

# ENTERPRISE DIGITAL TWINS FOR FACTORY PLANNING & SCHEDULING

AUTOMOTIVE / AEROSPACE / MANUFACTURING

Manufacturers face increasing challenges to maximize both customer satisfaction and profitability. Modern industrial supply chains are more complex and factory conditions are constantly changing. They need a technology that enables them to determine optimal production sequences and define the best resource allocation while respecting manufacturing constraints.

## BENEFITS



Increase  
Production Throughput



Reduce  
stock levels



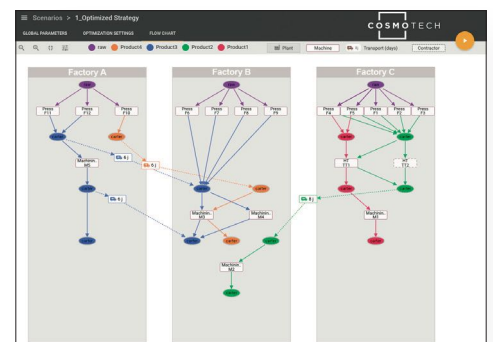
Reduce  
cycle times

## NOT YOUR STANDARD SIMULATION SOFTWARE

Cosmo Tech Supply Chain enables the rapid creation of a dynamic Enterprise Digital Twin of your supply chain. Our solution is designed to:

- Recommend the best possible factory and production line configurations
- Define an optimized production sequence robust to unexpected events
- Determine optimal resources for production according to a set of rules
- Find new production strategies to rapidly react to production hazards

Our collaborative solution helps manufacturers gain in efficiency by optimizing their factory production decisions.



# [ CASE STUDY ]

## Optimize your manufacturing planning & scheduling

Our client is a leading automotive manufacturer. When it comes to production scheduling and sequencing at our client's plant, he needs to simultaneously balance customer service, costs and utilization while respecting complex manufacturing constraints and rules.

Our client sought to find a tool that could find the optimal mix between production sequence, volume and location of parts, to achieve daily production targets, avoid bottleneck and deliver on time.

### FEATURES



#### Unlimited what-if scenarios:

Create multiple scenarios to investigate different production scheduling options



#### Discrete units management:

Simulate and test the production flow of each part to anticipate any bottlenecks



#### Work order sequencing:

Plan, execute and track work orders to optimize efficiency and productivity



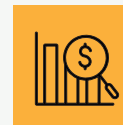
#### Robust scheduling:

Take into account parameter variability and mitigate risks



#### Closed-loop material supply:

Optimize supplies of materials with a finite capacity, in a predefined loop, to avoid shortages



#### Sensitivity analysis:

Test the robustness of your production plan by simulating unexpected events



### GLOBAL FACTORY OPTIMIZATION

“Cosmo Tech Supply Chain enabled us to predict our production capacity and define the best production sequence to maximize it.”

Plant director at a leading automotive manufacturer



Interested in learning more?

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