ACCELERATE PROCESS DESIGN EVALUATION USING ACCURATE COST ESTIMATION

Learn about the Derived Value of Combining Cleopatra with Process Engineering

An accurate cost estimate is the foundation for success. The capability to compare and analyze costs of a process design is imperative to delivering your project within time and within budget. The partnership of AVEVA and Cost Engineering accelerates the design process by using comprehensive, accurate cost estimates to evaluate alternatives along the lifecycle of a project. From an early phase conceptual estimate to a definitive detail estimate, you can ensure the best possible quality and accuracy thus minimizing risk.
Summary

The combination of PRO/II Process Engineering or SimCentral Simulation Platform and Cleopatra provides engineers the option of producing accurate cost estimations for easy evaluation of process design alternates.

Business Value

- Better estimates from class 5 through class 1
- Reduced risk in design selection
- Accelerated design evaluations
- Estimated CAPEX and OPEX with controls tracking throughout the lifecycle of a project

AVEVA and Cost Engineering have joined forces to link the process models of PRO/II Process Engineering with Cleopatra’s cost models to deliver accurate, rigorous cost estimations. This partnership provides unparalleled value to our customers, allowing for the cost evaluation of designs across all phases of a project.

Process Engineering

PRO/II Process Engineering is the industry leading steady-state process simulator used to optimize plant performance by improving process design and operational analysis. It can be used to:

- Design new processes
- Evaluate alternate plant configurations
- Modernize or revamp existing plants
- Troubleshoot and debottleneck plant processes
- Monitor, optimize, and improve plant yields and profitability

SimCentral Simulation Platform is a new, unified lifecycle simulator with the ability to build and execute the digital twin of your process in steady state, fluid flow, and dynamic modes. Its applications are similar to PRO/II Process Engineering within the process utilities and chemicals industries.

Cost Estimation

Cleopatra is the industry standard project controls tool that provides:

- Reliable and accurate cost estimating
- Off-the-shelf cost data for the process industries
- Complete transparent estimates (i.e., no black boxes)
- Integrated cost control and earned-value-management
- Easy comparison and benchmarking of your design alternatives

Continuous Improvements

- Project Inception
- Planning
- Cost Management
- Estimating
- Benchmarking
- Project Execution
**Unique Integration**

Linking the process design output parameters from early design alternatives in PRO/II Process Engineering or SimCentral Simulation Platform with Cost Engineering’s Cleopatra equipment cost models allows for:

- Direct feeding of process design parameters into Cleopatra’s equipment cost models
- Estimation of total cost of process design
- Quick comparison of cost impact of different design alternatives
- Implement cost control throughout the project

**Workflow**

Linking PRO/II Process Engineering or SimCentral Simulation Platform design information with Cleopatra equipment models requires three easy steps:

- Export your process design information from PRO/II Process Engineering
- Import design parameters in Cleopatra. Design parameters are automatically applied to cost models to estimate total installation costs
- Use the project analytics tools in Cleopatra to find most cost efficient design option
Why Process Engineering + Cost Estimation?

Combining PRO/II Process Engineering or SimCentral Simulation Platform with Cleopatra offers many advantages:

- Quick and easy-to-use
- Latest technology in process simulation and cost estimating
- Cloud-based (no complex IT configurations)
- Transparent cost build-up and data source
- Support for standard templates, reports, structures, etc.
- Offered as an add-on to new and existing Process Engineering users
- Equipment models can be user-defined