

## WORKCELL BUILDER SOLUTION

Easy-to-use 3D resource planning tool to design, build, and validate robotic workcell components

### Overview

**Role based resource layout tools for manufacturing line building and robot workcell design and fabrication.** DELMIA WORKCELL BUILDER is suited for any small-to-medium businesses, such as engineering firms, tooling suppliers, systems integrator that has significant and frequent product changes with many robot systems to manage and deploy.

DELMIA WORKCELL BUILDER provides a complete solution for the role of the resource designer to model in 3D to validate tooling, perform robot feasibility studies, and associate tooling and positioning equipment, including standard robots, for a complete assessment of a manufacturing workcell or entire line.

**Are you typically spending months using basic 2D CAD systems to mock up approximate workcell layouts?**

DELMIA WORKCELL BUILDER provides an advanced 3D environment to virtually build your workcells to identify problematic areas, confirm robot placement and verify if equipment is need to be repositioned or adjusted before they are commissioned on the shop floor. The resource design or planning role in your organization will be able to virtually design, plan, build and deploy workcell components, in order to commission the workcell right the first time. With DELMIA, you will improve overall quality and efficiency in your operations and result in significant cost savings and reduction in downtime.

**Perform resource positioning/accessibility tests, view robots work envelope for ensuring collision free work zones.** DELMIA WORKCELL BUILDER enables users to manually verify reachability and detect interferences between all the workcell components. This will avoid repositioning any Robotic resources in reality after commissioning. It is also possible to define specifications for other kinds of devices in the workcell (such as weld guns).

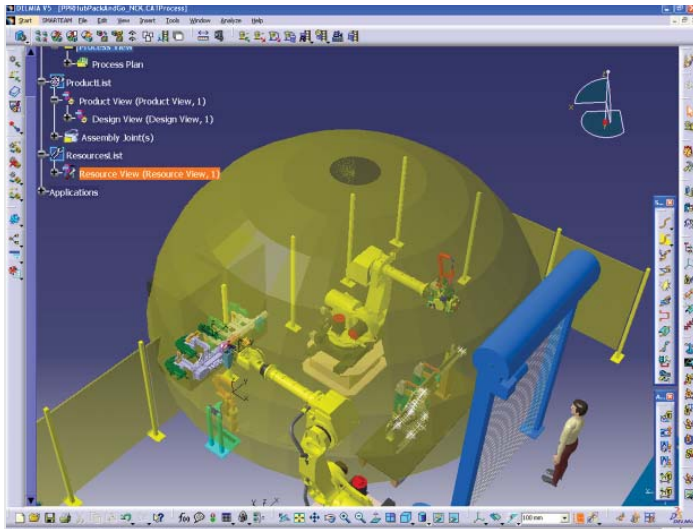
**Library tools to build and reuse resource data for quick and easy workcell setup.** DELMIA WORKCELL BUILDER's collaborative engineering capabilities allow reuse of user catalogs and manufacturing workcells. Features include geometric modeling, kinematics modeling, and interference detection capabilities for flexible manufacturing resources.

The optional Robot Libraries offer a selection of six major robot family models and related translators include Fanuc, Nachi, Daihen, Kuka, ABB, and Motoman. The user can verify that the chosen robot is the most appropriate for the task using reach analysis, placement, define resource machines including robots and controlled machines such as programmable pick and place devices. The resulting virtual model of the manufacturing cell, complete with products and resources as well as the process each resource is required to perform.



**Collaborative tools for your engineering network.** DELMIA Workcell builder's Multi-CAD compliance ensures that users can receive and use any form of CAD data from their customers.

Completed workcells can be passed on to other DELMIA PLM Express offering such as Robotic Programming Solution for sequencing offline programming, Workplace Ergonomic Solution for ergonomic factors, or Automation Control Engineering Solutions for virtual commissioning.



*Quick workcell set-up and virtual validation in 3D environment will enable early validation robots work envelope for ensuring collision free work zones*

## Key Functionality

- Build an accurate 3D mechanical model of a new or existing manufacturing cell
- Perform resource positioning/accessibility tests, view robots work envelope for ensuring collision free work zones
- Associate tools and positioning equipment with a robot
- Define resource machines such as robots, controlled pick and place devices and resource devices like weldguns and clamps
- Build 3D CAD models or use included STEP translator for importing Multi-CAD data

## Benefits

- Validate workcell set-up in 3D to eliminate costly rework
- Virtually perform "what-if" scenarios for the optimum solution
- Eliminate repositioning of robotic resources after commissioning workcells on the shop floor
- Create ready-to-use manufacturing cell models for the robot offline programmer
- Reuse of workcell data in other DELMIA PLM Express Solutions

**For more information on DELMIA, visit our website at [www.delmia.com](http://www.delmia.com)**

### 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 is listed on the Nasdaq (DASTY) and Euronext Paris (#13065, DSY.PA) stock exchanges. For more information, visit <http://www.3ds.com>

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