



New Kiln Complex at Mt Gambier For CHH



The four Windsor kilns in operation at Mt Gambier.

Windsor has commissioned a new timber drying kiln complex for Carter Holt Harvey (CHH) at their Mt Gambier site. The four 31m long Windsor kilns are replacing all the existing kilns onsite.

Three of the kilns are Windsor's specialised ultra high temperature model operating at 170°C with the fourth being a medium temperature model operating at 120°C.

With a holding capacity of 154m³ each, the four kilns will dry in excess of 430,000m³ per annum. The Windsor medium temperature kiln was specifically designed for re-drying CCA product.

Control system features include Dryspec kiln management system and Drytrack ECHO - the fully automated in-kiln moisture content measurement. The ECHO version of Drytrack is for 'hands off' operation, therefore eliminating the need for the kiln operators to

enter the kiln before and after each charge.

Steam heating is supplied from the two CHH boilers integrated with an energy management system to reduce peak loading on the boilers during normal operations. The kilns also feature forced cooled conditioning.

Windsor's Project Engineer Roy Joyce said the project ran very smoothly. Installation was managed by Windsor's Guy Randell, and his skilled team completed this complex project on time. Contractors on this project included Automation and Electronics, Vanden Hurk Engineering for site labour and Dalkar Engineering built the kiln heater coils in Mt Gambier.

Carter Holt Harvey's Project Manager Richard Gosling said "CHH are very pleased with the installation and operation of the new kilns".

News Flash...

Two significant orders have just been received by Windsor during the past month.

Southern Pine Products in New Zealand have ordered the first new CDK (Continuous drying kiln) for their West Coast operation. With completion due in early 2011, their new kiln will be a 47 metre long double track CDK with a holding capacity of 400m³.

KDS Windsor (our USA based JV) are also pleased to announce receiving a significant new order from a major USA based client. The project requires complete design / build of two new direct fired CDK systems with biomass heat plants and a fuel transfer system.

Further CDK orders are expected in the near future and are certain to be upcoming Windsor newsletter stories.

New Features for Dust Collector Packages



A Windsor dust collector ideal for the pMC Controller.

Windsor can now include new and advanced electronic pulse controllers as part of its dust collector systems.

The pMC Master Controller, which Windsor is purchasing from PTronik, has many sophisticated features which monitor all the critical functions of a dust collector.

One of the features of the Controller is On-Demand Cleaning (ODC) – that is, cleaning the dust collector socks in response to dust load. ODC systems switch the cleaning pulses on and off in response to the dust collector pressure drop. This reduces compressed air consumption and wear and tear on the system. Importantly, saving compressed air equates to electrical energy savings and reduced compressor maintenance.

“We completed trials last year, and after installing one of these controllers we found that 40% less compressed air was used compared to the standard unit,” said Industrial Project Engineer Gary Wilson.

In summary, benefits of ODC Systems include lower compressed air consumption, reduced maintenance and improved reliability. In addition pMC Master Controller provides benefits such as data collection and trending, self diagnosis of faults, remote monitoring, configurable alarms etc.

For more details contact Gary Wilson on 03 547 7491, 021 506 643 or via email: gary.wilson@windsor.co.nz



The pMC Controller.

Purafil Asia University – Hong Kong 2010

Purafil media and equipment is distributed and serviced in New Zealand by IPSCO. For more than 40 years Purafil Inc has specialised in the design and manufacture of corrosion and odour control media, equipment and scrubbers.

Purafil runs regular 'Purafil Universities' to train and keep their representatives right up to date, and recently training was held in Hong Kong, which was attended by IPSCO's Harley Dear.

Cooling Ducting for New Glass Melting Furnace



The removable filter wall in front of the attenuators.

One of the world's leading glass bottle manufacturers is completing a new glass melting furnace and bottle machine project in New Zealand.

Heating glass and making glass bottles requires cooling and production air to the melting furnace and bottle making machines. IPSCO, a Windsor Group Company, initially won the contract to supply 18 fans, some up to 185 kW.

The association between Windsor and IPSCO allowed a spring board into additional work and IPSCO secured the contract to supply and install furnace cooling ducting and fan room air- filtration and sound silencing walls.

IPSCO Executive Director, Mark Holm, comments: "With Windsor's assistance IPSCO were easily able to handle the extended scope of the project management with engineering skills and resources available." The ducting and silencing projects had to run in parallel on a fast track delivery and with challenging site access.

