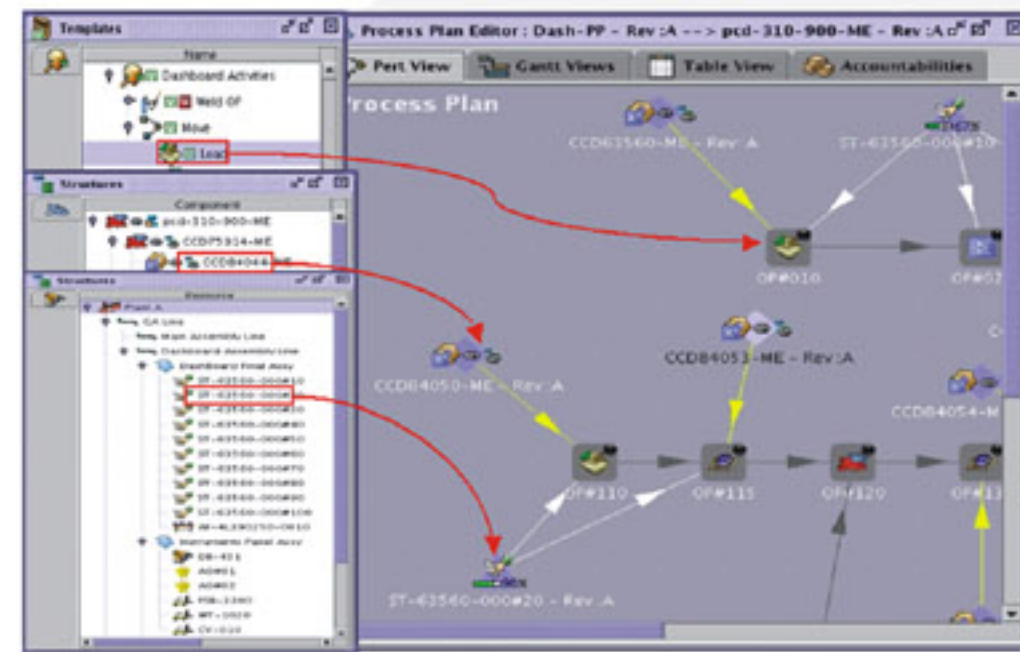


Integrated Assembly Process Planning & Management across your global Manufacturing Enterprise

Today's Manufacturers have to produce more product variants in much shorter times. The manufacturing processes not only have to be optimized for cycle time, cost but also be highly flexible. Changing product mixes should not reduce line productivity or increase product cost. CAMELEAN's General Assembly allows manufacturers to plan the assembly processes for all product variants through a single integrated view of Product, Process and Resource information, thereby ensuring faster time to market, optimized assembly processes and lower product costs. It allows manufacturers to evaluate alternatives, choose the best processes and automatically generate work instructions for the shop floor. With its extensive collaboration capabilities, it allows all stake holders to participate, contribute and design an efficient Assembly Process Plan.

