



CYCLE-TIME PERFORMANCE SOLUTION

Engineer optimum performance of mechanical devices to measure
and optimize nominal cycle-times

Overview

Design in the context of the machines performance

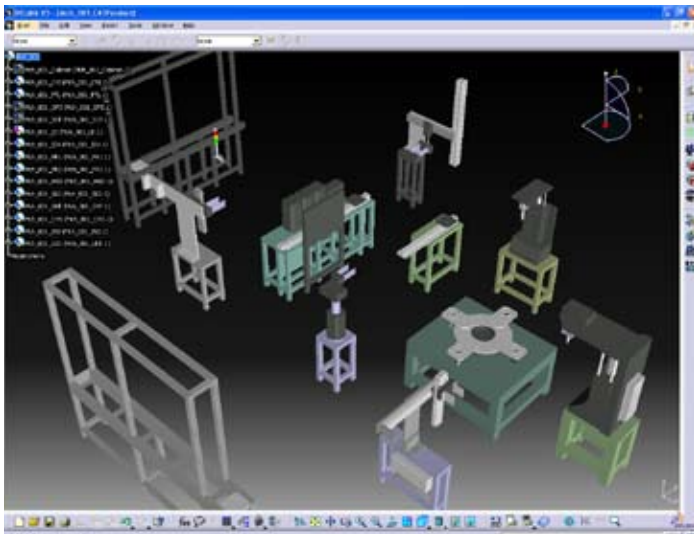
In today's competitive landscape, industries are challenged to achieve optimum utilization of their equipment, lower cost to its customers and be more agile in bidding for turnkey manufacturing projects. In general, most equipment designs are fundamentally geared towards optimum performance and output. Delivering industrial equipment, special purpose kinematic fixtures, and jigs for high performance output in case of mass production means saving time and money at every possible second.

Traditionally, cycle time improvement are done manually on excel documents which takes significant time and valuable use of high-end engineer resources. Quickly identifying and reacting to machine performance and design changes earlier in the process and better allocation of engineering resources is critical. Any company can significantly impact the success of customer delivery and company profits by better understanding the process and production variables prior to physical deployment on the shop floor.

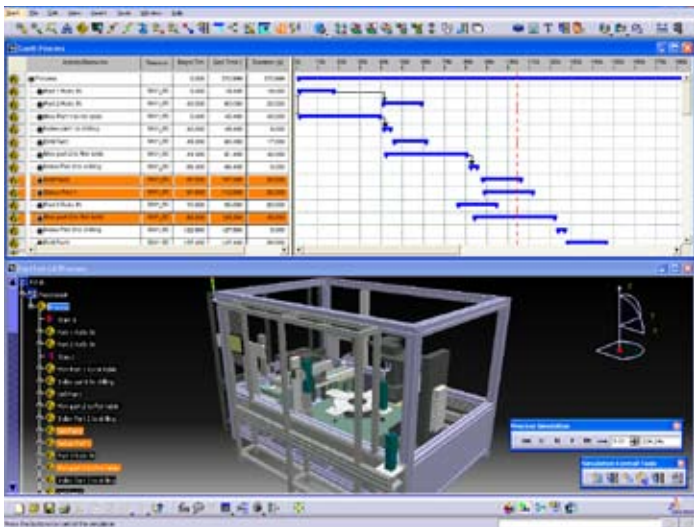
DELMIA Cycle-Time Performance solution breaks away from traditional methods to offer a superior 3D environment to perform equipment performance feasibility studies. Engineers can react quickly to design issues to measure and optimize nominal cycle time

It enables the engineers to design and reuse their CATIA 3D data, add kinematics and teach the working behavior of the equipment. The use of sophisticated Gantt charts help to optimize cycle times and allows the engineer to better understand performance.

Users can also simulate multi-device sequence and accurate machine behavior to visualize potential clashes between moving components and eliminate collisions during this simulation stage to enable the optimum equipment utilization and avoid potential high risk scenarios downstream in production.



Load prepared simulation CATProduct as resource and define equipment device tasks and assign them to process



Simulate complex multi-device equipment and synchronize cycle times on GANTT chart for faster evaluation of equipment performance virtually in 3D

Key Functionality

- Import Engineering Equipment BOM
- Create and restructure the BOM
- Reorganize BOM to identify the kinematic parts under a CATProduct
- Load prepared simulation CATProduct as resource into DELMIA Process document and define DEVICE TASKS
- Assign DEVICE TASK(s) to process
- Establish control flow relationship links between processes where necessary
- Open Process GANTT & run simulation to verify behavior
- Fine tune cycle time and optimize equipment performance interactively by moving time bars on GANTT chart

Benefits

- Simulate complex multi-device equipment & synchronize cycle-times on GANTT chart
- Faster evaluation of equipment performance virtually in 3D
- Eliminate collisions during simulation
- Rapid evaluation of late design changes
- Measure, evaluate & improve nominal behavior of equipment
- Error free communication in 3D to down stream users
- Natural extension of the 'CATIA Team PLM' offering

About Dassault Systèmes:

As a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 100,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire lifecycle of products from conception to maintenance to recycling. The Dassault Systèmes portfolio consists of CATIA for designing the virtual product - SolidWorks for 3D mechanical design - DELMIA for virtual production - SIMULIA for virtual testing - ENOVIA for global collaborative lifecycle management, and 3DVIA for online 3D lifelike experiences. Dassault Systèmes' shares are listed on Euronext Paris (#13065, DSY.PA) and Dassault Systèmes' ADRs may be traded on the US Over-The-Counter (OTC) market (DASTY). For more information, visit <http://www.3ds.com>.

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