

Comatec Oy

Comatec Oy Solves Complex, Real-World Analysis Problems with Engineering Simulation Software from ANSYS



www.ansys.com

With extensive expertise in mechanical and electrical design, Comatec Oy provides engineering services for the industrial machinery sector. The company excels in design related to mechanical engineering for mobile machinery such as steel constructions, transmissions, actuators, hydraulics, cabins and electrics. For structural mechanic analyses, Comatec engineers turn to engineering simulation tools from ANSYS for product design and optimization.

TECHNOLOGY USED

- ANSYS® Structural™
- ANSYS® Professional™
- ANSYS® DesignModeler™
- ANSYS® Workbench™

CHALLENGES

Comatec encounters various projects from customers that present complicated boundary conditions, loadings and nonlinearities. Comatec's challenges are to:

- Efficiently import 3-D models from various CAD applications into simulation tools
- Handle complicated large assemblies with many configurations
- Evaluate stress, vibration and fatigue for mechanical and thermal loadings
- Quickly obtain and report results to their customers

ENGINEERING SOLUTION

Deploy ANSYS Structural and ANSYS Professional tools within the ANSYS Workbench platform to:

- Robustly import 3-D CAD assemblies via ANSYS DesignModeler software for use with simulation tools from ANSYS
- Easily access high-end meshing and automatic contact capabilities
- Significantly reduce total solution times using 64-bit version of ANSYS solver
- Efficiently identify critical areas for stress, deformation, vibration and cyclic service
- Routinely evaluate products early in the design phase to avoid costly mistakes
- Quickly generate and deliver reports

COMPANY INFORMATION

Country: Finland

Industry: Engineering Services



www.comatec.fi

“We changed from an earlier FE analysis software to ANSYS Structural, which we use within the ANSYS Workbench environment. ANSYS Structural within ANSYS Workbench offers robust contact capabilities and the ability to work with large assemblies. Now we can analyze complex models easily and in less time than before, thus providing faster project delivery for our customers. With the help of ANSYS Structural we can include various nonlinearities in FE models to get even more accurate results, including thermal loading in models. With more accurate modeling Comatec can reduce the number of iteration cycles of prototyping.”

Leo Siipola
Technical Calculations, Team Leader
Engineering Office
Comatec Oy

