acumence Manufacturing Business Intelligence

VALUE BRIEF

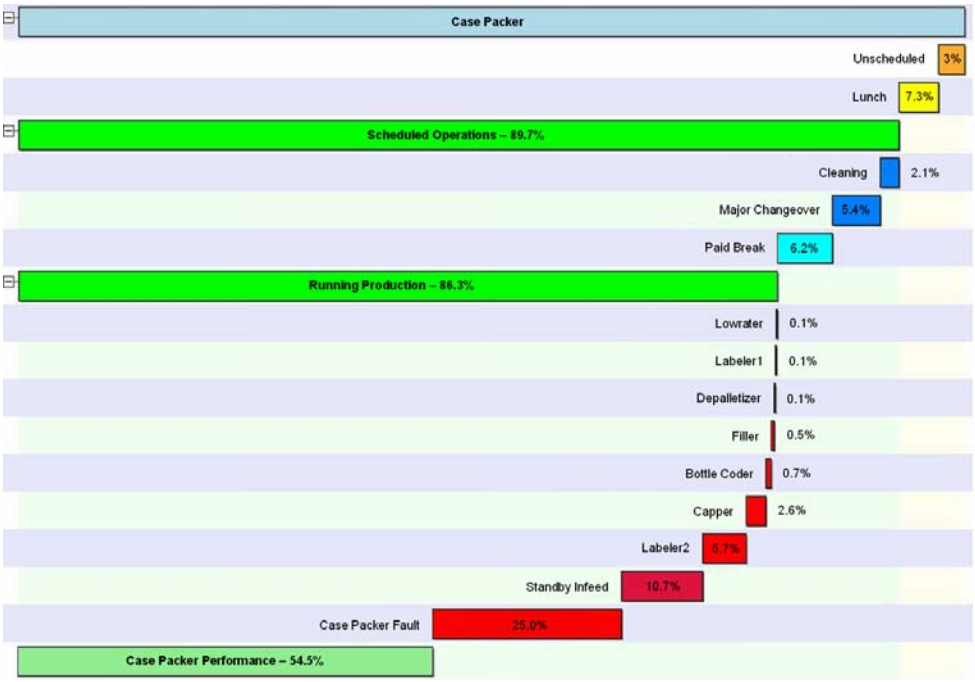
Intelligent Execution

OEE Downtime Analytics Highlight Losses in Upstream Equipment

by Chris Chandler

Downtime tracking is often used to identify the reasons for failure on a machine, in order to improve maintenance and uptime. But what happens when the key machine on a line sits idle for unknown reasons? Accumulated wait time is a significant contributor to poor OEE in most operations.

Acumence OEE Downtime Analytics are used to identify the ultimate root cause of downtime, and to quickly visualize which machines are causing the greatest losses to the operation.



OEE downtime analytics shown in waterfall object.

Getting Value Step-by-Step:

1. Use Acumence to capture and store all downtime data, including standby and wait times.
2. Apply downtime analytics to each line to assign wait time to upstream & downstream equipment.
3. Use standard downtime Pareto charts for poor performing equipment to recover lost time.

In this example we look at case packer downtime. Over 20% of the accumulated downtime during this shift was attributed to idle time. Acumence downtime analytics were used to associate idle wait time with problems in upstream equipment. The waterfall chart shows that the majority of downtime can be attributed to the Case Packer, but a large amount of wait time is actually attributable to upstream equipment – the Labeler and Capper in particular.

With Acumence in place, every second of downtime and idle time is captured for each machine on the line, and stored at full resolution. Analytics are used to associated idle time on each machine with downtime in upstream or downstream equipment, so that you get a clear picture of losses, and a roadmap for significant improvements in OEE.