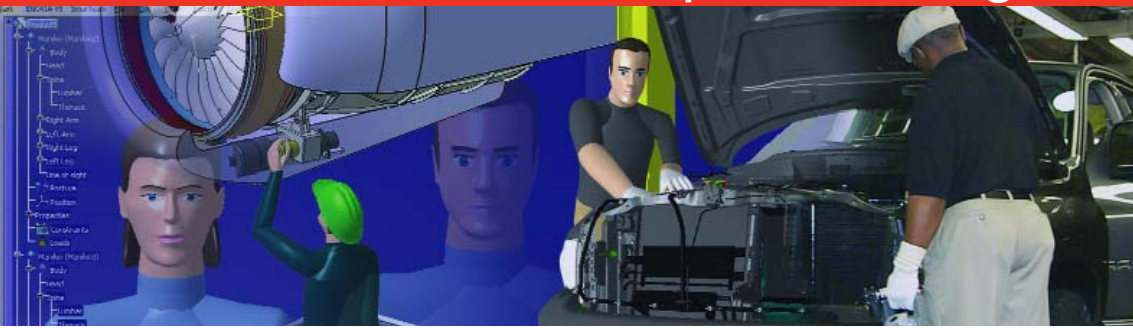


DELMIA V5

HUMAN™ Workplace Design



*Ready to use V5 Solution
to Design, Simulate and
Validate Human Workcell
Assembly Tasks*

Your Workforce is as Important as the Products they Manufacture

Manufacturing organizations around the world continue to design and develop machines, vehicles, and products that are capable of performing better, faster, and longer. An increasingly important design consideration is to ensure that these technological innovations are being designed from the perspective of the people who actually build, maintain, and operate them. From a factory worker to an aircraft pilot—today's manufacturers must consider these Human Factors (HF) early in the product life cycle.

Targeted for consultants and SMB companies that want to study basic and advanced ergonomics issues within their manufacturing environments, DELMIA offers a ready-to-use solution to evaluate and explore human activity in the manufacturing environment. DELMIA V5 HUMAN Workplace Design, provides such organizations with HF tools specifically geared towards understanding and simulating the worker task for the products they manufacture, install, operate and maintain.

To ensure competitiveness in the global marketplace, manufacturing organizations are becoming increasingly aware of the value in designing manufacturing facilities specifically geared to the skills and limitations of the local workforce. DELMIA V5 HUMAN Workplace Design can assist to maximum workforce potential—in a safe, ergonomic efficient environment.

Building your Virtual Worker for a Realistic Manufacturing Environment

DELMIA V5 HUMAN Workplace Designs permits the intuitive creation and evaluation of humans for initial worker-product interaction. V5 HUMAN Workplace Design offers a user-friendly interface and ensures that first level Human Factors studies can be undertaken by non-Human Factors specialists. Simple pull-down menus are used to create male and female standard manikins (Name, Gender, 5th, 50th, 95th percentile). The sophisticated manikin structure consists of 99 independent links, segments and ellipses. In addition, the manikin possesses fully articulated hand, spine, shoulder, and neck models to accurately reproduce natural movement.

The DELMIA V5 HUMAN Manikin is interactively positioned using the compass, or by selecting objects to be reached. Direct kinematics manipulators can be employed to accurately "fine tune" manikin posture by manipulating individual segments in each degree of freedom.

Manikin vision assessment permits a designer to understand what an operator or maintainer would "see" in a task environment. A separate vision window displays the vision field from the manikin perspective to assess visual interference or limitations.

