

Action code: **COMMERCIAL****CENTA rubber element inspection**SL2023-745/KHMA  
September 2023**Concerns**

Owners and operators with CENTAX and CENTAMAX couplings.

**Summary**

Guiding overhaul and expected service life of CENTAX and CENTAMAX couplings.

Dear Sir or Madam

We would like to bring to your attention the instructions for CENTA rubber element inspection and their replacement intervals.

**Recommendation**

According to the manufacturer's experience, the service life expectation of a coupling rubber element is approximately 10 years. However, the average life of the rubber element also depends on environmental circumstances (climatic influence, contaminant, etc.) and changes in the alignment of the setup (resilient mountings).

For this reason, it is recommended to conduct a visual inspection of the rubber elements according to the following intervals:

- after 1,000 operating hours
- after 4,000 operating hours
- thereafter every 6,000 operating hours or annually (whichever is earlier).

For detailed information, like the maximum wear criteria, we kindly ask you to contact us with the relevant engine number and coupling specification.

**Contact**

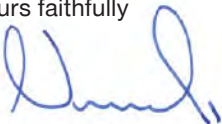
Should you have any questions or should you request a quotation for service and/or supply of replacement components, our technical service team will be pleased to be of assistance:

**PrimeServ Omnicare**

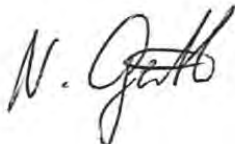
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Yours faithfully

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# Inspection Criteria

## Surface assessment

The rubber surfaces harden and become porous due to external factors (e.g. heat or ozone). This may result in fine diamond shaped cracks and a change of shore hardness. These signs of wear do not represent any impairment of the transmission capacity. Nevertheless, we recommend visual inspections to be done according to the following intervals:

- after 1,000 operating hours
- after 4,000 operating hours
- Thereafter every 6,000 operating hours or annually (whichever is earlier).

The periodical inspection of the couplings, according to manufactures recommendation as stated above, are required by the relevant classification societies (Lloyds register, part 1, chapter 3), (DNV, Part 7, chapter 1, table 26), (ABN, part 7, chapter 6).

## Permanent set of rubber elements

Rubber elements and segments transfer the torque by thrust. Different operating conditions, and thereby resulting stresses on the product, can lead to different permanent sets of the elements and segments. On couplings with several rubber elements in serial arrangement the permanent set must be checked for each individual rubber element.

## Cracking

Pronounced signs of wear, such as deep cracks, impair torque transmission by reduction of the cross section. Diamond-shaped cracks and cross cracks on the surface of the element are no problem, yet they have to be checked in intervals. Direct exposure to ozone or heat should be avoided by all means.

## Theoretical lifetime of this products

The theoretical lifetime of natural rubber elements is 10 years under normal operation conditions. Upon high speed operation [ $>1200$  rpm] lifetime and operation hours will be reduced by 50%.

## Increase of torsional stiffness

Should the torsional stiffness increase during operation, we recommend replacement of the rubber elements as rigidity affects the characteristics of the drive line.

## In case of cracks and debonding

Contact us immediately providing photos and documentation of cracks, damage or debonding, if your maintenance personnel cannot determine the reason for cracking. An immediate replacement of the elements could be necessary, if the values indicated in the makers inspection manuals are exceeded.

Note: CENTAX rubber elements sizes 300 and 400 will be substituted with an equivalent exchange set of size 200.

## Rubber element inspection manuals

Instructions on how to inspect the couplings can be found in the download section of our website:

[www.man-es.com/omnicare](http://www.man-es.com/omnicare)