

RECONDITIONING OF NORDTANK 150KW XLR

1. Parts for recondition
 - a. Blades and blade emergency brake system
 - b. Main bearing
 - c. Main axle
 - d. Yawing engine
 - e. Yawing cogwheel with bearing
 - f. Yawing brakes
 - g. Dampers and silencers
 - h. Main gearbox
 - i. Main brake system
 - j. Centaflex flexible joints
 - k. Generator
 - l. Nacelle
 - m. Control housings
 - n. Instruments

2. Performance
 - a. Blades and blade emergency brake system
 - i. Reconditioning of the hydraulic pump system
 - ii. Replacing hydraulic hoses and connectors
 - iii. Inspection and reconditioning of glide system of the blade tips (if necessary)
 - iv. Cleaning of the blades
 - v. Adding a new layer of anti-corrosive (gelcoat) paint to the blades

 - b. Main bearing
 - i. Inspection of the main bearing and replacement when necessary
 - ii. Inspection of the bearing housing
 - iii. Attaching a new layer of anti-corrosive painting
 - iv. Manufacturing of a new waste grease bucket to prevent leakage into the nacelle
 - v. Renewing grease with grease as specified by manufacturer

 - c. Main axle
 - i. Physical and optical inspection of the axle
 - ii. Cleaning all bolt connections etc.
 - iii. Attaching a new layer of anti-corrosive protection

 - d. Yawing engine
 - i. Discharge of used oil and grease
 - ii. Inspection and if necessary reconditioning of the engine and the small gearbox
 1. Engine is completely disassembled and inspected. Cleaned, dried and thermo impregnated
 2. Gearbox is inspected and reconditioned where necessary

3. Main yawing cogwheel are inspected and replaced if necessary
- iii. Oil and grease
 1. Filling the gearbox with oil and grease as prescribed by manufacturer
- e. Yawing cogwheel with bearing
 - i. Cogwheel is disassembled, cleaned and inspected
 1. In case of tolerance outside of outer limits the cogwheel will be reconditioned
 2. Attaching a new dust protection rubber if necessary.
- f. Yawing brakes
 - i. Yawing brakes are completely disassembled, cleaned and inspected
 - ii. Springs are inspected for tear and replaced if necessary
 - iii. Inspection and when necessary replacement of wear parts
 - iv. Contact surface is smoothed and tested for performance
- g. Dampers and silencers
 - i. Dampers and silencers are disassembled inspected and if necessary replaced
- h. Main gearbox
 - i. Discharge of used oil
 - ii. Bearings
 1. Inspection of bearings and replacement when necessary
 - iii. Cogwheels
 1. Cogwheels are physically and optically inspected
 2. Damage due to wear are repaired to prevent from further damage (maximum 10%, in case of more then 10% advise to change the cogwheel)
 - iv. Axles
 1. Axles are physically and optically inspected
 - v. Housing
 1. Housing of the gearbox are completely cleaned and a new layer of anti-corrosive painting will be attached
 - vi. Oil
 1. Gearbox are filled with new oil as prescribed by manufacturer
- i. Main brake system
 - i. Discharge of used oil
 - ii. Hydraulic unit are disassembled, cleaned and inspected. Broken parts or parts with wear are replaced
 - iii. Brake pads are replaced
 - iv. Brake disc are cleaned, smoothed and balanced if necessary
 - v. Hydraulic unit is filled with hydraulic oil as prescribed by manufacturer
- j. Centaflex flexible joints

Centaflex flexible joints are disassembled and replaced

- k. Generator
 - i. Generator are completely disassembled, cleaned, physically and optically inspected
 - ii. Windings are cleaned, dried and thermo impregnated to guarantee the required isolation class
 - iii. Generator is inspected on isolation class, resistance etc.
 - iv. Bearings are replaced (if necessary)
 - v. A new layer of anti-corrosive protection is attached
- l. Nacelle
 - i. Nacelle is completely cleaned
 - ii. Corrosion is repaired
 - iii. All critical joints and edges of the chassis are inspected on tear and repaired if necessary
 - iv. The nacelle is painted with a new anti-corrosive layer
- m. Control housing
 - i. Control housings is completely cleaned
 - ii. Relays and other electronically parts are inspected fully on function and reliability. Except for computer electronics all broken or non-reliable parts are replaced
 - iii. Capacitors are inspected and replaced if necessary
 - iv. Control housings are painted with a new anti-corrosive layer in the usual colour
- n. Instruments
 - i. Instruments are disassembled, cleaned and inspected for function and reliability
 - ii. Where necessary bearings are replaced
 - iii. Where necessary a new layer of anti-corrosive protection is attached