

REPORT OF OJSC STAVROPOLPROEKTSTROY, 9 APRIL 2002

Compressor, no teardown: reached working pressure, pump-up got faster

OJSC Stavropolproektstroy, SMU-2 · approved by: chief engineer V. A. Davydov · commission: lead mechanic, head of SMU-2, works superintendent

Stavropol Krai, Russia · treatment from 15 Feb 2002 · control measurement 9 Apr 2002

PRODUCT

XADO gel for compressors and bearings

XADO RVS · three stages with rising concentration in the lubrication system · 18 ml consumed

TREATED UNIT

Compressor with receiver
compressor cylinders · lubrication system · no teardown, under normal service operation

DOCUMENT TYPE

Report on the results of compressor treatment, 9 April 2002

EQUIPMENT

Compressor with receiver, SMU-2 site

CONDITION AT START OF WORK

Pressure of **6 kgf/cm²** was not reached; build-up to **5 kgf/cm² — 4 min 30 s**; air leak through the shut-off valve

WHAT WAS MEASURED

Pressure build-up time in the receiver; reaching the safety valve trip threshold

Treatment performed without teardown, on the running unit: three stages with rising XADO RVS concentration in the lubrication system, 15 Feb – 9 Apr 2002.

Key results

↑ **6 kgf/cm²**

safety valve trip pressure, not reached → 6 kgf/cm² in 6 min

↓ **33 s**

time to build {5 kgf/cm²} in the receiver, 4 min 30 s → 3 min 57 s

Receiver pressure build-up — before and after treatment

PARAMETER	BEFORE TREATMENT	AFTER TREATMENT
Time to build 5 kgf/cm²	4 min 30 s	3 min 57 s
Safety valve trip pressure 6 kgf/cm²	not reached	reached in 6 min
Air leak through the shut-off valve	recorded	still present, not eliminated

Measurements taken on the fully assembled compressor under normal service operation; **6 kgf/cm²** is the trip threshold of the standard safety valve.

Commission's conclusion

The commission of OJSC Stavropolproektstroy recorded in the report: "The results obtained give grounds to state that, as a result of the repair-and-restoration measures based on XADO technology, the compressor output increased by **12 %**, which indicates restoration of the compressor cylinders and, accordingly, a reduction in electricity consumption." Before treatment the compressor did not reach the safety valve trip pressure of **6 kgf/cm²** at all — after three treatment stages it reaches that threshold in **6 min**, while the air leak through the shut-off valve was not addressed during the work and was present in both measurements. Time to build **5 kgf/cm²** — **4 min 30 s** → **3 min 57 s**. The unit was never opened up and kept working on site.

XADO

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The results relate to the compressor unit with receiver at the SMU-2 site of OJSC Stavropolproektstroy; on other units and under different operating conditions the figures may differ. RVS is an obsolete XADO designation, the zero-generation compounds; the current product generation is revitalizants. The treatment was performed by a XADO technology distributor. The original report is published in full and available for download.