



# SysCAD

Design | Operate | Optimise

## SysCAD in the Life Cycle of Plant Development

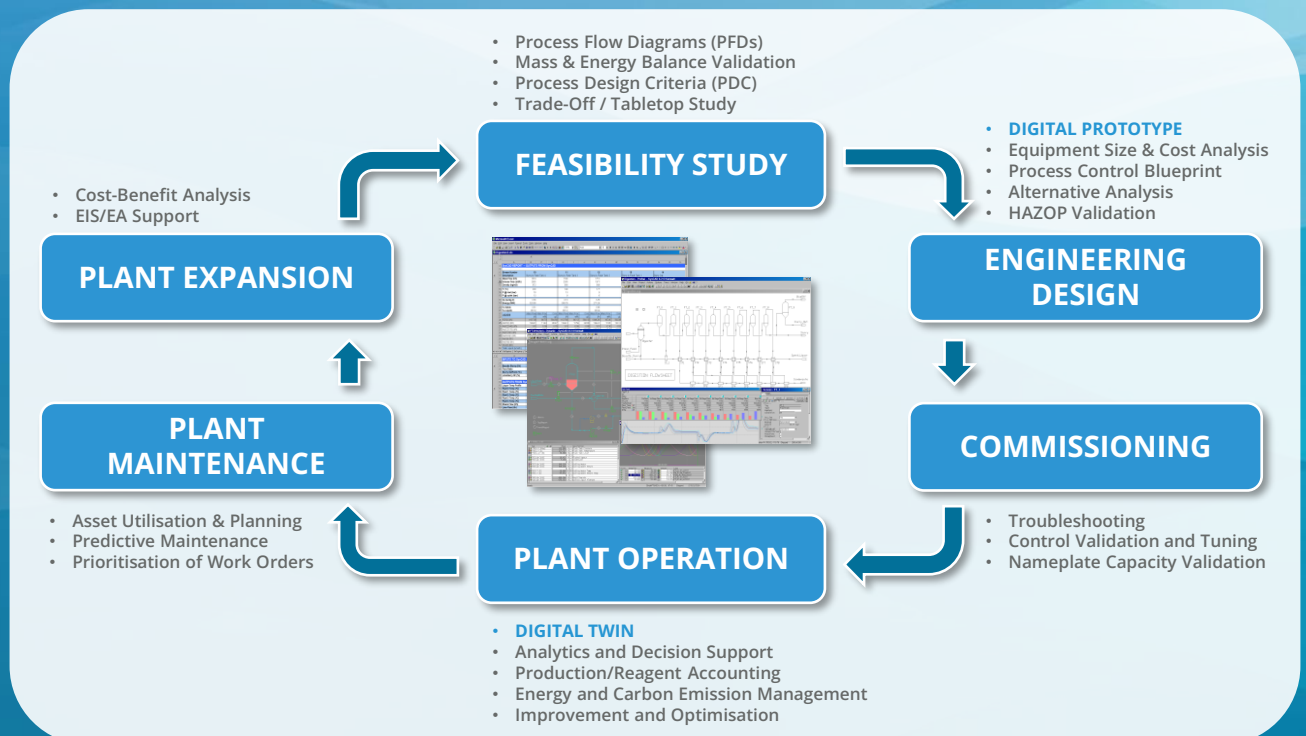
- SysCAD is an excellent repository for process knowledge, providing a comprehensive tool for evaluation and decision-making throughout the plant development life cycle.
- At all stages, different process options or methodologies must be considered. Decisions are made based on factors such as:
  - Capital and operating costs
  - Technical risk
  - Operational safety
  - Product quality
  - Secondary products
  - Raw material consumption
  - Water and energy usage
  - Environmental emissions

## Digital Prototype in Design

- Process design engineers use simulation to establish mass and energy balances which inform PDC, PFDs, P&IDs and control and safety system designs.
- The earlier process simulation is adopted in the development life cycle, the sooner potential issues are identified affecting design change.

## Digital Twin in Operations

- Operations teams use process modelling to better understand their process and find opportunities to optimise and better maintain their process plant.
- Robust model management systems ensure process data and operating knowledge is captured in the model.



## Invest in Your Process

The investment in building and using a process plant model throughout the plant life cycle supports continuously improving your understanding of the process.

The value of a SysCAD process plant model is significantly richer and better integrated when it is implemented early in the Design phase and applied throughout Operations.



**SysCAD**  
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***“A full plant model forms an all-inclusive knowledge base for the design and operation of your process plant.”***

DESIGN

OPTIMISE

OPERATE