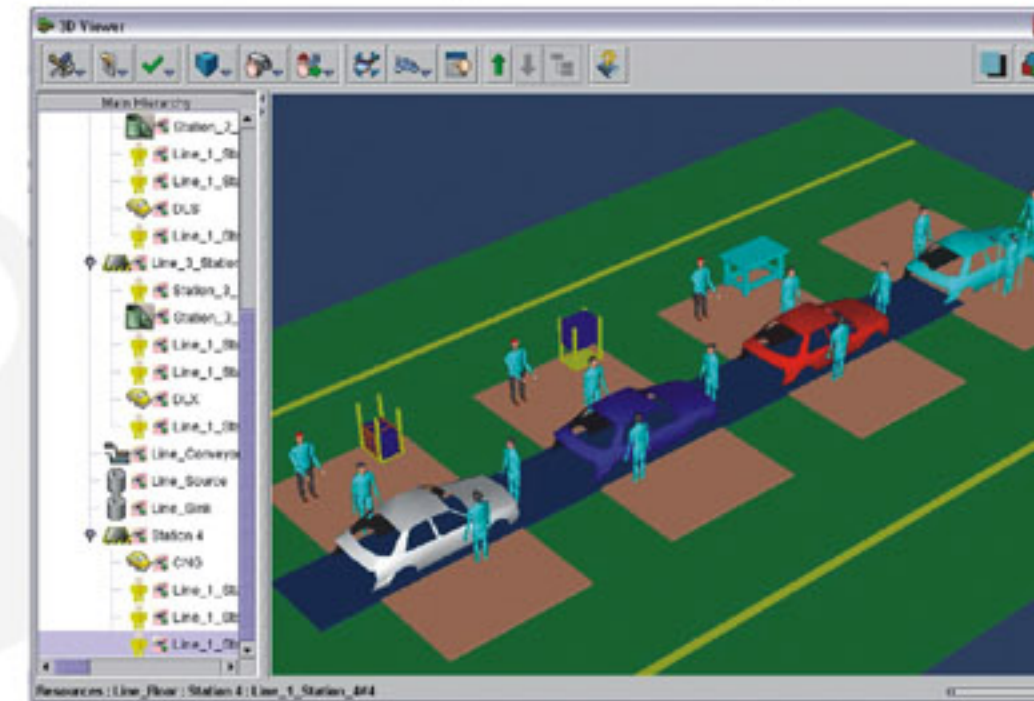
Plan the Assembly Process

- Define the Process Plan from Bill of Processes [BoP] for an MBoM using templates or create from scratch
- Define activity constraints [precedence, station..] & configurations
- Assign components to Process Plan activities
- Revise, synchronize, manage BoP with BoM
- Visualize product status at each activity & for each configuration
- Ensure part accountability by configuration or variants



Resource Planning

- Define the resource structure from Bill of Resources [BoR] using templates or create from scratch
- Assign and configure resources required for each activity
- Design Station, Line and position resources within them
- Visualize product and resource status by configuration
- Create and manage Resource structure revisions
- Interface with Plant Layout and Assembly Simulation software



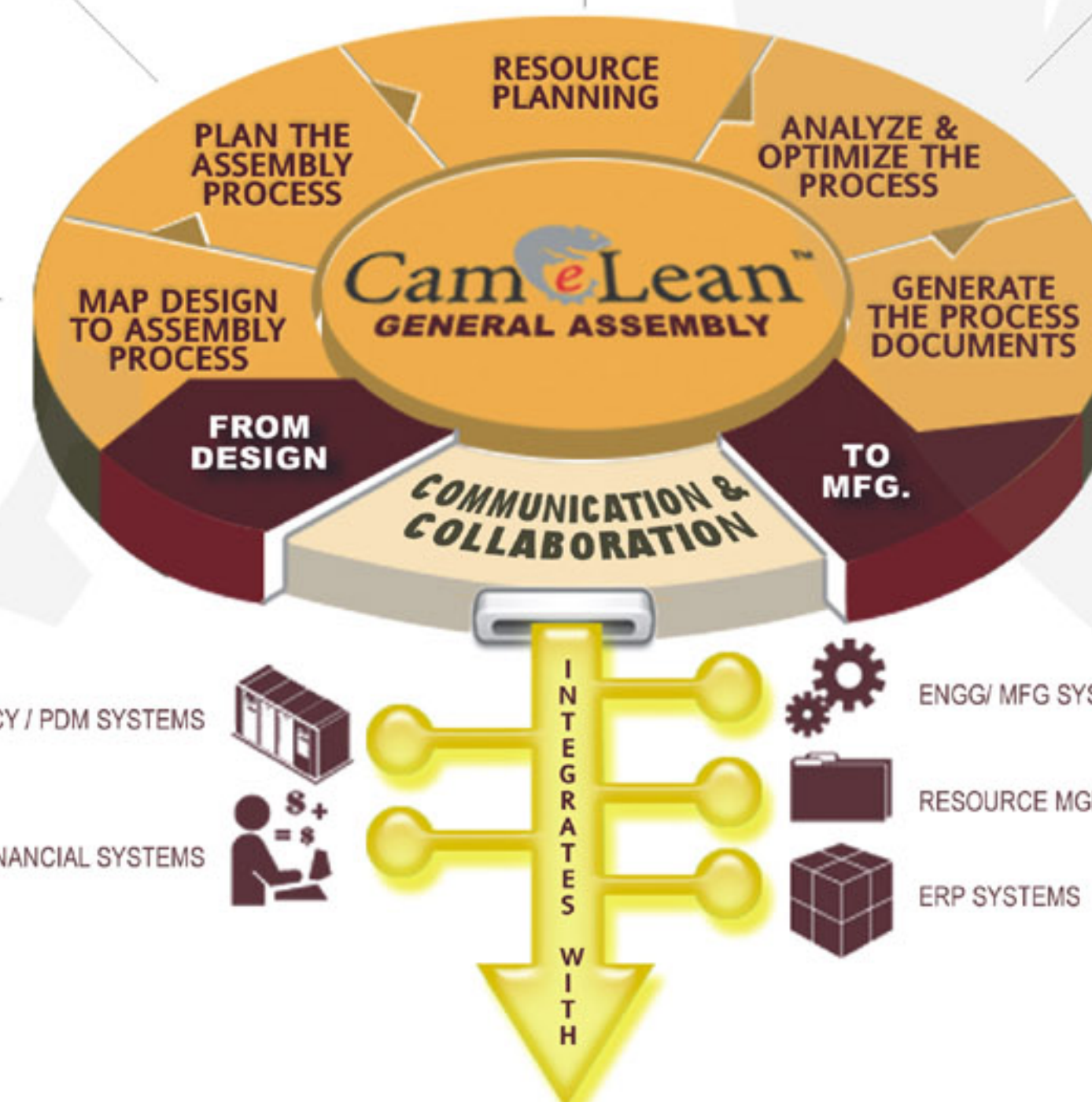
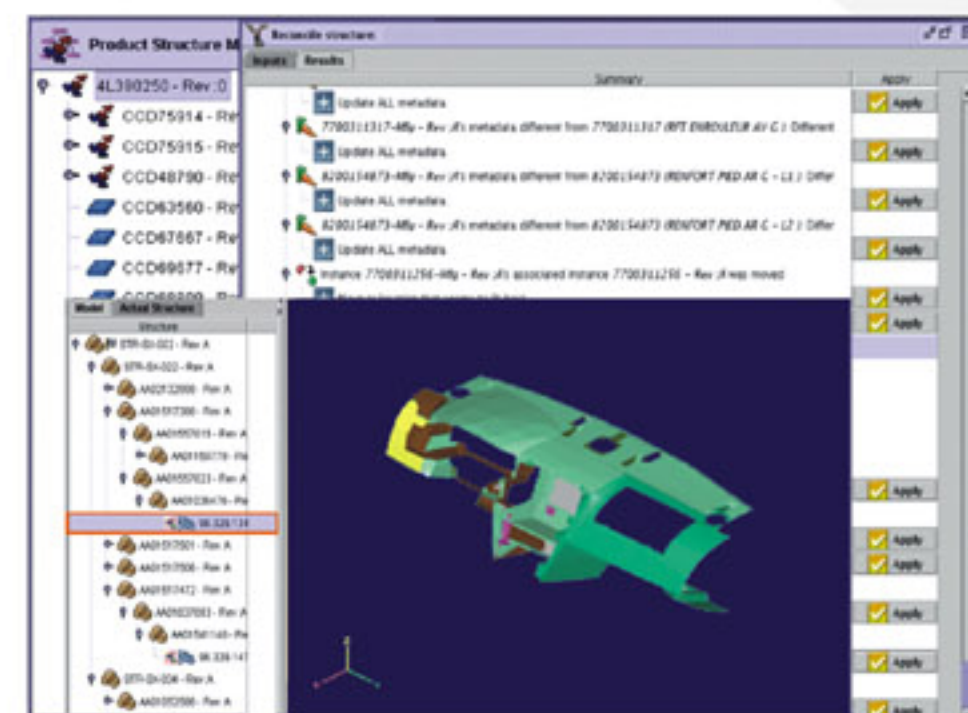
Analyze & Optimize the Process

