

TREATMENT REPORTS ON TWO COMPRESSORS · 10.06.2002

PKS-3.5 and PKSD-5.25 compressors: output increased without disassembly

NTC Stroy-Servis LLC, Volgograd — performed the treatment, signature and seal · on the customer's side
the reports were signed by the repair shop mechanic

Russia · two reports dated 10.06.2002

PRODUCT

XADO compound for
compressors
referred to in the reports as
"XADO technology"; treatment
without disassembly

TEST OBJECT

Two compressors
PKS-3.5 and PKSD-5.25 · both
worn before treatment

DOCUMENT TYPE

Two treatment reports
with signatures and seal
one report per compressor,
same date

COMPRESSOR	CONDITION BEFORE TREATMENT	WHAT WAS MEASURED
PKS-3.5	Worn · build-up to 7 kgf/cm² in 35 s · lubrication system pressure 2 kgf/cm²	Time to build up excess pressure to 7 kgf/cm² ; lubrication system pressure
PKSD-5.25	Worn · build-up to 7 kgf/cm² in 20 s · lubrication system pressure 1 kgf/cm²	Same

The factory output rating and the operating hours of the compressors are not stated in the reports — the comparison is made between measurements taken before and after treatment on the same machine.

Key results

↑ **75 %**

output of PKS-3.5, time to reach 7
kgf/cm² 35 → 20 s

↑ **43 %**

output of PKSD-5.25, time to reach 7
kgf/cm² 20 → 14 s

↑ **1-2 kgf/cm²**

lubrication system pressure, 1-2 → 3
kgf/cm² on both compressors

Measurements before and after treatment — both compressors

COMPRESSOR	PARAMETER	BEFORE	AFTER	CHANGE
PKS-3.5	Time to build up excess pressure to 7 kgf/cm ²	35 s	20 s	-15 s
PKS-3.5	Lubrication system pressure	2 kgf/cm ²	3 kgf/cm ²	+1 kgf/cm ²
PKSD-5.25	Time to build up excess pressure to 7 kgf/cm ²	20 s	14 s	-6 s
PKSD-5.25	Lubrication system pressure	1 kgf/cm ²	3 kgf/cm ²	+2 kgf/cm ²

According to the conclusion of the contractor, the output of PKS-3.5 rose by 70 % and that of PKSD-5.25 by 43 %; recalculation from the pressure build-up time gives 75 % and 43 %.

Conclusion of the reports

Both compressors arrived for treatment in a worn condition: PKS-3.5 took **35 s** to build up the working pressure of **7 kgf/cm²**, while the lubrication system pressure of PKSD-5.25 stayed at **1 kgf/cm²**. No disassembly of the units was required. In the conclusion for each compressor the contractor recorded: "After treatment of this compressor using XADO technology, the output of the compressor increased by **70 %**" (PKS-3.5) and "increased by **43 %**" (PKSD-5.25), "which means that the worn parts were restored", and recommended "treating similar equipment in order to extend service life and the interval between overhauls". The time to build up working pressure was reduced on both machines, and the lubrication system pressure increased on both — to **3 kgf/cm²**.

XADO

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The results relate to the PKS-3.5 and PKSD-5.25 compressors treated in June 2002; on other equipment and under other operating conditions the figures may differ. The treatment was performed and the conclusion on the magnitude of the effect was drawn by one and the same contractor — NTC Stroy-Servis LLC. The originals of both reports, with signatures and seal, are published in full and available for download.