

KSR Wind Solutions GmbH Daniel Szilagyi Industriestraße 32 25813 Husum Andreas Wieder
From the Flensburg Chamber of Industry and
Commerce
Publicly appointed and sworn
Expert for wind turbines

wieder-wind

Danziger Straße1 25917 Leak Tel.: +49 (4662) 89 11 455 Mobile: +49 (152) 08 57 5006

28.07.2025

Condition report for the gearbox, winergy PEAS 4375,6 with the serial number 170 102 909-001-2

Dear Mr. Andresen,

with this report I would like to inform you of the results of my condition check on the above-mentioned gearbox.

On Juli 26, 2025, a condition inspection with endoscopy was carried out at the winergy gearbox with the Serial number 170 102 909-001-2

The external condition of the gearbox, including the gearing and bearings of the spur gear and planetary stage, was inspected visually and, as far as possible, endoscopically. The gearbox shafts could be rotated so that most of the spur gear and planetary stage gears and bearings could be inspected.

No documentation was available for this gear and the total hours and oil change interval information is unknown.

From the outside, the transmission looks clean and well maintained. Frictional corrosion is present on the left side interstice of the spur gear housing.

No particles were found in the gearbox oil sump during the test with a magnetic rod.

The load flanks of the gear teeth from the intermediate pinion and sun gear show lines with micro pitting. All other gear teeth in the spur gear stage and in the planetary stage show no abnormalities apart from a few slight scratches.

There are no significant abnormalities on the rolling surfaces of the rolling bearings.

The planetary bearings of the 3 planets could be only limited seen due to design related.

The gear unit has no gear or bearing damage that would prevent continued operation.

Winergy PEAS 4375,6 SN 170 102 909-001-2

Gearbox overview

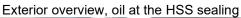
Type Shield





Exterior overview







Exterior overview, an old Lecakage at the interstice on the left site





An old Lecakage at the interstice on the left site



Tooth systems

Spur gear stage

Overview of the gearing of the spur gear stage

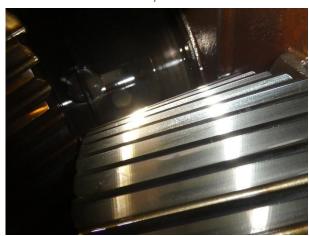


Pinion, HSS shaft, only slight scratches on the load flanks, harmless in this form.





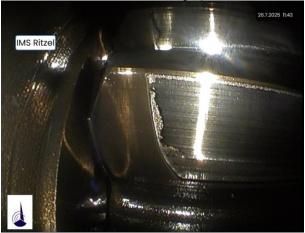
Wheel intermediate shaft, no abnormalities were recognised.



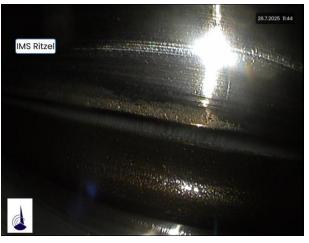


Pinion intermediate shaft, micropittings on the load flanks, this shoul observe during operations.









Wheel low speed shaft, no abnormalities were recognised.





Planetary Stage

Ring gear, some small areas with flaking on the load flanks, harmless in this form.





Planetary gear 1, no abnormalities were recognised.





Planetary gear 2, no abnormalities were recognised.

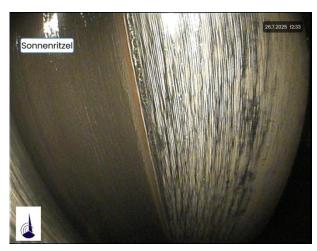


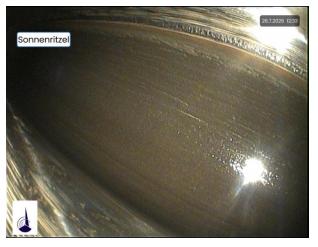


Sun pinion, a line of micropittings in the ground of the load flanks, harmless in this form









Bearings

HSS shaft, bearings generator side, no abnormalities were recognised.





HSS shaft, bearing rotor side, no abnormalities were recognised.





IMS shaft, bearings generator side, no abnormalities were recognised





IMS shaft, bearing rotor side, no abnormalities were seen





LSS shaft, bearings generator side, no abnormalities were recognised.





LSS shaft, bearing rotor side, no abnormalities were recognised.









The planetary bearings of the 3 planets could be only limited seen.

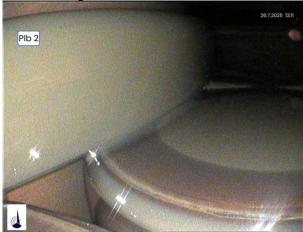
Planetbearing 1







Planetbearing 2





Planetberaring 3





The planet carrier bearings could not be seen due to the design.

The report consists of: 10 Pages. The report is protected by copyright and may not be published, even in part, or used for any other purpose without the author's consent. It is assured that the test report has been prepared in accordance with the state of the art in science and technology, impartially and to the best of our knowledge and belief. The results only concern the drivetrain/gearbox indicated above.

Documentation period: This report will be archived until 31.12.2035.

Leck, 28.07.2025

Andreas Wieder

(from the Chamber of Industry and Commerce Flensburg Publicly appointed and sworn Expert for wind turbines)