



# R3-MYDAS

## Newsletter 2

**FLENDER to participate in R3-Mydas project to exploit state-of-the-art remanufacturing technologies for high torque density journal bearing gearboxes**



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## **FLENDER to participate in R3-Mydas project to exploit state-of-the-art remanufacturing technologies for high torque density journal bearing gearboxes**

Flender as part of the R3-Mydas project is developing and building a dynamic tester for the wind drivetrain application. Flender has over 40 years of experience in developing wind turbine drivetrain solutions and technology, upon which the R3-Mydas project dynamic tester is built. One goal of the project is also to examine the potential of new “remanufacture” service processes and methodologies – providing cost and environmental benefits to the industry.

The current phase of the project for the year 2024 consists of three testing phases. The first phase, the iteration of the dynamic tester, was completed in April 2024. The first commissioning test was successfully completed in May 2024, which loaded bearings in nominal conditions.

The second phase, the reference testing of journal bearings, was started beginning of June 2024. The aim of the reference testing of generation 1 wind journal bearings is to find material fatigue limits and test hazardous conditions such as single blade installation and seizures, driving the components to failure.

Phase three, testing of wind turbine journal bearings generation 2 or state-of-the-art testing, will begin in Q4/2024. Testing of generation 2 which is closer to current state of the art journal bearing solutions will also see test runs running the materials in dynamically hazardous conditions and to failure in preparation for remanufacturing.

After testing the damaged components will undergo a “remanufacture” process with state-of-the-art technology. The remanufactured components will undergo the same test procedures, where the benchmark results will be used to compare the characteristics of remanufactured versus new materials, The results of this will be used to benchmark new service processes

potentially offering savings in materials, shorter lead times and lower repair costs for the customer.

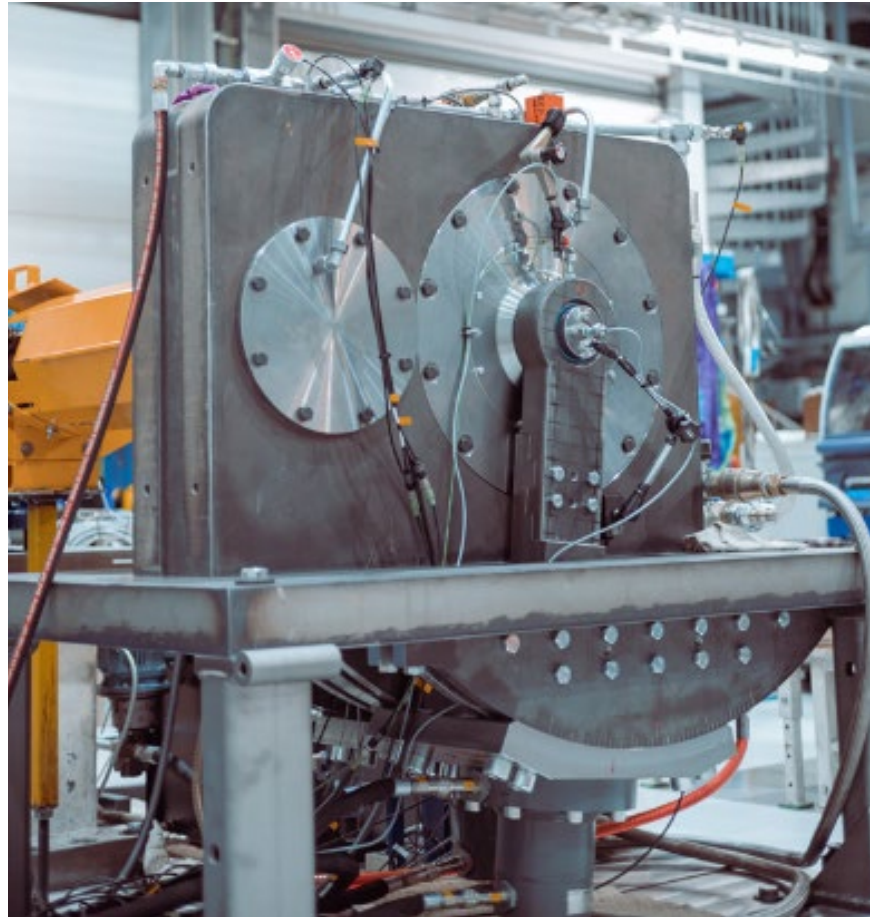


Figure 1 - Dynamic journal bearing tester