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MANUFACTURING REPORT

Best Practice and
Innovation in UK
Manufacturing

IN ASSOCIATION WITH

MANAGEMENT TODAY
CRANFIELD SCHOOL OF MANAGEMENT



Top left
The biggest losses on each line are checked and fixed every two hours using the LineView system.

Top right
Plastic preforms being heated prior to being blown and turned into bottles.

Middle
Plastic preforms.



and away from the line to analyse the effects of the proposed changes on safety, utilisation and other plant measures.

LineView

Edmonton's managers wanted a clear, easily understood, highly visible way of showing, at each line, the current status of that line in real time. The shopfloor data collection systems on the market were too complex or inadequate so, with some outside help, Edmonton developed their own system to use signals from the machine controllers. The system, called LineView, was piloted on one line and rolled out to the rest of the site. After that it was adopted throughout CCE GB.

The system provides an instant display of the six manufacturing losses:

- breakdowns
- set-ups
- minor stoppages
- reduced speed
- scrap rate and
- start-up losses

LineView analyses the losses at the most critical machine on the line. If a loss is occurring on the line, it shows up within 10 seconds. Davies acknowledges LineView as one of the single most powerful manufacturing improvement tools he has utilised in his 15 years operational experience. But for at least

six months it wasn't used properly. The management didn't own it. The shopfloor teams weren't engaged in it because, at first, LineView terminals were put in offices. The terminals can now be found next to the production lines. And, probably most important of all, even though Edmonton had the information, it didn't have the processes for acting on the information it gave them.

Now Edmonton uses LineView to check and fix the biggest loss every two hours. Should plant conditions alter drastically in between for any reason, LineView can do SPC analysis to see the trend and shut the line down.

As for the managers, with over 100 measures available, there was a risk that LineView would overwhelm them with data. So, they picked their top 16 measures from within the QUYSH framework, colour coded them red, amber, and green, and now use this as a business dashboard for the whole plant.

CCE Edmonton introduced other changes. One example of the teamwork ethic is the way they combined new cleaning technology with SMED and Formula One pitstop thinking to reduce the downtime for cleaning filling machines from three hours to 95 minutes.

TQMS – Documenting Success

The plant's managers were ready for a standards scheme that would deliver everything in a single set of audits which