



1 *Conceptual representation of a nacelle test stand*

2 *6 DOF force input allows authentic load testing*

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DRIVE TRAIN (IN PLANNING STAGE)

Example project: Technology development / test methodology

Research project: "Development of a drive train test machine"

In close collaboration with the wind energy industry, a Competence Center for Nacelles is being established at Fraunhofer IWES. This will enable us to meet the needs of our industrial R&D partners for future development of lighter and more reliable drive trains. Large scale testing and experimental facilities will be operated at the site, accompanied by computer-aided simulation methods for the development and optimization of new drive train systems.

Aircraft manufacturers use special technologies in order to understand the performance of components and assemblies within the total system of a large aircraft. Methods such as Iron Bird and Hardware-In-The-Loop provide valuable results for the development of new drive systems and new test methods. As part of the development of large test stands, it must be determined to what extent these methods are also able to push forward developments in the wind energy sector.