



# FilterTalk

FRESH NEWS AND INFORMATION FROM FILTERCORP INTERNATIONAL LTD • WINTER 2004

## World first tests filter bags

After months of development Filtercorp has created a new type of filter bag tester believed to be the first of its type in the world.

The new system means we can now test individual bags within a bag house without taking them out of the cell plate. This is important because in the past when we received filter bags for testing from around the country, they never arrived in the condition they were in when operating in the dust collectors. This was particularly true when we tested bags that were running hydroscopic dusts or operating at elevated temperatures.



Our new device will not only test to see if bags are at the end of their useful life but also compare one type of filter media (or pulse pleat) against another in the same bag house.

## New system bags midges



Insects and foreign matter in the atmosphere entering a process area have long posed problems for companies involved in food manufacturing or other operations where hygiene is important. Traditionally they've relied on some form of fly-screen mesh to help stop insects being sucked into air intakes or air conditioning systems – but not without pitfalls. Those screens were ineffective against midges that are much smaller than flies.

For the past four years Fonterra sites throughout New Zealand have been installing banks of Filtercorp midge pocket bags with great success.

Until recently, Fonterra's three milk-processing plants at Kauri, near Whangarei, relied on stainless steel flat mesh screens to catch midges and other insects. But they needed monthly disassembly and cleaning to prevent blockage and were also bypassing.

Now, Filtercorp midge bags protect the air entering intake rooms for ventilation and the powder plants. And cleaning the system has been reduced from monthly to annual – saving maintenance time and cost.

After years of trialling different size apertures and textures of media for these pocket bag systems, Filtercorp have now the ideal media which is a balance of efficiency and pressure drop.

The headers can be made from Stainless Steel or the new Laplock ABS type.

"The system works really well," reports Process Project Manager Howard Ansley, "and Filtercorp really go the extra mile if we encounter a problem."





## Forres' Feedback

I may not have found the fountain of youth but last week discovered the next best thing.

I went on a sales trip to Northland with my Sales Engineer Graham Pike. It was like turning the clock back 25 years.

We visited companies that I used to call on when Filtercorp was first started and met people like Simon Marsters who was a production person when I first met him and is now the General Manager of NZ China Clays at Matauri Bay, since renamed Imerys Tableware Ltd.

At another call Graham was somewhat surprised to discover that I still owned a boiler suit and could find my way into a large bag house where we changed some filter bags and inspected others.

It was great to be back at the coalface and while I didn't sell any filters (Graham took care of that) in two days I was offered three rounds of golf, two fishing trips, a sack of spuds and a Labrador/Retriever pup.

Yes in the words of Willie Nelson "I can't wait to get on the road again"

## Live Wire Solution

At its Sockburn plant in Christchurch, General Cable NZ Ltd manufactures all types of electrical cables from imported raw materials that include copper, aluminium, powders and oils.

"The outer sheath of most cables is PVC (Polyvinyl Chloride) made from a combination of the imported powders and oils," explains Engineering Co-ordinator Chris Brown.

"Until recently, we had to stop and clean filter vents on the powder storage hoppers every 20 minutes during their loading from our silos. The blinding of the filter material on the filters also contributed to erroneous variable weight readings of the silo's contents – costing the company money."

The solution came with the installation of six new Sonic Silo Vents (SSV) on the powder storage hoppers.

The new units clean during loading without interruption – saving 15 minutes loading time every hour, Chris Brown reports, and weighing has become more accurate as the constant cleanliness of the filters has eliminated blinding. The powder product consistency has also improved the company's manufacturing process.

## Goodbye old sock

At Coalgate, a small Canterbury town near Darfield on the way to Mt Hutt, OMYA (NZ) Ltd quarries and mills bentonite (a clay product used as a binding agent in the paper industry), limestone and other substances.

Despite being enclosed, the milling process in its 38-year-old plant creates dust. Until recently it was collected in an old system that incorporated 64 three-metre long cotton socks attached by hose clips



to a trumpet inside a frame. But the virtual cyclone created in the milling and dust extraction process, caused the socks to vibrate and consequently the trumpets broke, frequently damaging the rotary valve at the bottom of the exhaust system.

