

# WORK SAFETY ENGINEER

## 3DEXPERIENCE MANUFACTURING & PRODUCTION ROLE



**CREATE, VALIDATE  
AND ENHANCE  
HUMAN TASKS  
WITH LIFELIKE  
MANIKINS**

Work Safety Engineer creates lifelike manikins and places them into 3D models.

Work Safety Engineer delivers the ability to create lifelike manikins with standard anthropometry. Manikins can be placed into a 3D model to evaluate human interaction with a product or workplace. Defining common tasks is simple using predefined actions such as picking up and placing objects, walking, operating a device or using a tool. The **3DEXPERIENCE®** platform makes a wide range of manipulation and analysis tools accessible to all stakeholders.

## Save costs by early integration of human factors in product or workplace design

Users can easily place a lifelike manikin in an immersive environment. Non-experts in ergonomics for product and workplace design can easily see how humans will perform in a manufacturing context. Product and workplace designers can perform ergonomics-related validation early in the design phase to avoid costly changes later.

## Reduce risk of injury

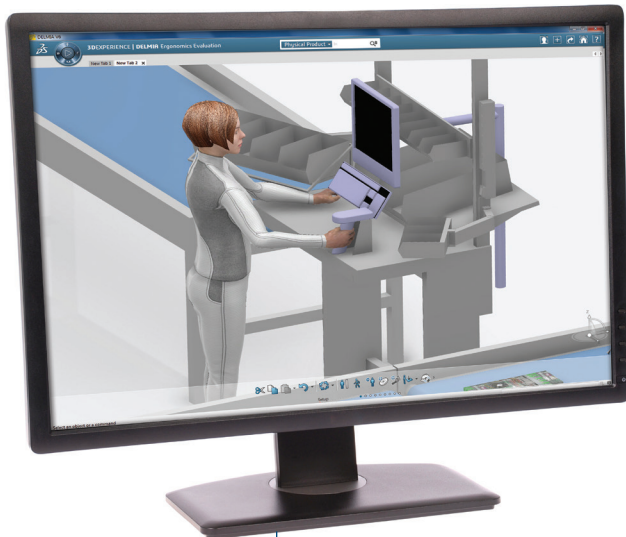
Designers can avert injuries in the workplace through early identification of potential ergonomics-related problems.

## Capture and re-use ergonomic enterprise standards

A customized manikin, including its attributes and skills, can be saved for use in future evaluation scenarios. This saves time and effort for downstream users while capturing company know-how.



Create, simulate and validate human tasks on the **3DEXPERIENCE** platform



Powerful tools for simulating and validating human tasks

## Switch target populations without updating tasks

A manikin from one population can be taught a series of motion postures. After the analysis for that manikin is complete, the user can easily switch to a manikin from a different population without needing to update the taught tasks.

## Role Highlights

- Groundbreaking **3DEXPERIENCE** platform
- Task sequencing for multiple humans, robots and devices
- Simplified teaching of common actions
- Time management from task level to motion elements
- Capture and re-use of basic skills or complex tasks
- Push, pull and carry analysis
- Lifting and lowering analysis
- Rapid upper limb assessment
- Manikin vision assessment

## Our 3DEXPERIENCE Platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE** 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 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).

