RAMSIS MODULE
MOTORBIKE EQUIPMENT LIBRARY

You need the right feel, handling and safety on a motorbike or scooter. Clothing has a great deal of influence on the interaction between man and machine – and you can now simulate this equipment in RAMSIS.

Equipment in the ergonomics simulation

Mobility restrictions caused by clothing play an important role in the safe use of a motorbike. Posture, movement behavior, accessibility, visibility, and streamlining are significantly changed. Unlike the additional simulation of clothing elements in CAD, the equipment in the RAMSIS simulation becomes an integral part of the RAMSIS manikin – and as in the case of a real motorcyclist, the outfit changes the behavior of the manikin.

More realistic ergonomic evaluation

Changed body dimensions, deformation of the thighs, reduced arm clearance, restricted visibility due to the helmet – in the simulation with equipment, collisions and interference points in the installation space and packaging become more visible and can be precisely analyzed.

Critical points are also easier to see and evaluate, so the processing of variants can be better estimated during the analysis of the mirror view with a helmet for instance. More precise pre-positioning of the mirror surface also saves test time and variants.

This means that the simulation replaces even more real test drives, saving a significant amount of development time and costs.

How the library works

The motorbike outfits are elements of an equipment library. The real garments were digitalized with 3D scanners and fully integrated into RAMSIS. The RAMSIS manikins can be flexibly equipped and the RAMSIS software ensures the correct sizing & fitting of the equipment.

The assets include: helmet, protectors, jacket, pants, gloves and motorbike boots for three different clothing outfits – racing with a leather combi, touring with a textile combi and a casual look in a street outfit.

The RAMSIS Motorbike Equipment Library was developed together with BMW and KTM!

Using the Motorbike Equipment Library

The new RAMSIS "Motorbike Equipment Library" module is available for all NextGen releases. It can be installed for RAMSIS Standalone and fully integrated in CATIA V5, **3D**EXPERIENCE and Siemens NX.

HUMANETICS