



FilterTalk

FRESH NEWS AND INFORMATION FROM FILTERCORP INTERNATIONAL LTD • AUTUMN 2005

Link forged over the sands of time

BACK IN THE MID 1960's New Zealand was in expansion mode. Our population was steadily edging towards three million.

Energy research and exploration was assuming national significance.

A pirate radio station was about to hit the airwaves on the Hauraki Gulf. And in an office above a Queen Street Auckland department store, a group of men was planning one of the biggest production facilities in the country's industrial history – to process local iron sands into steel!

The new venture evolved from investigations begun in 1959 by a Government-owned company to determine the feasibility of local steel manufacturing.

In 1965 New Zealand Steel Limited was established as a private company. Its long-term vision: to produce steel from the raw black sands found on the west coast beaches of the North Island.

In 1966 construction of a mill began at Glenbrook 65 kilometres south east of Auckland. Back in the city the planning team found itself bombarded with calls from potential suppliers.

Among them was a 22-year-old Sales Manager from a company involved in dust collection and filtration. Forres McPheat was the first "rep" ever interviewed by then assistant purchasing officer Derek Harries, who later became the steel company's Purchasing Superintendent.

"We're still supplying filter bags – the product that I sold 40 years ago," Forres reminisces. "But there's been

a huge leap forward in technology and materials in recent years. And NZ Steel is benefiting from this. For example we have just supplied two state-of-the-art silo vents for the plant's 130 tonne and day bin lime silos. Replacing the existing vents increased capacity of flow through the silo and significantly reduced the down time in changing the filters."

NZ Steel has changed too – from a private company, then 90% government owned, and following several

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Left: NZ Steel's Stephen Meredith and Filtercorp's Kevin McPheat and day bin silo.

Clear-Flex exceeds OSH requirements – Pg3

Keeping it clean in Kaitaia

AT ITS MILL IN THE FAR NORTH, Juken NZ Limited produces solid wood and veneer. Boilers fired by wood waste, bark and occasionally coal, supply steam to the plant for drying, conditioning and heating. Eighteen months ago, a dust collection system was installed to control exhaust emissions of ash and gas. Within months it was failing to keep up with requirements.

An upgrade was implemented to help reduce the level of unburned fuel arriving in the dust collector. At the same time some 880 Filtercorp dust filter bags were installed to collect soot from wood waste, coal ash, and difficult to collect SO2.

The extremely fine nature of ash demanded equally extreme efficiency from the system. That meant Filtercorp's latest hi tech PTFE laminated filter bags that were subjected to stringent testing using fluorescent powder – finer than talcum – and infra-red lights to check for leaks.

The system is now more efficient, reports Plant Supervisor Gerald Bennenbroek, with



Graham Pike, Filtercorp Technical Sales, watches over the installation of hi tech bags at Juken NZ Ltd.





Forres' Feedback

ON A RECENT Wednesday afternoon, Blair and I were driving back to Auckland from Hamilton. We were discussing an upcoming meeting with one of our major customers who

were midway through a trial of a new type of pleated bag. I suggested that the meeting would be more helpful for our client if *Jorgen Poulson, Managing Director of Nordic Filtration* were there. So at 3 pm that day we text messaged him in Denmark. As you may know, Denmark is 12 hours behind New Zealand. By the end of that day Jorgen called to advise that he would be arriving at Auckland airport less than 48 hours later!

We duly had our meetings, and Jorgen flew out shortly afterwards.

While he was here we discovered that only a day or so previously he was in China. And after returning to Denmark from New Zealand he was heading to Miami.

Support like this from our suppliers is one of the reasons we at Filtercorp offer this country's most comprehensive range of filtration products. And we do it with complete confidence in our products, our suppliers and our own people.

Which is why we're proud that more and more companies in this country and abroad have complete confidence in us.

Have a prosperous Autumn.
Forres

FILTERCORP'S WEBSITE gives you access to the widest range of filtration products and services in the country. Our web site is a living document and is being constantly upgraded with new products and technical details. Visit www.filtercorp.co.nz

→ *continued from cover*

lower emissions; fewer volatiles left in the ash, and improved conditions generally. And the system's performance falls well within Resource requirements.

← *Continued from cover:*

ownership changes, to a wholly owned subsidiary of Bluescope Steel (formerly BHP).

As the country's sole producer of flat rolled steel products for construction, building, manufacturing and agriculture, NZ Steel is a major employer and exporter. Some 1200 people work with the company. 60% of the 650,000 tonnes of steel it produces each year is exported.

NZ Steel cites environmental, health and safety among its prime concerns – reflected in the extensively planted 114-hectare greenbelt surrounding the mill site, and a further 500 acre "buffer" of farmland.

