



Automation Services

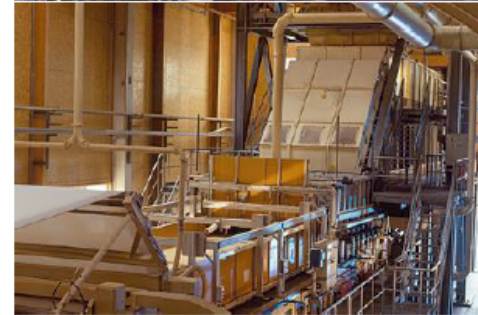
Main drivers for automation upgrades

- Securing runnability by access of spares parts and support, PLC systems end of life cycle
- New generation HMI – operator friendly
- Higher security level for data protection

Automation Services

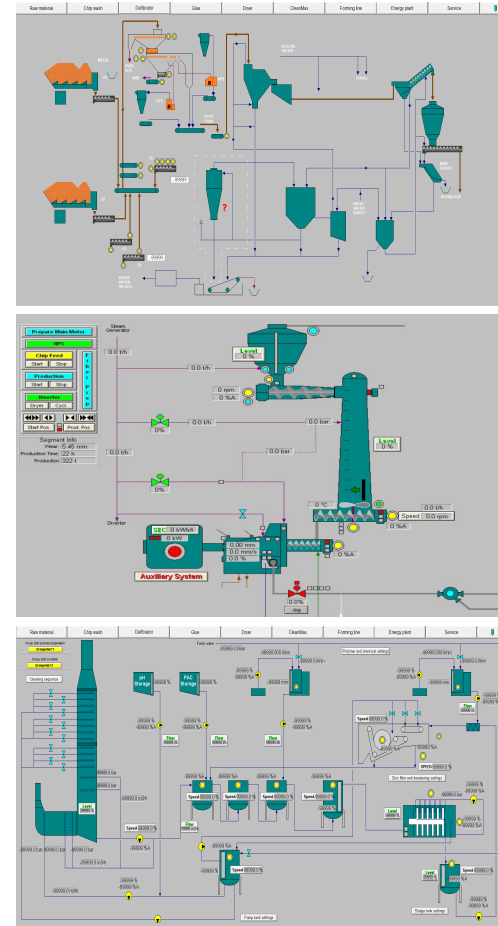
- Scope of services
 - Design and supply of complete systems
 - Complete lines, from wood yard to panel handling, including refiner and press systems
 - Including complete process descriptions
 - Using latest technology

- Complete plant control system upgrade, from MDF, PB and OSB
 - For all OEM machine supplier, Sunds Defibrator, Metso, Siempelkamp, Dieffenbacher and Küsters lines
 - HMI
 - PLC
 - MCC



HMI upgrades

- Latest software (e.g Intouch) for better data handling and visibility
- History and production data management
- Improved operator interface
- Modern protocol for data transfer



PLC upgrades

- Replaced with latest model PLC e.g Siemens S7/ 1500
- Update of PLC program
- Faster and more reliable system
- Bigger memory
- Securing runnability by access of spares parts
- Enable remote support



MCC upgrades

- Replaced components in existing cabinets
- Replace DC drives with VFD drives
- Securing runnability by access of spares parts



Implementation steps

- Information collection existing system
 - Brand and version of software
 - Communication system, verification of new system vs. old system compatibility
 - Agree on scope of upgrade
- New design based on data collection
 - New hardware for HMI/ PLC and MCC
 - New program
 - Based on dialogue with customer
- Installation and start-up
 - Supervision of installation
 - Start-up by experience SUNDS automation team
 - Established procedures to secure trouble free start up