"Replacement parts became increasingly difficult and expensive to source," relates Omya Plant Maintenance Supervisor Gary Batchelor (pictured).

He called on Filtercorp, which had a long association with Omya, and had supplied other dust collectors to this and other sites.

"Paul Hill's solution turned out to be a smaller and more user friendly unit," Gary says. "The new dust collector has 42 pulse pleat elements that are only one metre long. That means fewer parts and easier access to maintain the unit, because it is not as high off the ground as the old one. All in all a simple and compact unit, and spare parts are easy to get as all of the dust collectors on site are standard size."

## Penmanship!

Enjoy this issue of Filter Talk? Then email or fax your feedback to us before August 20 and you're in the draw to win a brilliant Parker pen. Last issue's winner was **David Grubb** from **West Auckland**. Congratulations and thanks for your comments.



# NEWS FROM THE **FILTERWORLD**

**OUR FIRST WEBSITE AUCTION.** We are conducting our first live auction on the web for an Air Shower. Visit [www.filtercorp.co.nz](http://www.filtercorp.co.nz) and follow the directions. Make a bid for this unique and safe method of de-dusting employees and avoid the dangers of compressed air guns.

**Filtrair® MARRIAGE ANNOUNCED.** Filtration Group USA has recently acquired Filtrair Co of the Netherlands. We represent both companies in this part of the world. The merger will enable us to provide a stronger range of international products and better technology to our clients in New Zealand and Australia.

**NEW GENERATION CLEARFLEX.** Only months after its American developers launched it, Filtercorp has acquired the first new generation equipment in New Zealand for Clearflex welding.

The new welder allows for significantly longer and wider products than previous. Operations Manager Kevin McPheat – shown here recently training with the new equipment at the manufacturing plant in St Louis, Missouri – says the new welder provides a cleaner stronger weld with more size options. The decision to invest in this new equipment was justified by the tremendous success Clearflex has achieved both here and in Australia.



**FRAMING FOR THE ENVIRONMENT.** Our continuing exports to Europe required us to produce a filter that is fully incinerable at the end of its life without the toxic fumes of PVC – and look what we came up with: **Laplock** – a new eco-friendly range of filter frames made from ABS plastic (pictured below). As the name suggests these filter frames lock together to prevent any possibility of by-pass. The support rods are manufactured from reinforced polyester and the full range of filter pockets are also manufactured from polyester.

Laplock filters are available in efficiencies of G2 through to F8 and are manufactured in Auckland and Christchurch to any size.

They're suitable for any ventilation application as flat panels or pocket filters and will be particularly useful in hospitals or any other application where incineration is desirable.

Some of our major customers are demonstrating a responsible attitude to recycling and reducing land fills and Laplock will fit right into their programmes.

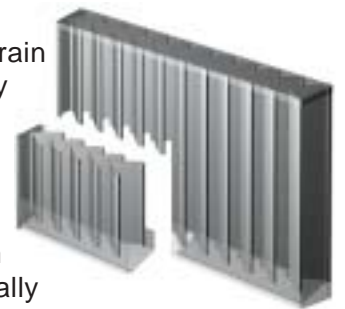


**STILL GROWING:** We have just been granted resource consent to extend our factory in Beach Haven by 50%. The new area is needed to accommodate our expanding manufacturing facility for the Laplock range of filters. We consider it important to manufacture these filters right here in New Zealand as this adds security of supply to our customers in the event of an emergency.

**SYSTEM IS WELL TONED.** Every month, NZ Business Products, Auckland, remanufactures thousands of toner cartridges used for laser photocopiers and faxes. Until recently, cartridges were emptied by vacuum cleaning – generating a lot of atmospheric dust simply because toner is so fine and difficult to collect. Filtercorp's solution was a single station, high-powered toner extraction system with matching filters that also collects the dust. And the system is easier to empty. Not only is the atmosphere cleaner and particle free, but also healthier for those working in it, reports NZBP Director Iain Robertson.



**THE RAIN FALLS MAINLY ON THE VANE.** Aquavane™ developed by Filtercorp is a new cleverly designed vertical vane that removes water particles and rain from air streams. Traditionally such systems have used horizontal vanes, but the FC development eliminates re-entrainment of water/moisture and gives maximum drainage. The vanes are usually installed on the outside of a building to protect filter bags/ filter banks inside a ventilation system from getting wet and thus becoming less effective.