Today, as with Forres McPheat's initial orders, our products also help keep the mill environmentally friendly for workers and the countryside.

They include filtration for fume extraction, ventilation and liquid.

It's a relationship we value ... and one of our longest.

Dust hits the fan!

FILLING A TRUCK-MOUNTED cement mixer with raw materials for mixing on the way to the job sounds simple enough. It's not.

At Counties Ready Mix in Drury, South Auckland, raw materials are piped to the mixer parked in the loading bay via pipes and conveyor belts. It's a dusty process and as the exact measure of materials go in – it's called weigh batching – the air inside the mixer bowl is ejected, generating even more dust. Lots of it. Multiply that by 14 mixer trucks operating constantly from the early hours and you get some idea of the challenge faced by Counties Ready Mix – and Filtercorp.

The solution was the installation of a complete new dust extraction system developed by Filtercorp.

It incorporates a single extractor fan inside a compact bag house at the back of the loading bay. It sucks all the dust out of the loading area before it can pose a health or environmental hazard and contains it for safe disposal later.

"It's a much better system now," says Counties owner Graham Payne. "It's cleaner, more efficient, and you can actually see the dust being collected."



Dollars for Dust

UNLIKE MOST OTHER industries, Omya New Zealand makes money out of the dust generated by its processes. At its plants around the country, the end product of its quarrying and milling operations is literally dust – fine powders used in the production of paper, paint, plaster, building fillers, plastics and many other products.

At Omya's Te Kuiti plant, the raw materials milled are limestone and calcite. The process not only generates dust – down to one micron – but also potential problems when it escapes. And so an efficient dust collection system is essential for environmental as well as economic reasons. Letting dust escape into the atmosphere would be like scattering dollars into the wind.

To counter this, the plant has a number of dust



collectors designed for different applications. One of the plant's older collectors met requirements when it was installed over 12 years ago. It comprised 144 socks and cages each 3.150m long. Bags were difficult to replace – the work having to be carried out on the “dirty” side of the dust collector. With time, wear, and the introduction of more stringent requirements, the plant no longer met air resource consent standard.

A recent Filtercorp retrofit incorporating a 36 bag top section using pleated filter elements reduced the footprint of the system by about a third.

A subsequent test revealed the upgrade returned results well within emission standards – operating more efficiently than other dust collection systems tested at the plant – helping the company earn “more money for dust.”

NEWS FROM THE FILTERWORLD

CLEAR-FLEX EXCEEDS OSH REQUIREMENTS

Clear-Flex connectors used throughout the dairy and other industries now exceed OSH requirements. The connectors are commonly used on vibrating or gyrating equipment such as feeders, conveyors, sifters and screeners. One of the main safety features of Clear-Flex is fire explosion resistance – a remarkable attribute given that it's made from clear polyurethane. On the job however this material has proven to be far superior to fabric and rubber alternatives used for the same purpose. Our latest connectors feature seamless welding, superior abrasion resistance, and smooth surfaces that reduce product entrapment. And they're transparent for visual monitoring and better process control.



NEW HIGH TEMP MEDIA FROM FILTRAIR

A new media that filters contaminants such as tar, soot and rust out of hot air streams in industrial processes is now available through Filtercorp. Produced in the Netherlands, the new high temp non-allergic synthetic fibre filter is made from heat resistant high-performance fibres bonded into a web-like structure. It's ideal for use in extreme heat situations such as paint curing ovens, boilers, burners and air handling systems producing temperatures between 100 – 230 degrees C.

LESSON FOR OTHERS Auckland's Northcote College has joined the growing number of schools installing a dust extraction system in their woodwork departments. Dust can be a problem in schools, polytechnics and other organisations teaching trades or skills. The Filtercorp system is compact, easily installed, has minimal moving parts, is inexpensive and easy to run, requires no tools for sock changing, and is fully weatherproofed. We also advise on waste collection.

TRYING TO AVOID A DUST UP! Rare arguments have broken out in the Filtercorp tearoom over who's going to handle servicing for one of our customers in Fiji. Concrete cement producer Fiji Industries uses Filtercorp systems to collect dust generated by cement transfer belts. Dust clouds are created when materials used in cement production are dropped from one conveyor belt to another. So we supplied Filtercorp silo filters with inbuilt exhaust fans. It's not that we don't want to service the systems ... problem is, everyone here wants to.

NEW USE FOR PLEATED BAGS

It's not a typical application – but because they can be washed, cleaned and reused, our pulse pleat elements are now replacing paper filters on blower intakes. Easily installed, inexpensive and quick to change without needing nuts or bolts, the bags are usually used in pulse jet dust collectors for bulk dust or powder recovery in big bag houses. Efficiencies available up to and including HEPA.



