HINZ
A Rockwell Automation Company

Blue Ridge Lumber (1981) Ltd.
Secondary Refinery Upgrade

The Client:

Blue Ridge Lumber (1981) Ltd. owns and operates a medium fiberboard plant in Blue Ridge, Alberta, about 20 km east of Whitecourt. The plant is currently rated at the sixth largest in the world and will likely become the second largest in the world after this upgrade. Blue Ridge Lumber Ltd. believes that high quality fiberboard is the key to world markets in a very competitive environment.

The Requirement:

Blue Ridge Lumber produces medium density fiberboard used primarily in the manufacturing of furniture and cabinets. The board is manufactured using raw material (pulp chips and planer shavings) which is softened with steam and run through a machine (de-fibrator) to produce individual fibers which are then infused with resin and pressed into a high quality board. The client found the product could be improved if another refiner was used in series to achieve a more uniform fiber. The secondary process would eliminate oversized fibers found in the board.

The addition of the secondary refiner also required a more complex control scheme. The existing control hardware was a vintage mixture from previous years and was becoming difficult to expand and maintain. The advent of personnel computer-based hardware typically found in today's control systems seemed very attractive. Hinz was requested to work with Blue Ridge personnel to come up with a cost effective solution.

The Design Solution:

The fiberboard plant control system contained a mixture of PLCs, dedicated PID controllers, and hardwired pushbuttons and lamps to provide operator interface functionality. Hinz worked with Blue Ridge Lumber to design a PC-based network solution which integrated all components of the existing control system while ensuring flexibility & ease of expansion when upgrading other areas of the plant. The vision into the future was to eventually replace all hardwired functions in the rest of the main control room as part of the new PC network solution. The ease of expansion would require low cost, low maintenance and some innovative operating windows which the operations people could now help design.

Future expansions could now easily take place. More information could now be displayed to the operator. More flexibility in the operations is now inherent due to the networking advantage of bringing up multiple process windows of at multiple operator stations. It is now possible for operators to view another process to provide assistance to a fellow operator.

Future maintenance on such systems becomes easy. A new operator display can be configured offline complete with all dynamic data and downloaded to the operator station without interference to any operations.

Future gathering of performance data on the plant process can now be transported across to other computing platforms. The information could represent current process conditions or conditions which occurred last month and information could be used by engineering, accounting or management.

The upgrade at Blue Ridge using the PC network solution will make future expansions low cost, minimize future maintenance and troubleshooting time, and provide more information flexibility. These all contribute to making Blue Ridge a more profitable manufacturing facility.

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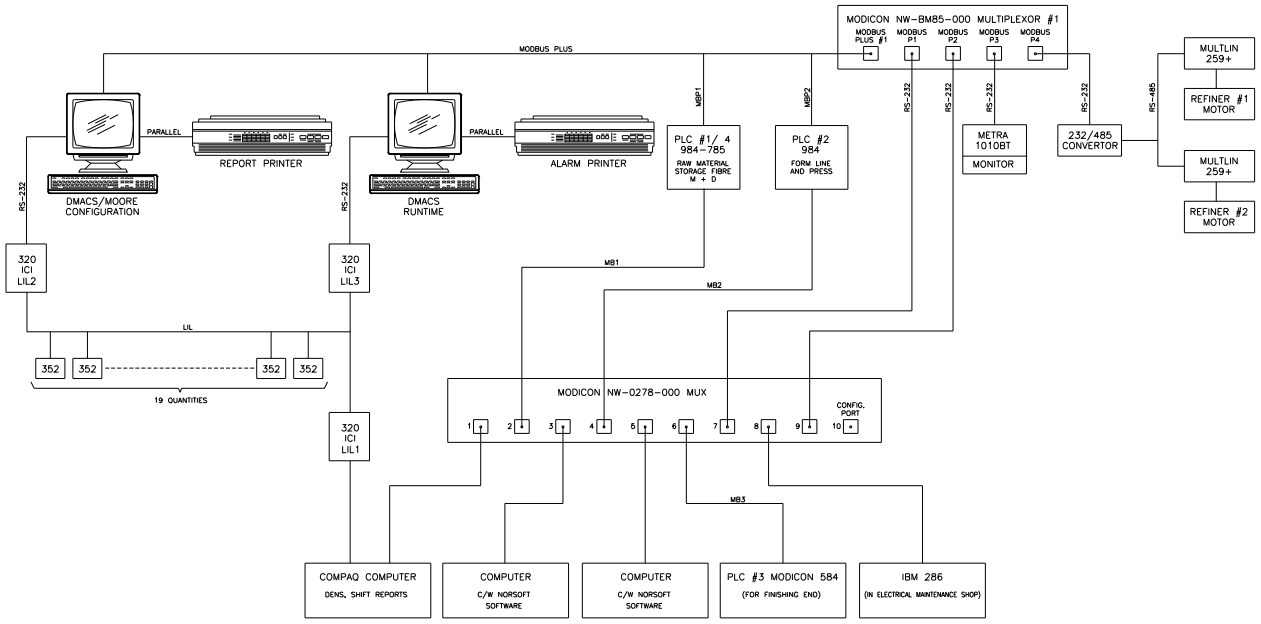

System Specifications:

- 2 - Inte-color 486-33 Industrial PCs
- Modbus-Plus Networking
- RS-232 Link to Moore LIL
- Modicon 984-785 PLC
- FIX/DMACS
- Modicon 984-685 PLC

For further information or to contact a Hinz office near you, please check our website at:

www.hinz.com