



## Custom Test Rig Design & Manufacturing

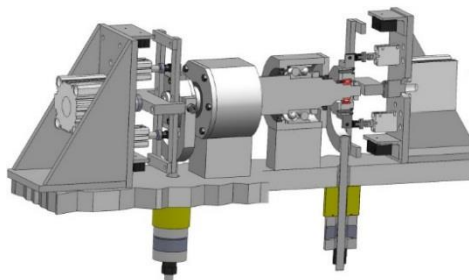


As the largest independent bearing testing facility in the United States, **Napoleon Engineering Services** is well equipped to design and manufacture a custom test rig to meet your in-house research and development needs. NES bearing and mechanical component test rigs bring the data to your finger tips for increased knowledge gain for product and process development.

Choose from a variety of test platforms and control options in support of classical, sudden death, or maximum likelihood test methodologies. Test for bearing or lubrication efficiency, rolling contact fatigue, environmental conditions, application reliability, or supplier comparison. Rigs can be designed with manual controls for constant operating parameters or full automation for step-stress duty cycle testing. Common monitoring and control features include: bearing vibration, temperature, torque, rotational speed, applied load (axial, radial, moment), lubricant flow rate, oil inlet temperature, and thermal operating conditions.



An NES Design Engineer can evaluate your intentions for testing and develop a 3-D model and control option proposal for review by your team. Test platforms can be designed with as many as eight (8) test locations to maximize sampling rates and statistical accuracy while minimizing test time and overall budget. In-house testing capability allows for proprietary advancements in bearing and mechanical component technology thus increasing your competitive advantage.



With the growing presence of global manufacturing and sourcing options, understanding the role that design, manufacturing capability, and overall quality of workmanship have on product life and application success, validates the need for in-house testing capability using proven NES technologies. Capitalizing on the growing popularity of NES's bearing testing services, let our Custom Test Rig Design & Manufacturing department create a rig solution that is right for you.