



# CaseStudy



## Now that is what we call fit for purpose!

### Ballance Fertiliser Plant, Tauranga

#### Benefits

In a fertiliser plant the conditions are tough. The conveyor system, including the belts, rollers and accessories; are exposed to chemicals, abrasion, product build up and wear and tear.

At the Ballance fertiliser plant in Tauranga the rollers regularly needed to be replaced in the Acidulation Plant, some as often as every 4 to 6 weeks and others every 6 months. The rollers were wearing out or seizing under the conditions in the plant. They were jamming; product was building up on surface of rollers and then acting like a sander/grinder on the back of the belt resulting in a shorter belt life and more cost to the plant; there was poor tracking and extra cleaning was required during production time.

#### Solution

The roller needed to be able to withstand exposure to Sulphuric acid, HFA, Potash, temperatures above 90 degrees and have the ability to minimise build up of product on the roller itself.

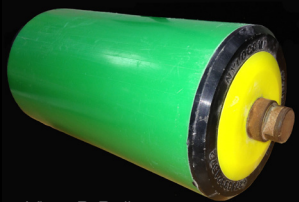
The Mac-Daddy of all rollers was installed in the plant – YIGA-P® IDLER ROLLER. A 3 year trial was undertaken to see how the roller would withstand the conditions.

Lo and behold it is still looking good, but more importantly the rollers are still functioning efficiently and there has been no need to replace them.

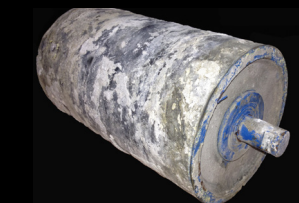
From a 6 month replacement cycle to a 3 YEAR replacement cycle!

At Viking Conveyor we were able to offer the team at Ballance:

- Technical advice – our ongoing experience in the fertiliser industry means that we have seen it all and are able to provide customers with sound technical advice on what would work best for their site
- Innovative solutions – rather than just continuing to supply the same replacement roller every 6 months we worked with the team at Ballance to find them a better, more innovative solution. We took the time and care to research, source and trial a roller that would provide a better solution
- Adding value to the asset – the YIGA-P roller has lasted over 3 years in the plant. The life of the roller is now maximised and it provides a cost effective solution as there is less downtime, maintenance and man hours required to continuously replace the rollers



Yiga. P. Roller



Previous Roller with product build up



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- Fit for purpose – the rollers are extremely suitable for the conditions that exist in the fertiliser plant as they have high impact and abrasion resistance and can withstand being exposed to harsh chemical reactions.

You couldn't find a better example of providing our customers with a product that is really fit for its purpose.

- Non Stick Surface - YIGA-P also provides an extremely effective "non stick" surface. One of the major applications for YIGA-P is the lining of hoppers, chutes, silo's and bins where problems are encountered with material sticking to the sides. Sticking of materials to conveyor idlers is encountered and the choice of YIGA-P as the liner or contact surface could overcome this type of problem.

- A roller that had the extra benefits of:

- Noise reductions as vibration on frames are minimised
- Double-lipped rubber oil seals which are extremely effective against all conditions, even when very wet
- End caps which are of glass-reinforced nylon for strength and impact absorption
- Very low coefficient of friction. Should a bearing seize, the belt will slide over the conveyor idler with minimum wear to the belt or roller.

## Result

So instead of there only being 3 YIGA-P rollers in the plant, the entire Acidulation plant has been upgraded. The team at Balance is now looking at upgrading all their rollers in other areas of their plant.

The product has added valuable production efficiency to their plant, with a lot less headaches than the previous solution.

Solid advice for all your belting needs, local stock & services

[www.vikingconveyor.co.nz](http://www.vikingconveyor.co.nz)

## Our Product range

Conveyor belts are used across such a wide range of industries, from airports to food processing. To ensure that we can help New Zealand businesses move their goods and services, drive efficiency and satisfy their customers, Viking Conveyor offers a comprehensive product range of conveyor belts, accessories and rubber lining solutions.



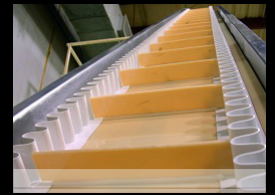
Industrial Belting



Rollers, Cleaners & Accessories



Rubber Liners & Sheeting



Conveyor Processing Belts



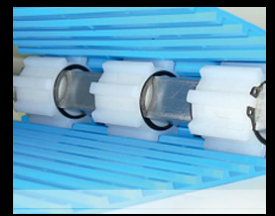
Engineered Belts



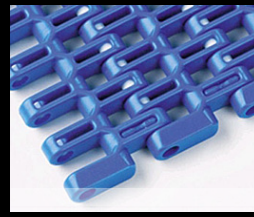
Bisca Teflon Tapes



Ammeraal



Volta



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General Purpose & Packaging Belts

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