Food and Beverage industry

Amal Grow

SKF SYSTEM 24 single point automatic lubricator LAGD series



© Amal Grow

SKF SYSTEM 24 lubrication units cut maintenance time by 75% for vegetable grower

Amal Grow, one of the largest vegetable growers in the Channel Islands, has achieved a dramatic 75% reduction in maintenance times on its potato grading and washing machines, simply by upgrading the bearing units and fitting SKF SYSTEM 24 single point automatic lubricators.

The new bearing units and the SKF SYSTEM 24 lubricators are manufactured by SKF, the knowledge engineering company, and were supplied by Antifriction Components, an SKF Authorised Distributor, via their agent in Jersey, CAF Engineering.

Ewan Pervis, of Amal Grow, explains, "We specialise in vegetables grown outdoors, with the sale of potatoes accounting for a large volume of our business. These are harvested and then graded and washed before being packed for delivery to our customers around Jersey. Machinery is generally running seven days a week and is exposed to the elements, with the operating environment for both the grading and washing machines being especially tough, ranging from dry dust, dirt and grit in the summer, to wet liquid mud in the winter months. As a result, we found that these machines needed constant maintenance; in particular, bearings fitted to the rotating drive, agitator and idler shafts needed regular lubrication and frequent replacement".

Ewan Pervis continues, "Bearings had to be lubricated manually via grease nipples. These were often located behind machine guarding or were hard to reach safely. Additionally, it was difficult to apply the correct volume of lubricant and easy to miss lubrication points, so bearings could run dry or be over lubricated; in each case their operating life was dramatically shortened, resulting in considerable downtime. It was not uncommon for us to have a machine offline for several days and for two engineers to be tied up carrying out repairs."

The solution provided by CAF Engineering was to supply replacement stainless steel bearings, which are fitted as each existing unit needs replacement, plus a dedicated SKF SYSTEM 24 single point automatic lubricator attached to each bearing.



Once set up, the SKF SYSTEM 24 lubricator is fully automatic, eliminating the need for manual lubrication. Each device is constructed from a tough polyamide plastic cartridge, filled with lubricant and hermetically sealed to prevent the ingress of dust or moisture; it is also transparent so that lubricant levels can easily be checked.

Integrated into the head of the cartridge is a hydrogen cell that releases gas at controlled intervals to pressurise an internal piston; in turn, this forces lubricant through the neck of the cartridge, which is screwed directly into the bearing unit.

The piston and internal cartridge surfaces are shaped to ensure that all the lubricant is thoroughly dispensed, while the rate at which lubricant is distributed is accurately controlled by an integrated timer. This can be adjusted on-site, allowing oil or grease to be distributed at intervals of between one and 12 months and at rates that can be as low as 4.5g/month.

"SKF SYSTEM 24 has revolutionised our maintenance procedures", explains Ewan Pervis. "The devices are tough, so withstand the operating conditions, are simple to fit and setup, and are available with a range of different lubricants, including food safe greases. We've fitted them where they can easily be seen on the machines, so a quick visual check of reservoir levels is all that's required during a routine monthly maintenance check. Typically, each device operates for around 12 months before needing replenishment."

"Since we switched to the SKF SYSTEM 24 technology, we estimate that we've cut the maintenance time required for lubrication by over 75%. This represents a significant cost saving; it also frees up our engineers to concentrate on more critical tasks elsewhere in the business and has dramatically increased bearing life, from one or two years to over four years. All in all, SKF SYSTEM 24 has proven to be an excellent investment, with a particularly fast pay-back."



SKF SYSTEM 24 single point automatic lubricator LAGD series

SKF (U.K.) Limited

T: 01582 490049 marketing.uk@skf.com www.skf.co.uk

® SKF is a registered trademarks of the SKF Group.

© SKF Group 2010

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.



Printed in England on environmentally friendly paper.

