Moog in Germany uses SimulationX to answer their customers’ dimensioning requests in a quick and reliable way

Moog Inc. is a worldwide designer, manufacturer, and integrator of precision motion control products and systems.

Moog Industrial, a division of Moog Inc., designs and manufacturers high performance motion control solutions combining electric, hydraulic and hybrid technologies with expert consultative support in a range of applications including plastics, metal forming, power generation (including wind energy), testing and simulation. The company was founded in 1951 and works in Germany with 700 employees at three sites.

«Based on reliable simulation results it is possible to quickly predict the dynamic behavior of the overall system and to optimize it according to customers’ wishes.»

Dr.-Ing. Achim Heilig, Innovations Projects Manager, Moog in Germany

Challenge
High-performance Motion Control Systems
To increase the efficiency and reliability of Moog’s fluid and drive power components and systems, an engineering tool is needed for the analysis of coupled systems including multi-body systems, mechanics, hydraulics, and control.

Solution
SimulationX
The dynamic drive simulation with locally concentrated parameters was used for the drive and axis controller dimensioning. The connection between hydraulic, mechanical, and electric components was visualized and even most complex hybrid systems could be easily simulated.

Benefits
Speed-up modeling processes
Based on reliable simulation results it is possible to quickly predict the static and dynamic behavior. SimulationX provides a lot of flexibility and the most intuitive graphical user interface. Time for calculations could be significantly reduced and modelling processes were speeded-up.