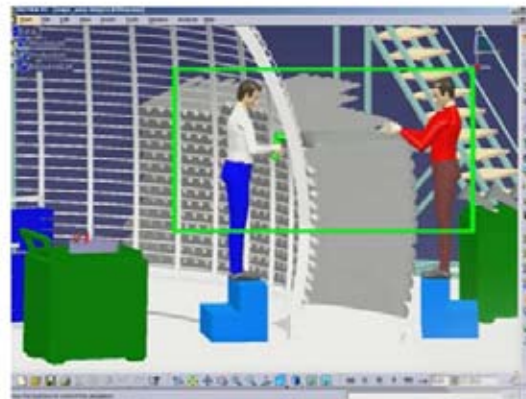
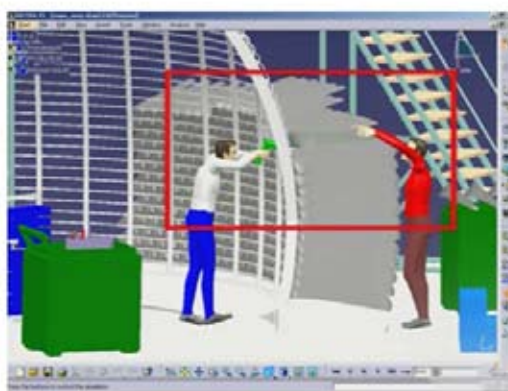
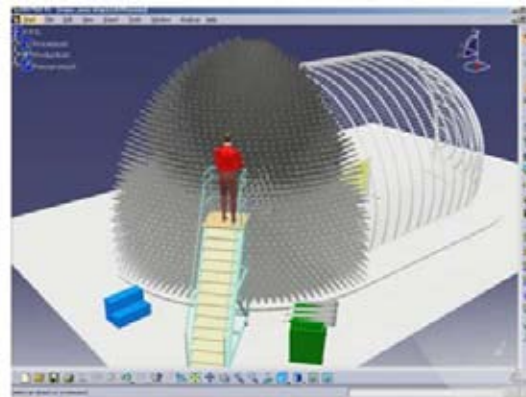
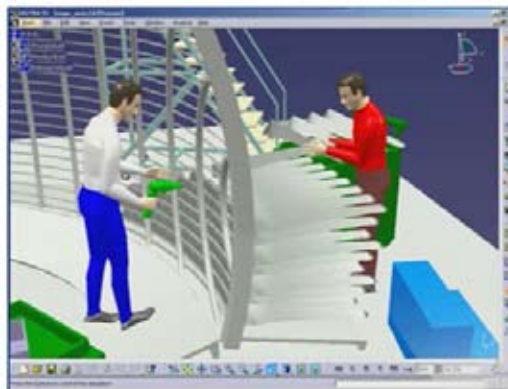
The DELMIA V5 Advantage

- *Open architecture for customization and extension*
- *Address specific ergonomic needs such as Reach, Vision, Clearance, and Space*
- *Reduce errors with manual feedback on critical stations*
- *Reduce number of physical prototypes*
- *Validate worker interactions within the workcell*
- *Enhanced ease of use for rapid deployment*
- *Take human factors into account during process design phase*



Key Functionality

- Intuitively insert accurate virtual humans into the powerful V5 simulation environment
- Explore and analyze multiple worker scenarios using different anthropometry for vision, reach and clearance
- Import/Insert 3D CAD geometry into V5 HUMAN Workplace environment
- Position manikin(s) at appropriate locations for seamless interaction with product geometry
- Simulate human activities such as Move-To-Posture, Walk, Pick & Place, Climb Up/down Stairs & Ladders
- Create HTML based reports



Save Time, Cost and Improve Accuracy of your Workforce

DELMIA V5 HUMAN Workplace Design offers powerful human modeling tools to create, validate, and simulate activities for "workers". Analyze common performing activities within your manufacturing environment where they may walk to a specific location, move from one target posture to another, following the trajectory or path of an object and pick and place parts in the work area.

Users can also establish part relations to constrain

specific segments of the worker to parts or tools in its environment. Position constraints are also stored from selected segments to selected 3D objects in the environment. Those constraints are subsequently solved to update the posture the next time the activity is modified.

DELMIA V5 HUMAN Workplace Design will allow manufactures to save time and maximize factory efficiency with the right ergonomic tools to simulate the workforce in manufacturing, maintenance and assembly environments.