- Define product mix for different variants, Line Parameters
- Balance the Line in terms of desired cycle times
- Analyze different resource plans for a Process Plan considering regional cost and volume perspectives
- Speedily analyze alternate line balancing results and optimize

Allocation	Weighted Average	Standard - 50.0%	Special Edition - 50.0%
Station#1 - Rev 0	101 s	108 s	110 s
OP#1 (OP)	20 s	20 s	20 s
OP#2 (OP)	40 s	40 s	40 s
OP#3 (OP)	10 s	10 s	10 s
OP#4 (OP)	10 s	10 s	10 s
OP#5 (OP)	30 s	30 s	30 s
OP#6 (OP)	10 s	10 s	10 s
Station#2 - Rev 0	72 s	70 s	69 s
OP#1 (OP)	20 s	20 s	20 s
OP#2 (OP)	30 s	30 s	30 s
Station#3 - Rev 0	42 s	43 s	43 s
OP#1 (OP)	80 s	80 s	80 s
Station#4 - Rev 0	80 s	80 s	100 s

Map Design to Assembly processes

- Import EBoM from PDM or create it in CAMELEAN
- Import Product configuration, parameter data from PDM or create it in CAMELEAN
- Create MBoM from EBoM and automatically reconcile them
- Visualization of product by configuration
- Reuse manufacturing knowledge through libraries and templates



Generate the Process Documents

- Generate Product Centric Reports in terms of the Product Mix, Bill of Materials, Part Accountability ..
- Generate Resource Centric Reports in terms of the Bill of Resources [BoR], work instructions, utilization ..
- Generate Process Centric Reports in terms of the BoP, component/resource requirements, process constraints..
- Generate Customized Reports based on special requirements

