down into levels.

- This allows us to publish data in varying detail and enables users to drill into the right data, quickly.

AE Millwide Software & Control System Architecture