"The cooling air ducting is installed around a large glass furnace, and in places measures up to 1.2m in diameter and 50m long," says Windsor Project Engineer Richard Aston. The ducting was fabricated by Windsor over a one month period, and the Windsor site team took a further two months to complete the installation.

The basement fan room posed additional challenges, with inlet air needing efficient filtration and noise reduction in order to comply with health and safety and environmental limits. An added complication was the near zero access and limited space for the silencers. A unique modular silencer and filter cassette design was developed, which enables removal of the silencers for service and cleaning.

This project builds on a 40 year association by IPSCO with the customer. "It is gratifying to be involved in such projects and to be able to bring together the full resources of the Windsor Group," says Mark Holm.

Tenon and Windsor's Servicing Partnership



Pictured from left: Dave Nixon – Windsor designer, Rob Hayes – Tenon Maintenance Fitter, Kaki Waenga – Tenon Maintenance Manager, Lew O'Connor – Tenon Kiln Supervisor, Tim Hutchinson – Windsor Service Engineer.

Tenon Manufacturing Limited is one of New Zealand's leading wood processors, specialising in the manufacture, marketing and distribution of high value Appearance Grade Lumber, Solid Lineal Mouldings and Clear Grade Boards throughout the USA.

Tenon have eight Windsor timber drying kilns located at their Taupo operation, with the first built in 1989 and Kiln 8 completed in 2000. The early kilns started life as direct gas fired, but were later converted to run on geothermal energy. The plant uses both phases of the geothermal fluid, two stages of heat exchanging and fully re-injects the geothermal fluid without pumping.

The Maintenance Team at Taupo are dedicated to the ongoing improvement of the operations on site, including the timber drying facility. Tenon has a computerised maintenance system (SAP) which flags necessary preventative and corrective work orders, which are carried out by the maintenance team with the assistance of Windsor's technicians.

Windsor and Tenon have formed an ongoing successful maintenance partnership, which has been built up over many years.

Windsor's role in servicing Tenon's kilns involves servicing and maintenance of the kiln fans and drives. This includes crack testing and dynamic balancing of axial fans, alignment of couplings and setting up spherical roller bearings on the fan drives. Repair and modifications to kiln pipe work are conducted to code ASME 9.

Kaki Waenga, Tenon's Maintenance Manager, says: "To assist us in getting the best out of our drying kilns, we chose Windsor – they are often able to provide solutions which are cost effective, and they have a full range of experienced team members to tackle any level of work required. Windsor is a very professional company – they always provide good back-up service, they do a professional job and they always finish on time. Documentation of the reports are always at a high level and the communication side is very responsive – there's always someone on hand for advice."

Windsor Enters the Vietnam Market



Gary (left) and David (right) examine Vina Eco components.

Windsor has won an order to supply dust extraction and pneumatic conveying systems for a greenfield site in Vietnam, approximately one hour outside Ho Chi Minh city.

The new particle board factory is being developed by Japanese owned Sumitomo Forestry Company (SFC). Windsor's successful bid was helped by its close association with Nelson Pine Industries, which is owned by SFC.

Vina Eco Board Pty Ltd was established by SFC to construct and operate the new particle board plant which will produce 800m³/day of particle board, primarily for furniture manufacture.

Fabrication of the Windsor Extraction Systems commenced in July at Windsor's Wellington base, with plant start up due for November next year.

Windsor will design, supply and supervise the installation of five extraction and three pneumatic conveying systems. As the name suggests the extraction systems collect dust, while the pneumatic systems transport dust to a collection point.

Windsor's Gary Wilson is the project manager, while David Smith who recently joined Windsor, is the project designer.

"We're expecting to deliver 12 containers of equipment in February 2011, and then we'll provide the installation supervision and commissioning" Gary said. "There's also a lot of Vietnamese content as part of the project – all of the connecting ductwork is designed by Windsor, but it is being manufactured in Vietnam and installed by local contractors."

Windsor has engineered, supplied and commissioned systems for numerous wood based panel plants in Oceania in the past. Windsor's comprehensive range of extraction and pneumatic conveying equipment is designed to be containerised and therefore ideally suited for projects such as the Vina Eco Board project."

New Premises for Windsor



After 35 years in our current head office and factory, it's time for a change. During November and December, Windsor is relocating to a new centralised facility in Porirua. The new factory will have an eight metre crane for the larger fabrications we are now undertaking. We look forward to showing our new premises to our clients.

Our new address is: 3A Broken Hill Road, Porirua. Full contact details are listed on the footer of this newsletter.



Windsor's new facility (comprising both office and factory) at Porirua.