**DISC BREAK FOR FILTERCORP.** Filtercorp has recently taken over the manufacture and supply of vacuum can discs (pictured) from Mulcahy Engineering of Avondale, Auckland. A full range of diameters and bolthole options to suit APS units are now manufactured in our Beach Haven factory. The media remains Filtercorp's FM4G Armourtex, well proven over the past 14 years.



**PAYING ATTENTION:** More people must be reading our Filter Talk than we realised. Our first shipment of FM11T mentioned in our last issue all but sold out! The water resistance and filtering capabilities of this new product are already paying dividends in difficult applications.

# Washing powder process cleaned up

A major laundry detergent producer recently asked us how to stop a very fine dust residue by-product from escaping into the atmosphere.

In the manufacturing of its washday products, detergents, powders, caustic soda, water and other ingredients are combined at 80 degrees centigrade in a mixer and spray dried from a tower.

The process creates a steam-saturated dust that is filtered before the fine mist is exhausted into the atmosphere. The problem was that the saturated alkaline powder, corroded extraction fan blades, and often blew a fine dust into the atmosphere.



Maintenance was frequent, intense and expensive. During a routine visit to the company's site, Filtercorp representative Graham Pike suggested the solution.

Filtercorp products were used extensively throughout the detergent manufacturing plant but were not involved with the troublesome laundry powder production process.

Graham's suggestion saw a Filtercorp wet scrubber installed. Now the dusty mist is drawn through a water curtain; the residue drops out of the air stream and is deposited into the scrubber tank; and all that is exhaled into the atmosphere is clean air.

Now the company needs only clean the tank out about once a month and the residue that has been collected is recycled.

**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](http://www.filtercorp.co.nz)

## Liquid strainer bags

We manufacture a full range of micron rated felt and monomesh strainer bags from 1 micron up to 1000. Commonly used for in-line filter housings, these replacement bags are available with the conventional steel ring in the top or the new plastic double lip seal ring with removable handles. Common sizes are available ex stock and special sizes are made to order.



## Thought for the Season

*"It is the size that catches the flies"*



# FILTERPEOPLE



With eleven years behind him chances are you've encountered Purchasing Supplies Manager **Keith Dixon**.

Most of the time, Keith's role involves researching and sourcing products – often drawing on his former

experience as draughtsman to sketch jobs as well as source and cost components. He'll also occasionally assist Filtercorp design engineers with research.

"What I like most about the job is when everything comes together – from ordering through to delivery with the goods arriving on time, to specification, and as priced," Keith says. "That's not always easy as many jobs start out as estimates with a wide range of options." One scenario he does find easy however happens after hours.

An enthusiastic recreational swimmer, sailor and fisherman, Keith spends most weekends pursuing these activities during the summer.



**Colin Summerton** (seen here on the job at Fonterra) is our recently appointed South Island serviceman based at Filtercorp Christchurch. Originally from Canterbury, the father of five spent 15 years in the Waikato where for

10 years he worked as a stainless steel fabricator with one of Filtercorp's suppliers Cook & Galloway Engineering. Seven years ago he was lured back to his hometown and worked with Burns & Ferrall. Now with Filtercorp, Colin installs and maintains the equipment he once built – a career change that he's enjoying. Like others in the Filtercorp team he's also a "petrolhead" (enjoys speedway), and an enthusiastic leisure fisherman – reeling them in wherever a boat can go!

**WHO'S WHO?** Do you watch "Top Gear" on TV or read the magazine? Then you'll be familiar with Jeremy Clarkson. Or is he really a younger version of Forres McPheat? Are they related? How come both have their birthday on the same day (April 11?) Should we send our filter bags to Jeremy for testing on a racetrack?



For more information contact **Filtercorp International Ltd**  
22-24 Bay Park Pl, Beach Haven, Auckland.  
Ph: 64-9-483 7149, Fax: 64-9-483 4355  
Email: [akld@filtercorp.co.nz](mailto:akld@filtercorp.co.nz)  
[www.filtercorp.co.nz](http://www.filtercorp.co.nz)