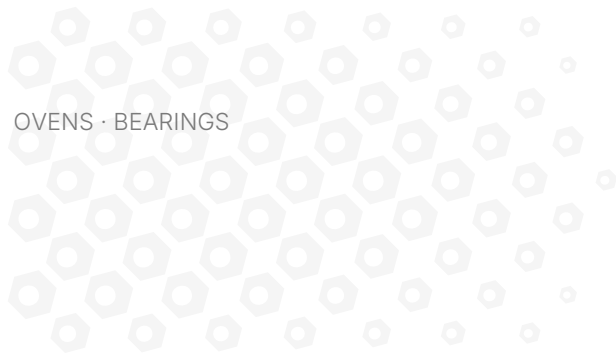




TECHNICAL REPORT OF OJSC KHEBOKOMBINAT-2, PERM

Musson-rotor super oven: grease does not coke, no shutdown for greasing

OJSC Khlebokombinat-2 · chief engineer N. I. Kostrov, chief mechanical engineer A. L. Tetenov,
mechanic Ya. P. Lyalin · XADO Corporation representative A. V. Yakovlev

Perm, Russia · contract No. 1 of 26.07.2004 with XADO-Region LLC, Moscow · testing
02.09–01.12.2004

PRODUCT

XADO grease
TERMOLYUB-300
high-temperature grease

TEST OBJECT

Musson-rotor super rotary
oven
support bearing unit of the
baking chamber carriage ·
bearings No. 1210, No. 210

DOCUMENT TYPE

Technical report
with signatures and stamps

EQUIPMENT

Musson-rotor super
rotary oven

UNIT

Support bearing unit of
the baking chamber
carriage, bearings **No.
1210, No. 210**

**OPERATING
CONDITIONS**

180–200 °C, 30 rpm

WHAT WAS ASSESSED

Service interval, condition
of sliding and rolling pairs

The oven ran in the plant's normal production mode; the unit was neither disassembled nor replaced — only the grease was changed.

Key result

↑ **3.75×**

service interval of the bearing unit, 200 → 750 h

Unit servicing: standard grease and XADO grease

PARAMETER	TsIATIM 201, STANDARD GREASE	XADO TERMOLYUB-300
Interval before removing the grease and packing new	200 h	750 h, no change required
Oven downtime per grease change	2 h	No shutdown required
Sliding pairs after running time	The grease coked, the coke was removed at every change	No traces of coking

The 200 h interval and 2 h downtime are the plant's standard schedule; 750 h is the actual running time of the unit up to the inspection.

Inspections on a single grease pack

INSPECTION	RUNNING TIME SINCE PACKING	CONDITION OF THE UNIT
First	750 h	Free rotation of the baking chamber carriage; no traces of coking; rolling pairs smooth, covered with a metal-ceramic layer (XADO effect)
Second	another 750 h	Bearing unit in working condition, no grease change required

The grease was packed on 2 September 2004 during routine maintenance; the unit was not serviced between the inspections.

Conclusions of the plant commission

Before the tests the carriage support unit ran on the standard grease TslATIM 201 at **180-200 °C**: the grease coked, and every **200 h** the oven was stopped for **2 h** to remove the coke and pack new grease. On XADO grease TERMOLYUB-300 the unit was inspected after **750 h** — no coking, the rolling pairs covered with a metal-ceramic layer, no grease change required; at the second inspection, another **750 h** later, the unit remained in working condition on the same grease pack. Conclusions of the report:

1. The use of XADO grease TERMOLYUB-300 is expedient in all units operated at high temperature.
2. The economic losses associated with the weekly shutdown of the oven are eliminated.
3. The service life of the bearing unit is increased.



© XADO. All rights reserved.

The results refer to the support bearing unit of the Musson-rotor super rotary oven at 180-200 °C and 30 rpm; in other units and duty modes the figures may differ. The original technical report of OJSC Khlebokombinat-2 with signatures and stamps is published in full and available for download.