

# Getting recycling taped (but not all wrapped up)



327°C, and the lowest coefficient of friction of any known solid material, this makes it almost impossible for the tape to stick to the bearing. Even if it does so, it makes the possibility of ignition highly unlikely.

The recycling company accepted ERIKS' recommendation, and once the PTFE disc was installed there was no incidence of tape binding round the roller bearings in the first four months of operation. As a result, if further tests prove satisfactory, the company intends to fit the seal to all conveyor rollers.

ONCE PEOPLE USED TO THROW THEIR RUBBISH AWAY AND THINK NO MORE ABOUT IT. IT WAS 'SOMEBODY ELSE'S PROBLEM'. NOW THEY RECYCLE IT INSTEAD, AND STILL THINK NO MORE ABOUT IT, BECAUSE IT'S STILL SOMEBODY ELSE'S PROBLEM. IN THIS PARTICULAR CASE, THE PROBLEM WAS A TRICKY ONE FOR AN ENVIRONMENTAL WASTE RECYCLING COMPANY.

The reasons for what is recycled and when can be traced back to changes in tastes, technology or recyclability. The demise of video tapes and their replacement with DVDs has led to a surge in the recycling of the tapes, and that in turn led to difficulties for one recycler.

Tape has to be separated from paper, and other rubbish. This takes place on conveyors, which are driven by rollers. Unfortunately, the video tape frequently comes unravelling from within the tape cassette and subsequently wraps itself around whatever it comes into contact with – including the conveyor rollers. The tape works down the rollers and binds up at each end by the mounting bearings.

This can have one of two results – both of which can lead to expensive downtime, or even worse.

The tape can bind up so tightly that it forces the metal bearing seal into the rolling elements, causing the conveyor to stop and to be unable to start again until the tape has been unravelled. Or, worse still, the tape can jam and cause huge friction and heat: enough heat, in fact, to ignite a fire. Norwich's waste recycling site caught fire for this very reason.

One environmental waste recycling company sought help from ERIKS, whose sealing and bearing know-how made finding a solution relatively simple.

Realising that the tape had to be prevented from building up, and the bearing had to be protected, ERIKS recommended the use of a PTFE disc matching the profile of the external part of the bearing seal, to be located over it. Since PTFE has a melting point of



# Why guns won't protect you

IF YOU'RE STILL USING GREASE GUNS FOR LUBRICATING YOUR MACHINERY – EVEN AS MANAGEMENT IS PUTTING MORE PRESSURE ON YOU TO REDUCE COSTS – THEN YOU'RE EFFECTIVELY BEING ROBBED EVERY DAY. BUT IF YOU PUT DOWN YOUR GREASE GUNS AND SWITCH TO SINGLE-POINT LUBRICATION, YOU CAN PROTECT YOUR MONEY, YOUR MACHINERY, AND YOUR EMPLOYEES.

A single-point lubricator not only automates the lubrication process, but also ensures it is carried out in the most efficient manner. An automated lubrication system will never forget to lubricate, will never over- or under-lubricate and – because it dispenses lubricant at a steady rate for up to 12 months at a time – the machinery is always lubricated to the optimum for maximum reliability.

A single-point lubricator is also ideal for difficult-to-access lubrication points. Instead of an engineer struggling to get to the lubrication point – with associated health and safety risks, the single-point lubricator is positioned once and then does its job, day-in, day-out, with access required as little as once a year.

But just because a lubrication point is hard to access for an engineer, doesn't mean it's difficult for dust, debris or water to get into. Many manual lubrication points are open to the atmosphere and everything that's in it. And once foreign bodies or other

contaminants have entered the lubrication point, the next step is the machinery itself. A single-point lubricator prevents contamination because it is essentially a closed system. The only thing that gets into the machine is the lubricant that you want to – even in the contaminant-rich working environment of a waste and recycling plant.

However, not all single-point lubricators are the same. The simalube single-point lubricator, for example, uses a patented gas-producing dry cell to power the lubricant.

This is a highly reliable system which can operate successfully at temperatures ranging from -20°C to +55°C, whereas other lubricators use electro-chemical systems which can begin disintegrating at below freezing or over 40°C.

The simalube is also the only 100% recyclable lubricator. The empty cartridge can be refilled to save up to 50% on the



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initial cost, replaced with a new pre-filled cartridge, or replaced with an empty cartridge for you to fill with the lubricant of your choice. If replaced, the old cartridge can be disposed of as battery waste and the housing as PET waste, with no additional costs for waste disposal.

As well as complying with most customers' environmental policies, and international standards such as ISO14001 and EMAS, simalube is food safe, containing no acidic liquids or electrolytes.

So why rely on grease guns to protect your money, your machinery or your employees? simalube can make life safer and easier for maintenance engineers, can maximise machinery life, and reduce your costs.

