



TECHNICAL REPORT No. 2 · JSC KRYM

PB-28 compressor: higher discharge pressure without dismantling the unit

JSC Krym — customer · Rigonda (private production company) — treatment contractor · approved by
the directors of both parties: I. E. Yaskevich, A. B. Boyko

Ukraine · treatment 19-21 August 2003 · report dated 21.08.2003

PRODUCT	TREATED OBJECT	DOCUMENT TYPE
XADO revitalizant compounds revitalizant gel · Application Instruction No. 004 XADO-2002	PB-28 piston compressor three treatment stages, 19-21 August 2003 · without dismantling the unit	Technical Report No. 2 signed and stamped

EQUIPMENT	CONDITION AT THE START OF TESTING	WHAT WAS MEASURED
PB-28 compressor	Discharge pressure 4.0 atm , elevated operating noise	Discharge pressure after each treatment stage

Treatment was performed on a test bench, with the unit subsequently put into service.

Key result

↑ **12.5 %**

compressor discharge pressure, 4.0 → 4.5 atm

Compressor discharge pressure by treatment stage

STAGE	DISCHARGE PRESSURE, ATM	CHANGE VS. BASELINE
Before treatment	4.0	—
After stage 1	4.2	+5 %
After stage 2	4.5	+12.5 %
After stage 3	4.5	+12.5 %

Measurements were taken before treatment and after each of the three stages within one cycle; the pressure reached 4.5 atm already after the second stage.

What else changed in the unit's operation

WHAT WAS OBSERVED	AS RECORDED IN THE REPORT
Suction vacuum	Increased noticeably after the first treatment stage
Operating noise	Noise of the running unit decreased
Oil level	Unchanged after the third treatment stage — oil loss stopped

Assessments are those of the contractor and the customer in the report; the document gives no numerical measurements for these observations.

What the report records

The PB-28 compressor was treated in three stages on 19-21 August 2003, without dismantling the unit. Already after the first stage the report notes that "the suction vacuum and the discharge pressure of the compressor increased noticeably" and that the noise of the running unit decreased; by the third stage the discharge pressure had risen from **4.0 to 4.5 atm**, and the oil level stopped falling. The parties then verified the result directly: "After 32 hours of operation of the unit with the oil in the crankcase into which the revitalizant gel had been introduced, on the initiative of the 'Customer' and under the guarantees of the 'Contractor', an experiment was carried out — STARTING THE COMPRESSOR WITH NO OIL IN THE SYSTEM. The treated compressor ran for 2 minutes. The results of the experiment clearly demonstrated the effectiveness of XADO technology."