PRE CHEQUE CHECK ESSENTIAL Before you sign for goods from Filtercorp (or anyone else), check for any damage that may have occurred in transit. Obviously, we wouldn't send you damaged goods. But transit damage can occur. When you sign the goods received docket you are also signing away your rights to a later claim if when the carton is opened there is any transit damage.

One client recently did not notice that fork hoist tips had gone through the side of the carton that damaged the pleated bags inside. Having signed the delivery docket stating the goods were received in good condition, neither the transport company nor our insurance company could do anything about it. So please help us to help you – make sure your people check that the product they receive is as good as when it left our factory.

Refreshing the Refractory Factory



JUST SOUTH of Huntly in the Waikato, they've been making bricks since 1884. What was originally the *Huntly Brick and Fireclay Co* in 1911 is today *Shinagawa Refractories Australasia NZ Ltd*.

Its original single kiln producing 350,000 bricks per annum has grown into a sizeable plant churning out over 10 million bricks p.a. Made from heat resistant materials, the company's products are used in furnaces and a myriad of industries from steel production to aluminium, pulp and paper and cement production.

As with any plant – particularly one over a century old – things wear out. And so it was with Shinagawa's dust collectors used to prevent nuisance dust from clay, bauxite and calcite escaping into the atmosphere.

"We had old cotton sock dust collectors mounted on wire frames," says Plant Manager, Nigel Lovett.

Filtercorp's Mark Smith and Blair McPheat were called in to recommend the best way to get the dust collectors working again with no filter by pass.

They worked through seven units repairing and reconditioning filter cleaning systems and replacing filters.

Some of the units' existing filter socks and cages were not working too well and were replaced with pulse pleats that extend the surface area of the filter and also clean effectively in this kind of environment.

"We were sceptical about pulse pleats, disbelieving to say the least," commented Nigel Lovett. "We bought a set of 18 or 19 to try them out – and they worked! Environment Waikato didn't believe how well they performed."



** For more information about dust collection service anywhere in the country contact Mark Smith 021 445 837. Filtercorp can provide a condition report on all clients' dust collectors on request. This can be used to show environmental groups that maintenance is being done to ensure systems work effectively.*

FILTERPEOPLE

HOGAN'S A HERO!

"If there's anything I can do to help, I'll do it," says front line receptionist and "P.A. to everyone," **Angela Hogan**. Since joining us in October, Angela has not only been responsible for filtering customers and callers through to our team, but also learning about the various roles and what goes into what we do.



"Learning new things, and gaining new skills are among the things I enjoy about working here," Angela comments, which probably summarises her attitude to life outside of here (yes, for all of us there is life outside Filtercorp).

Angela is a chorister (alto), with piano and clarinet skills. She's crafty – making ceramic dolls for sale, gifts and personal pleasure. And she's "handy," renovating her home doing all the work herself from laying carpet to stripping paint and sanding – not far from us here in Beach Haven where she also grew up.

As if they weren't enough, Angela inherited an interest from her parents who for the past 23 years were involved with a caravan club. Their enthusiasm was contagious; Angela caught the bug and now has her own caravan and enjoys meandering the country with other club members.

With over 12 years experience in customer service with an insurance assessor, an electrical repairer, and an investment company prior to joining Filtercorp Angela had all the attitude, attributes and experience that we value.

And maybe you thought receptionists didn't have much to do!

RYAN CURRY is our new North Island Service Engineer, taking over from Mark Smith who has been promoted to Service Manager.

A born and bred Aucklander, Ryan previously worked as a fitter and turner/welder with Stabilus, a German based company that manufactures air stays. After hours he's often competing at local remote controlled car races; tramping or walking the outdoors, and enjoying time with his partner and two sons.



New Service Manager **MARK SMITH** has been with Filtercorp five years, originally servicing our customers nationwide. For four years previously he was maintenance engineer with Auckland Hospital.

"I like working for a locally-owned company," Mark tells us, "where decisions can be made on the spot and the work implemented without having to refer to some head office on the other side of the world."

Like some others at Filtercorp, he's a petrolhead and has for the past three years been restoring a '78 Pontiac Transam that he hopes to complete in a year or two.



Pen-ultimate offer!

ENJOY this issue of *FilterTalk*? Then email or fax your feedback to us before May 01, 2005 and you're in the draw to win a brilliant Parker pen. Last issue's winner was **Jason Moxon** from the West Island at Colby Powder Systems, Sydney. Congratulations Jason and thanks for your comments.

Thought for the Season

Fall is my favorite season, watching the birds change colour and fall from the trees. David Letterman (1947 -)



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