

Process planning tools support Volvo Cars' expansion to Asia Pacific region



Volkswagen

www.volkswagen.com

Volkswagen is a German automobile manufacturer headquartered in Wolfsburg, Lower Saxony, Germany. Volkswagen is the top-selling and original marque of the Volkswagen Group, the biggest German automaker and the second largest automaker in the world.

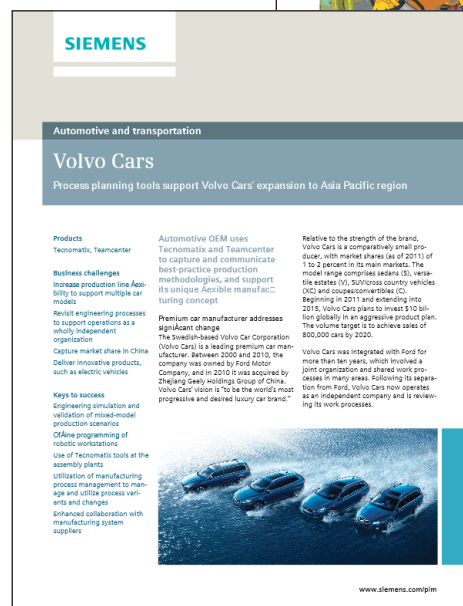
Engineering simulation plays a central role whenever an automotive company decide either to increase production line flexibility to support multiple car models or even for revisiting engineering processes to support operations and deliver innovative products. In this case, Volvo was able to meet these challenges because of its engineers' high level of expertise, employing a Process Simulate tool and using its offline programming and realistic robot simulation capabilities. By doing so, the company is able to generate very accurate robot programs that require only slight modifications on the shop floor.

Simulation and Forecasting Technology role

Increase production line flexibility, revisiting engineering processes, realistic robot simulation capabilities, and increase robot programs accuracy

Sector
Automotive

[Click here](#) to download the Case Study



SIEMENS

Automotive and transportation

Volvo Cars
Process planning tools support Volvo Cars' expansion to Asia Pacific region

Products
Tecnomatic, Teamcenter

Business challenges
Increase production line flexibility to support multiple car models.

Ways to success
Engineering simulation and validation of mixed-model production scenarios.
Offline programming of robot workstations.
Use of Tecnomatic tools at the assembly plants.
Utilization of manufacturing process management to manage and utilize process variants and changes.
Enhanced collaboration with manufacturing system suppliers.

Automotive OEM uses Tecnomatic and Teamcenter to capture and communicate best-practice production methodologies, and support its unique *Åxible* manufacturing concept.

Premium car manufacturer addresses significant change. The Swedish-based Volvo Car Corporation (Volvo Cars) is a leading premium car manufacturer. Between 2000 and 2010, the company was owned by Ford Motor Company, and in 2010 it was acquired by Zhejiang Geely Holding Group of China. Volvo Cars' vision is "to be the world's most progressive and desired luxury car brand."

Relative to the strength of the brand, Volvo Cars is a comparatively small producer, with market shares (as of 2011) of 1 to 2 percent in its main markets. The model range comprises sedans (S), versatile estates (V), SUVs/crossover vehicles (XC) and coupes/convertibles (C). Beginning in 2011 and extending into 2015, Volvo Cars plans to invest \$10 billion globally in an aggressive product plan. The volume target is to achieve sales of 800,000 cars by 2020.

Volvo Cars was integrated with Ford for more than two years, which involved a joint organization and shared work processes in many areas. Following its separation from Ford, Volvo Cars now operates as an independent company and is reworking its work processes.

www.siemens.com/plm

