ERGONOMICS ANALYSIS
Datasheet

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. As such, products can be analyzed for selected populations in America, Europe and Asia – an important consideration for companies designing products for global markets.

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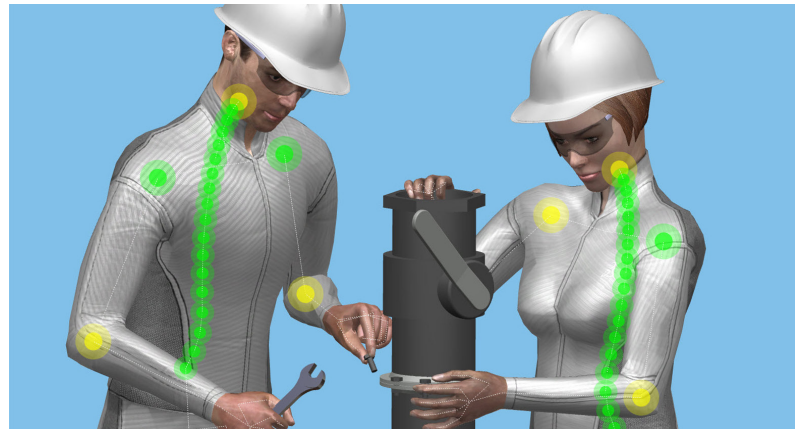
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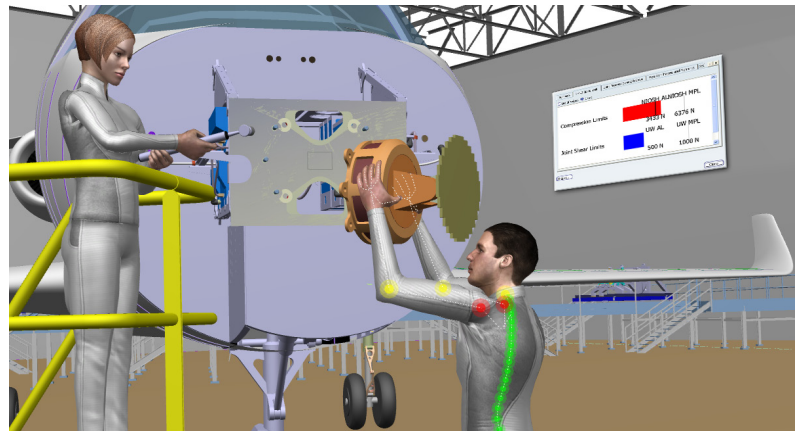
Analyze and predict human comfort, safety and performance directly within the 3D virtual environment.

About Dassault Systèmes

Dassault Systèmes, the **3D**EXPERIENCE Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 150,000 customers of all sizes, in all industries, in more than 80 countries. For more information, visit www.3ds.com.

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