

# STRATEGIC COMPONENT PLANNING (GCD)

Centralized, global planning of Global Common Data (GCD) across multiple systems with different models.



5
5 Year capacity
overview



60 Locations



< 1
Year project
duration



8
Hrs. runtime overall planning



# In brief ...

### **Implementation Highlights**

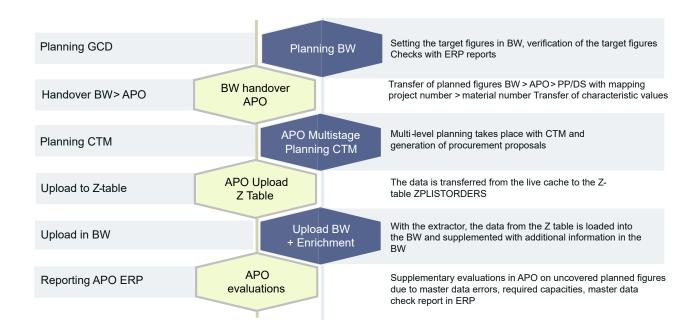
- · Long-term capacity overview for the next five years
- Global planning of all purchased part requirements through multi-level, multi-site explosion of bill of material levels
- Expansion to include strategic capacity planning (GCP) as a central, integrated and harmonized system for capacity planning
- Use of the results by downstream areas such as purchasing, logistics, work preparation and production

### **CHALLENGE**

- Aggregation of the required purchased parts across approx. 60 different locations with several ERP systems
- Calculation of the expected purchase volume per material and supplier based on a 5-year forecast
- Consideration of intercompany relationships between plants
- · Consideration of multi-level subcontracting
- Different master data in each plant, supplier numbers must be consolidated to a unique supplier ID
- · Forecast and planning of projects with reference BOMs
- High data volume with approx. 60 million procurement proposals in the planning horizon
- Identification of the causative primary requirements, project probabilities, etc. starting from the purchased part or supplier and subsequent characteristic-based planning (CDP in CTM)

### PROJECT GOALS

- Global planning of all purchase & in-house requirements through multi-level, multi-site resolution of all BOM levels.
- Traceability of the use of purchased parts in customer requirements for risk assessment, e. g. in case of supplier failure
- Simulation (what-if) of the impact on component requirements in the event of changes to customer or primary requirements
- Extension to include strategic capacity planning (GCP) as a central, integrated and harmonized system for capacity planning and a long-term capacity overview for the next five years
- · Planning of supplier capacities on capacity families
- Use of results by downstream areas such as purchasing, logistics, AV, manufacturing, etc.





### CONCLUSION

- Global planning across several systems with different master data models and merging in a central APO were successfully implemented
- Sufficient effort should be calculated for the preparation or correction of master data and the harmonization of the interface (CIF mapping)
- Due to the high data volume and despite the associated longer runtime of the planning chain, SAP APO was successfully used in this use case
- The corresponding effort for job control should be planned for restarting after terminations, individual package formation and the prevention of load peaks
- The procedure is technically demanding from a CTM point of view, but has proven itself through the right technical interventions and enhancements

99



in the implementation of a global planning across several systems with different master data models and the consolidation in a central APO successfully.

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## ZF Friedrichshafen GmbH & CO. KG

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