

Pure, compressed air keeps vitamin maker in shape

Nature's Own, Natural Nutrition, Bio Organics, Vitelle and Cenovis are major brands of Mayne Health in the nutraceutical arena that have one thing in common – Ultrafilter.

The compressed air purification and drying specialist – a division of Donaldson Australasia Pty Ltd – Ultrafilter has installed and maintains a filtration system to 0.01 micron and oil, odour and taste free to maintain clinical standards in key areas of tablet production and packaging.

To stay on the cutting edge of technology, Mayne Health upgraded its existing Ultrafilter equipment in 2005 with the latest Ultrafilter technology, the UltraAqua Ceramen Autoclean 0008 unit, to perform the oil/water separation function of the condensate to a guaranteed level which exceeds Australian standards.

At a pressure of 60 to 70 P.S.I., compressors pump air through the manufacturing plant 24 hours a day. The air has to be on for control valves to retain purity of the water and is pumped around the 250-staff site through up to 700-800 metres of piping.

“We are running a clinical operation here with some areas operating under conditions not unlike an operating theatre in a hospital,” said Engineering manager of Mayne Health, Mr Bryan Pritchard. “The Ultrafilter equipment provides us with filtered air for purity of air in all product contact points.

“One example is where we are using the air to orientate bottles and caps. The compressed air positions these components for filling with tablets, so any air that gets into the bottles has to be totally pure. In another section of the plant, compressed, filtered air is vital on the unscrambling machine when jumbled pack bottles have to be sorted out and anything other than pure air is a risk for this process.”

The efficient system works around two compressors that push the air through two refrigerated air dryers into the Ultrafilter filtration. This filtered, compressed air then moves into the operations pipework, while the condensate drains into an oil/water separator.

This separator – a self cleaning unit that utilises its own detergent reserve – channels oil residue into a contained reservoir while sending clean water into an outlet.

“But it is not only the compressed, filtered air that Ultrafilter provides – their technicians carry out a very comprehensive maintenance,” said Mr Pritchard. “Ultrafilter also does the regular checking for purity and air analysis – a test required by the Therapeutic Goods Association to be done once a year. The air system has been in for five years and this upgrade will ensure we retain product purity during our manufacturing and packaging processes for the national market.”

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