

Project Profile

Project: <u>No 5 Recovery Boiler Burner Management System</u>	Man hours: <u>6,700</u>
Location: <u>Carter Holt Harvey - Kinleith Mill Tokoroa</u>	Duration: <u>4 Months</u>
Client: <u>Carter Holt Harvey</u>	Completion: <u>September-05</u>
Consultant: <u>Carter Holt Harvey</u>	Approximate Value: <u>\$500,000 +</u>
Project type: <u>Negotiated Installation Rates</u>	

Description of Site

The Carter Holt Harvey Mill at Kinleith is located approx 8km south of Tokoroa on SH1, and is the largest timber processing site in New Zealand.

Kinleith produces approx 1100 tonnes of kraft paper and 730 tonnes of baled pulp per day for either export, or local markets from wood chips.

Description of Project

The No. 5 Recovery Boiler burns by product waste from the pulp process to produce steam. The boiler is fueled on startup by a gas and oil fuel combination. When the boiler reaches operating temperature, a chemical by product from the pulp process called "Black Liquor" is used as fuel and the gas/oil is then shut down. The Black Liquor is reduced in the furnace and other waste chemicals are reclaimed. Steam is a by product and is used throughout the mill for heating and drying pulp and paper.

The No. 5 Recovery Boiler BMS Upgrade involved the complete rewire of the Burner Management System with multi pair instrument cable. Approximately 17,000 metres of instrument cable was installed including the project with approx 5,000 metres of 600-1000v power and control cable being installed. Additional cable support systems were installed where necessary. The installation of a new Gosfern Quadlog Control System, eight Local Burner control stations, and eight High-energy Igniters were included in the project scope. Approximately 50 replacement control instruments were installed and all Gas and Oil safety shut down valves had new solenoid enclosures manufactured on site by Newpower Electrical staff.

All the above equipment was installed terminated and tested as far as practicable with the boiler in service which involved working in difficult operating conditions and managing the specific safety requirement of an operational boiler environment. A five day shutdown was planned to suit the operational requirements of the site to enable the final tie in and commissioning of the projects work to be completed. Following the commissioning of the work Newpower removed all redundant cables, control cabinets and instruments from the upgraded boiler.

