Maximising your Plant Capability using MeasCap

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EFFICIENCY HUB

1. Problem Statement

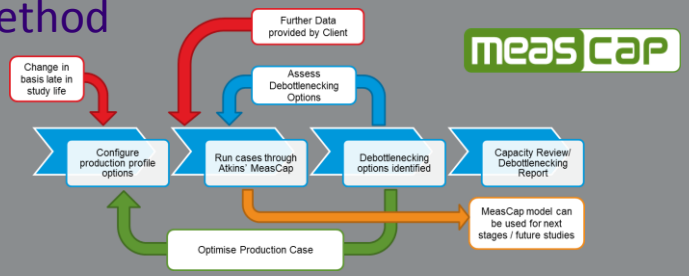
Traditional capacity reviews work on one production profile case at a time, so can be time consuming and expensive when dealing with uncertainty and evaluating a number of options. Atkins' MeasCap tool provides a more efficient approach to capacity assessment.

2. Aims

The software tool MeasCap is optimised to make facility capacity assessment:

- **Fast**: automation allows hundreds of cases to be run/re-run in minutes
- **Extensive:** multiple cases can be run simultaneously, allowing the full potential production envelope / field life to be assessed
- **Adaptable**: easily incorporating late / future changes in data
- **Trustworthy**: auditable, checkable, verifiable results
- **Results-focused**: providing user with clear results and upgrade options

3. Method

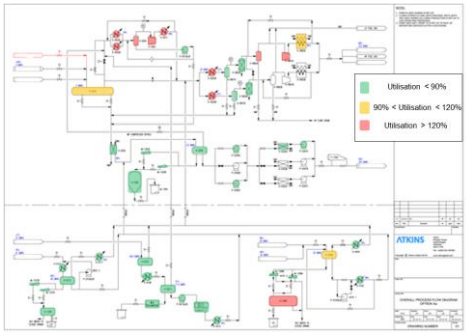


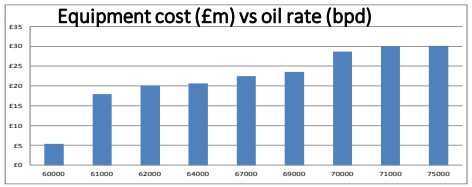
Automated assessment of cases can be used to identify capacity limitations, and then rerun to understand debottlenecking option effectiveness. The options are then assessed by our engineering team to understand constructability and cost implications, offering option comparison. The flexibility offered by MeasCap allows late data to be incorporated, and the model can be re-used for future studies.

4.Impact

MeasCap has been used to help our clients assess a number of scenarios, including:

- Third party tie-backs
- Addition of new wells
- Life of field studies
- Low pressure operation options for maintaining export pressure
- FPSO redeployment
- Facility rationalization for late life
- Terminal debottlenecking





The automation of cases makes the process more efficient, and allows our engineers to work with clients to focus on assessing the "what if" questions. Clear results show the bottlenecks on the plant and feasible operating envelope, and display the range of opportunities available, with option payback vs investment cost.

Efficiency improvements

Automated capacity assessment gives double the results in half the time

Total savings anticipated

Typical study reduced from 12 to 6 weeks, saving > £30k