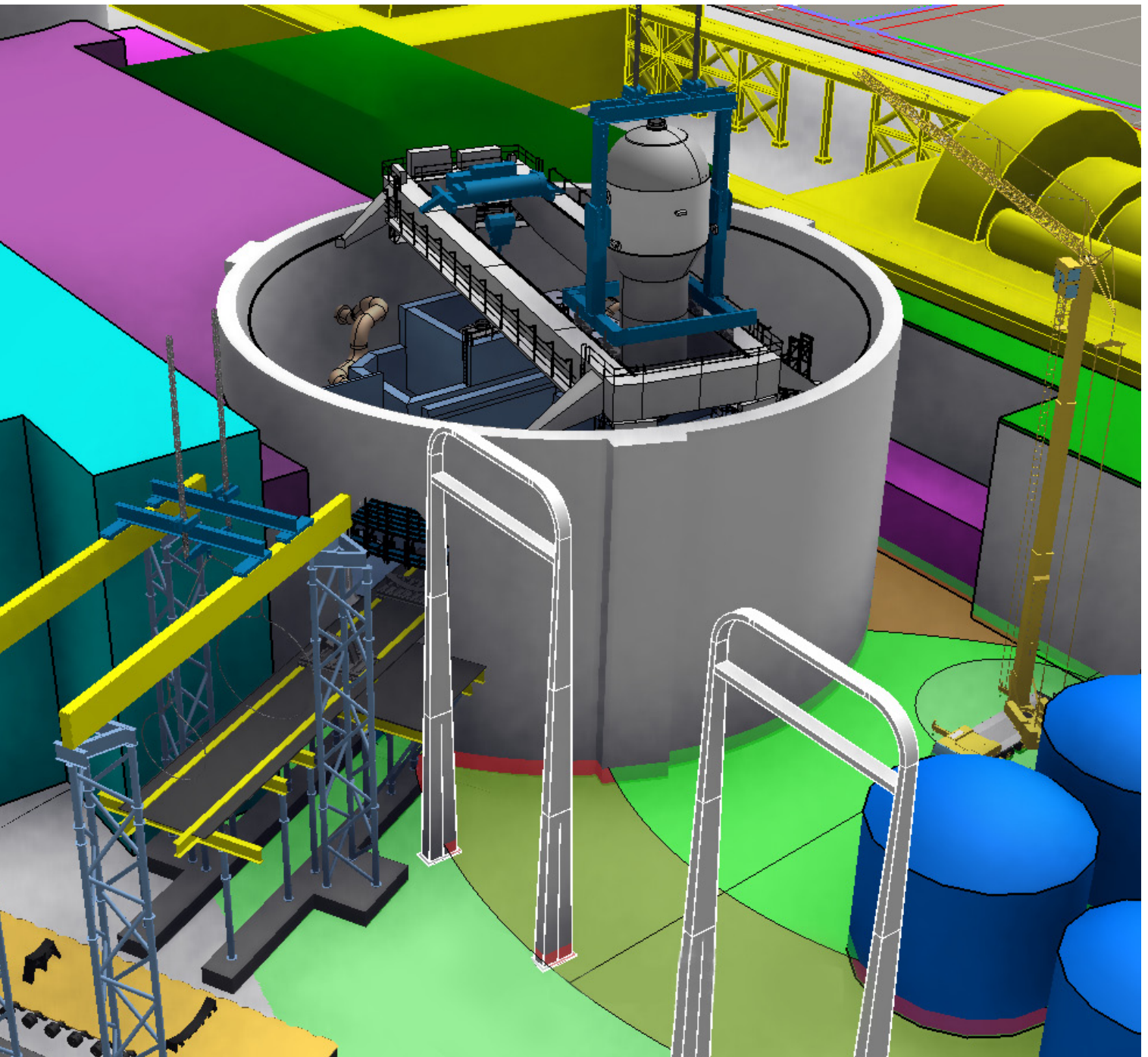


# VIRTUAL CONSTRUCTION 4D SIMULATION

ENERGY, PROCESS & UTILITIES

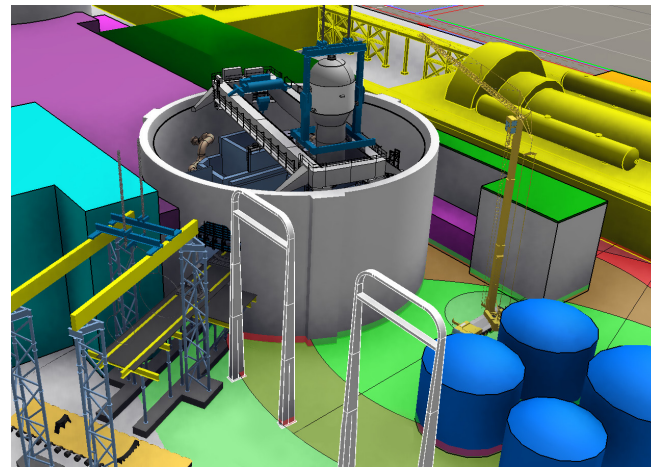


# Innovative construction practices reduce costs and increase on-time completion

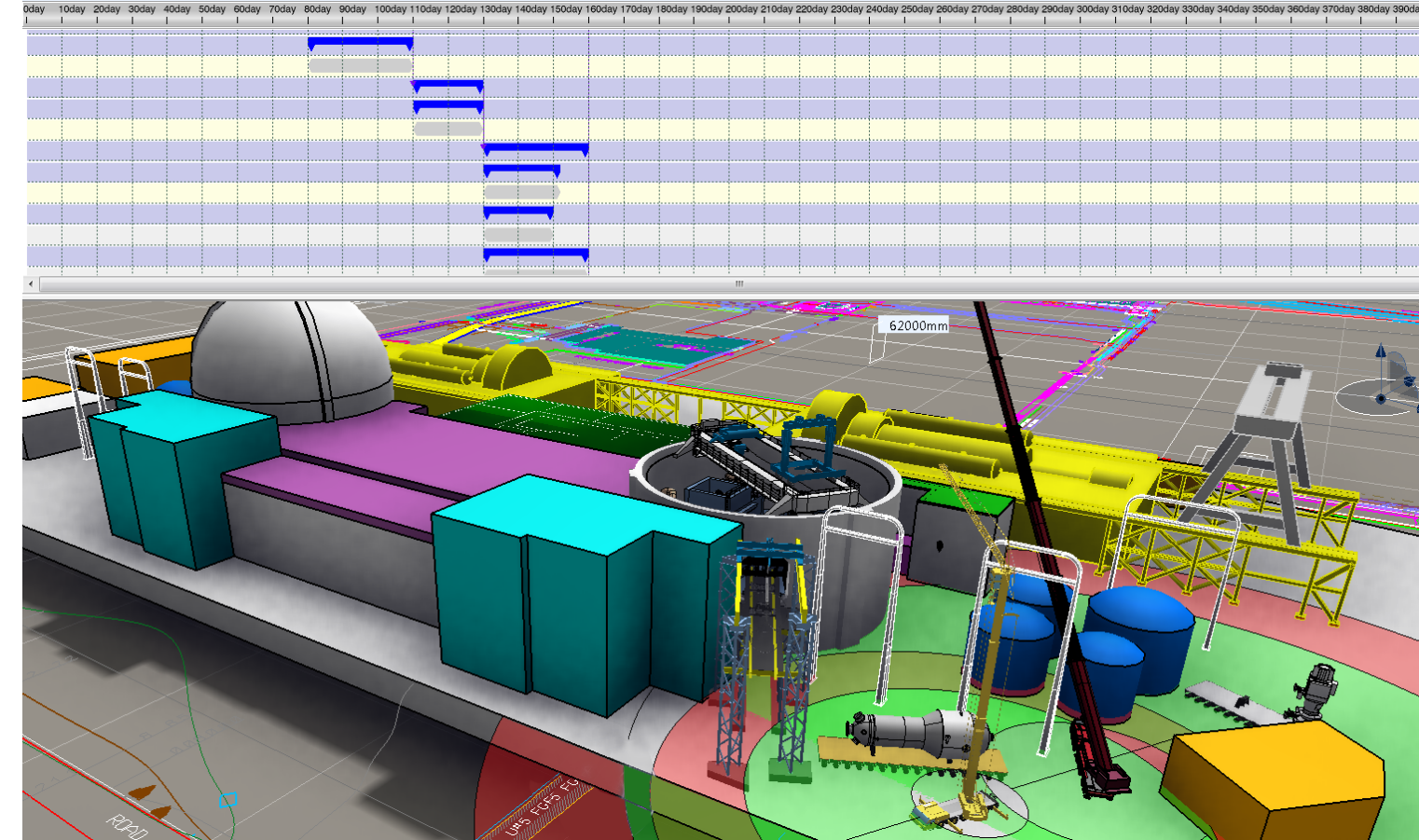
*DELMIA's Virtual Construction 4D Simulation solution for the Energy, Process & Utilities Industry allows you to introduce construction innovation at an affordable cost through a collaborative capital project environment which optimizes resource usage and scheduling.*

DELMIA's Energy, Process & Utilities Virtual Construction 4D Simulation solution allows you to plan virtual construction activities based on a 3D plant model, with construction best practices as a way of reducing costs, meeting project schedules and maximizing the effectiveness of valuable resources.

Construction Project Managers can support a "fast track" project environment that leverages best practices to improve the utilization of valuable resources. This includes defining methodologies for public hearings and acceptance and concurrent development of project health, safety and environmental aspects.



Plan virtual construction activities based on a 3D plant model.



Study alternative sequences and optimize the schedule.

## INDUSTRY CHALLENGES

- How to optimize construction and improve time to completion?
- How to develop construction best practices to reduce costs, manage schedules and improve the effectiveness of valuable resources?
- How to develop a collaborative construction project with integrated EPC, Owners and Subcontractors?
- How to be prepared for short timescale between approval for construction and the construction itself?
- How to develop a Construction Health, Safety and Environment initiative and public hearing objectives?
- How to commit to objectives fixed by government agencies on Environment and Health & Safety initiatives?

## SOLUTION HIGHLIGHTS

- Validate and optimize construction schedule in 3D
- Replay, validate and rehearse scenarios prior to performing critical work
- Collaborative Construction innovation through Plan, Visualize and Execute in 3D
- Concurrent Engineering where construction is going on in parallel with engineering
- Enhance Health & Safety with human simulation and detailed ergonomic analysis
- Capture and reuse knowledge and best practices
- Integrate with any scheduling system

## SOLUTION VALUES

- Improved construction time and efficiency
- Global collaborative construction innovation
- Optimization of construction schedules through 4D concept
- Integrated Plant Engineering – construction simulation
- Simulation-based constructability and safety assessments

## USERS

- Construction Project Managers
- Construction Planners
- Safety Engineers





## Delivering Best-in-Class Products



Virtual Products



Model and Simulate our Planet



3D Design



Information Intelligence



Realistic Simulation



Dashboard Intelligence



Digital Manufacturing and Production



Social Innovation



Collaborative Innovation



3D Communication

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### About Dassault Systèmes

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