PROGRAM, SIMULATE AND VALIDATE MECHANICAL DEVICES:

DELMIA DEVICE TASK DEFINITION GIVES USERS THE ABILITY TO PROGRAM, SIMULATE AND VALIDATE MECHANICAL DEVICES.

DELMIA Device Task Definition (DTD) delivers the capability to program and simulate forward kinematic mechanical devices, ranging from simple clamps to complex lift-assist mechanisms. It also provides the ability to manage multiple devices, integrate them within the V6 3D workcell layout, and perform feasibility studies. Each device is individually programmed with tasks that are sequenced and simulated to eliminate any interference and obtain optimal cycle times. Device and device behavior can be instantiated multiple times within a single workcell and across the entire factory.

PROGRAM A DEVICE TO PERFORM DESIRED TASKS

DELMIA Device Task Definition provides an interactive V6 3D environment which allows users to define the tasks for each device in the context of the shop floor.
SEQUENCE THE TASKS OF MULTIPLE DEVICES

Users are able to sequence the tasks of each individually programmed device in order to achieve synchronized motion between the devices in the workcell.

SIMULATE AND VALIDATE IN 3D

Single or multiple device tasks can be simulated in 3D to locate and correct any interferences or collisions in the workcell. Users are able to evaluate and optimize device activities to achieve desired cycle times.

COLLABORATE THROUGH SIMULATION ROLL-UP

Multiple users can concurrently create and validate individual device tasks in a single workcell or across an entire factory. Device tasks are automatically incorporated into the parent resource hierarchy. Other stakeholders are able to run simulations to validate processes that contain work from multiple contributors.

DEFINE RESOURCE STRUCTURES

Users can modify a device by editing, adding or replacing existing parts or joint attributes. This is particularly helpful when the user wants to create a variant from the resource library to fit the current product or process requirements.

DEFINE MOTION CONTROLLERS

Users can enrich the product structure with kinematics and motion attributes. The result is a programmed mechanical device for use in resource detailing, simulations and program generation.

PRODUCT HIGHLIGHTS

- 3D platform to create, validate and edit device tasks in different manufacturing contexts
- Collaborative context-based, immersive user interface
- Define device tasks concurrently and sequence them at higher context
- Find and resolve Design for Assembly and Design for Manufacturing issues early
- Up-front validation and redesign of device geometry

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