

Supplementary regulation for wheelset bearing inspection as per VPI-EMG Module 04 Annex 15

Version: 1.2

As at: August 9, 2024

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1 Foreword

Against the background of Safety Alert No. 118 “Defective cylindrical roller bearings” in SAIT (Safety Alert IT Tool) reported on February 26, 2024, we are issuing the following recommendation.

In the case of wheelsets undergoing reconditioning as per maintenance levels IL, IL+IS1, IS2 or IS3, the inspection of the roller bearings as specified by VPI-EMG Module 04 Annex 15 should check for inadmissible roller bearing damage, namely: slippage marks.

This provision affects FAG-brand cylindrical roller bearings with the designations:

WJ130x240-TVP* (cylindrical roller bearing without loose rib washer)

WJP130x240-P-TVP* (cylindrical roller bearing with loose rib washer)

RWU130x240-TVP* (outer ring with rolling element set and cage)

AND with a date of manufacture of **06/2021** (date code 152-21) to **12/2022** (365-22).

2 Identification

The cylindrical roller bearings affected are clearly identified by the marking WU130x240 on the outer ring (see Fig. 1). Cylindrical roller bearings marked WU130x240-A are not affected.



Figure 1: Identification

The cage serves as an additional visual differentiator (see Fig. 2).



Figure 2: Cage as differentiator

The exact date of manufacture of the cylindrical roller bearing is marked on the outer ring after “EN12080 CLASS1” using the canonical date format of three digits for the day followed by “-” (minus sign) followed by two digits for the year. A small number of bearings were marked with a “W” for the year 2022 instead of the two-digit format for the year (see Fig. 3).



Figure 3: Date of manufacture

The bearings affected are marked with the date of manufacture:

For 2021: 158-21 to 365-21

For 2022: 001-22 to 365-22 or W001 to W365

3 Slippage marks

The rollers exhibit a considerably roughened running trace. Slippage marks with a flake-like/scaly appearance can be seen over part or all of the roller surface (see Fig. 4).



Figure 4: Slippage marks roller

The inner rings exhibit a distinct, dull circumferential trace with a roughened surface (see Fig 5).

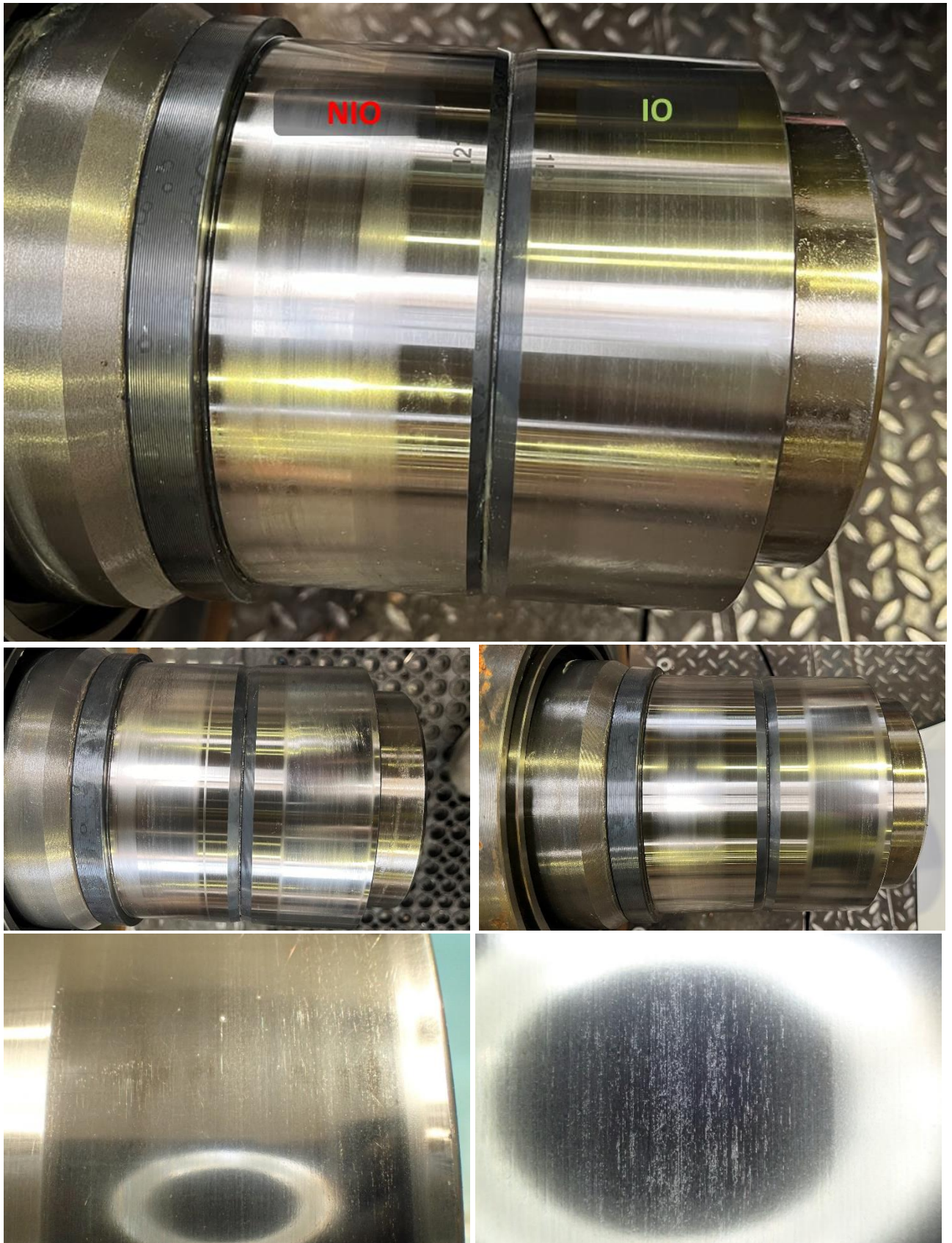


Figure 5: Slippage marks inner ring

4 Instructions

Cylindrical roller bearings that exhibit the signs of damage shown in Section 3 (Fig. 4) are to be segregated and can then be scrapped. It must be ensured that the cylinder roller bearings that have been removed are not re-used (even inadvertently)!

The removed cylinder roller bearings should also be documented in addition to the “Wheelset Repair Sheet” (VPI-EMG Module 04 – Annex 26-1), (see next page).

Inner rings exhibiting the signs of damage shown in Section 3 (Fig. 5) must be removed from the wheelset shaft and can then be scrapped.

It must be ensured that these damaged inner rings are not re-used (even inadvertently)!

All provisions in VPI-EMG Module 04 (especially in Annexes 14, 15 and 16) will continue to apply.

If there are no slippage marks, this means that there is no inadmissible increase in the outer enveloping circle diameter. There are therefore no restrictions on the intended use as per specification and the bearings can be installed.

