

## *Are You Using the Right Tool for the Job?*

How often have you been trying to solve an intermittent problem on a production line and everything happens so quickly that you really are not sure of what you are looking at?

This was the issue that the TPM<sup>3</sup> team in the Sanitarium Berkeley Vale Beverages department was facing when they were trying to resolve a problem on the soy milk production line. Each pack of soy milk has a straw attached to it. However, intermittent problems with the application of the straw were resulting in a lot of downtime on the line. Since the line is running so fast it was not possible to see the actual problem occurring, so the team sought some professional assistance to understand the problem in more detail.

The team contacted David Adermann from Measurement & Analysis Camera Systems P/L (MACS) in Sydney, who came and set up a high speed camera on the troublesome part of the production line. David has over twenty years of experience in high speed camera technology and has such claims to fame as the “slow motion” camera at the international cricket matches in Australia last summer. David has installed over 500 high speed cameras in Australia, for various applications, including production line trouble shooting.

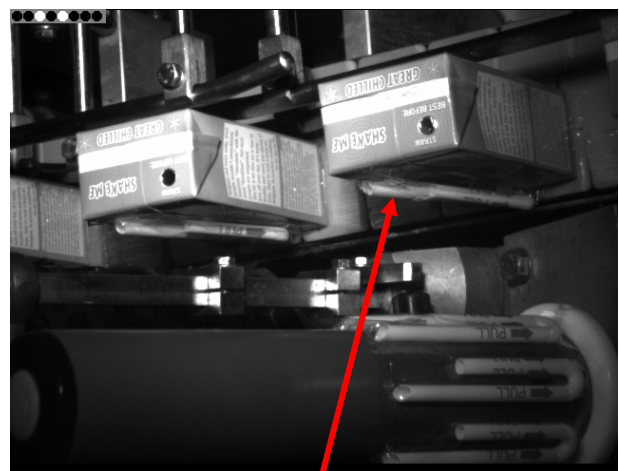


**David Adermann installing a high speed video camera onto the production line**

After some setting up David started to collect some very valuable video footage to allow the team to understand what was causing some of their problems. David videotaped the problems at 250 frames per second, although the camera could have filmed at 1000 frames per second if the line was running faster. Compare this to the 25 frames per second at which home video cameras operate!



**Straw application point    Straw attached to pack**



**Straw starting to lift off the pack**

However, just after this point the straw starts to lift away from the pack.



### **Straw coming off pack**

Very quickly, the straw comes off the pack and the pack will be rejected.

All of this has occurred in a time frame of less than 0.2 seconds! No wonder it can't be seen with the human eye!

Once the team had looked at the video footage they were able to identify the root cause of the problems that they were facing, develop some feasible solutions and then organize their implementation.

If you need to resolve equipment problems that occur within the blink of the human eye, call David Adermann at MACS on 02 9487 7916, or go to their web site at [www.macsimage.com.au](http://www.macsimage.com.au). He also has agents in Melbourne and Auckland, New Zealand, available to assist you with your problems.

For more information about TPM<sup>3</sup> – Australasian Lean, contact Keith Saul, General Manager Operations on 0418 663 563, CTPM Australasia Head Office on 02 4226 6184, or visit [www.ctpm.org.au](http://www.ctpm.org.au).