

CHIP THICKNESS UNIFORMITY

CLIENT: Scott Paper Company
LOCATION: Mobile, Alabama

The scope of this project was to provide a new scalping screen system, a new chip uniformity system, and a chip exporting system. The mill produces 100% of its chip supply using two drum debarking lines. The scalping screen system screens out overs prior to going to two existing outstocking and reclaiming systems, one hardwood and one softwood. The overs are reduced by a shredder and returned to the chip flow. The chip uniformity system consists of four lines of gyratory, disc, ADS, and slicer equipment. Two lines handle hardwood and two handle softwood. The system handles a total of 260 BDT per hour. The screen system is incorporated into an existing screen building and replaces four Retec gyratory screens. All the systems are controlled by a Modicon 984B PLC system.

Note: The entire project had to be built in the existing screen room without shutting down the existing system. The chip exporting system was provided by designing means of loading chip trucks with screened chips. It also included a switch system to allow for species to be changed on the conveying system.

SCOPE OF ENGINEERING SERVICES PROVIDED TO SCOTT PAPER COMPANY:

- I. Preliminary Engineering
 - a. Developed a new approach to the project by laying out the systems to combine the existing conveying and structural systems with the new equipment.
- II. Detailed Engineering
 - a. Provided engineering including all mechanical, civil, structural, electrical, and control design.
 - b. Wrote technical specifications for all purchased equipment, fabrication, and installation services. Contracts written for lump sum and unit prices depending on activity.
 - c. Assisted owner in selection of all vendor equipment and worked with owner's purchasing department in procuring all equipment, fabrication, and labor required for the project.
 - d. Provided on-site construction management.

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ENGINEERING SCOPE:

Detailed Engineering

Demolition

Site preparation

- Piling
- Grading, paving, and drainage
- Fire protection

Chip conveying

Screen room

Structural

Architectural

Chip screening (4-line system)

Selection of equipment

Electrical power distribution control (PLC)

Field engineering

Scheduling