1. Record Nr. UNINA9910703251803321 Autore Van Dam J (Jeroen) Titolo Gearbox Reliability Collaborative bearing calibration [[electronic resource] /] / J. van Dam Golden, CO:,: National Renewable Energy Laboratory,, 2011 Pubbl/distr/stampa 1 online resource (32 unnumbered pages): illustrations (some color) Descrizione fisica Soggetti Gearing - Design and construction Wind turbines Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Title from title screen (viewed Oct. 31, 2011). "October 2011." "Prepared under Task no.WE10.1131." "Contract no. DE-AC36-08GO28308." "NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy, operated by the Alliance for Sustainable Energy, LLC." Sommario/riassunto NREL has initiated the Gearbox Reliability Collaborative (GRC) to investigate the root cause of the low wind turbine gearbox reliability. The GRC follows a multi-pronged approach based on a collaborative of manufacturers, owners, researchers and consultants. The project combines analysis, field testing, dynamometer testing, condition monitoring, and the development and population of a gearbox failure database. At the core of the project are two 750kW gearboxes that have been redesigned and rebuilt so that they are representative of the multi-megawatt gearbox topology currently used in the industry. These gearboxes are heavily instrumented and are tested in the field and on the dynamometer. This report discusses the bearing calibrations of the

gearboxes.