



DELMIA V6

ErGonomics Analysis

Analyze and Predict Human Comfort, Safety and Performance

DELMIA Ergonomics Analysis enables efficient evaluation of workplace and product designs through the V6 3D immersive environment.

DELMIA Ergonomics Analysis (EGA) builds on DELMIA Ergonomics Evaluation (EGE) and allows users to analyze and predict human comfort, safety and performance for targeted populations, directly within the 3D virtual environment. These analysis capabilities enable engineers to examine, score and iterate whole body and specific segment postures to determine a person's safety level, as well as their ability to perform defined work in the context of a product or workplace design.

With DELMIA Ergonomics Analysis, user-defined manikins can be created to represent a specific population with access to any of the 103 anthropometry variables. The



boundary manikin technique gives users the ability to ensure that their products accommodate a global target audience. Products can be analyzed for selected populations in America, Europe and Asia – an important consideration for companies designing products for global markets.

Rapid upper limb assessment

Work-related upper limb disorder risks can be detected and displayed via color coding on the manikin's upper body segments (neck, trunk, wrists and arms).

Lifting and lowering analysis

Duration, frequency, lifting posture (start and finish) and coupling conditions are used as input to provide recommended and maximum weight of the object to be lifted.

Push, pull and carry analysis

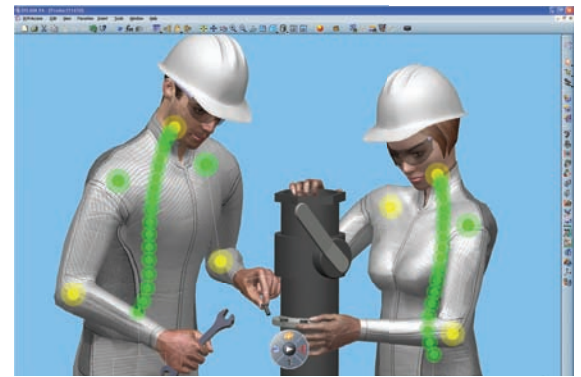
This analysis compares the actual “pushing/pulling” force to what is considered a safe force to perform the activity. Distance and population samples are used as input to provide a maximum acceptable carrying weight.

Biomechanics analysis

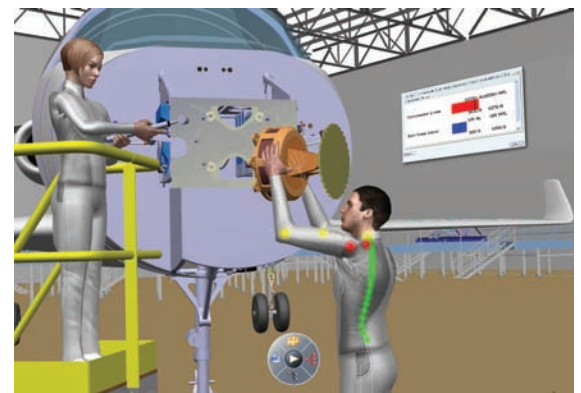
Based on the position and the load (weight of an object) specified on the manikin’s segments, this analysis will calculate the moments and forces being applied to each joint. This analysis also provides an indication of the percentage of the manikin’s population that will be unable to perform this action.

Product Highlights

- Creation of user defined manikins to cover targeted populations
- Comfort, strength or safety scoring for postures with color coding
- Customization of range of motion for each joint
- Capture and re-use of ergonomic enterprise standards
- Lowering of work-related injuries because ergonomics concerns can be identified early in the design process



DELMIA Ergonomics Analysis enables engineers to examine, score and iterate whole body and specific segment postures.



Analyze and predict human comfort, safety and performance directly within the 3D virtual environment.

About Dassault Systèmes

As a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 115,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes applications 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.

For more information, visit 3ds.com

SOLIDWORKS, CATIA, SIMULIA, DELMIA, ENOVIA and 3D VIA are registered trademarks of Dassault Systèmes or its subsidiaries in the US and/or other countries.



 **DELMIA**