CONSTRAINT UTILISATION VISUALISATION CASE STUDY

Our Goal:

To develop a suitable constraint utilization model that would actively monitor and measure the constraint within the facility.

In order to identify the current bottleneck and to hand back control to management by being able to plan ahead in determining where to focus available capital expenditure.

Our Solution:

To increase throughput via the implementation of automatic control, reducing variability and human error. This was done by developing the constraint utilisation model through benchmarking each area of the plant against the available capacity.

Periodically, each area would be compared and the utilisation measurement calculated. On top of this, a new category for "underutilized" was also included to show periods when all areas of the plant were being underutilized.

Using these calculations, a live visualisation was developed that summarised the percentage of time each area was considered the constraint of the plant. This information was then able to be displayed for current shift, previous shift and the last 24 hours.

Unlocked Potential:

With the constraint utilisation information now readily available, the client's management team were able to effectively determine which key areas of the plant would provide the greatest return on investment.

It also provided the operations team with a suitable method of identifying the current bottleneck and being able to make on the spot decisions to help alleviate the issue.

Key Success Factors





Andre Gibson

Co-founder & Director Principal Process Control Engineer

Key Insight:

"Having visibility of the constraint allows for the operations team to make calculated decisions that will provide the greatest benefit to the supply chain"



Develop Develop simple measures of effectiveness

Communicate Communicate results and areas requiring attention Identify Identify critical areas of the process

<u>Construct</u>

Construct simple visual that ranks each critical area