TREATMENT REPORT, PP «DYVANY-MEBLI», 2009

ECOAIR D40 compressor: restored while running instead of teardown repair

PP «Dyvany-Mebli» · measurements taken jointly: plant chief mechanic P. M. Rosiak and XADO LLC sales representative O. I. Bratasiuk

Lviv, Ukraine · treatment cycle 22.09–16.11.2009 · report 25.11.2009

PRODUCT

XADO revitalizant gel

calculated dose added to the oil bath in stages

TREATED UNIT

ECOAIR D40 rotary screw air compressor

oil system · in service since 1994 · treated without disassembly

DOCUMENT TYPE

PP «Dyvany-Mebli» report signed and stamped

EQUIPMENT	IN SERVICE SINCE	WHAT WAS MEASURED
ECOAIR D40 rotary screw air compressor	1994 — 15 years by the start of treatment	Air charge-up time to 6.5-8 atm, oil temperature in the system, outlet air temperature

The treatment was carried out in service: the revitalizant gel was added to the oil bath in stages, the compressor was neither disassembled nor taken out of operation.

Key results

↑ **10 %**

compressor output, charge-up to 6.5-8 atm, 55 → 50 s

↓ **25 %**

oil temperature in the system, 80 → 60 °C

Measurements before treatment and after 300 hours of operation

PARAMETER	BEFORE	AFTER	CHANGE
Air charge-up time, 6.5-8 atm	**55 s**	**50 s**	output **+10 %**
Oil temperature in the system	**80 °C**	**60 °C**	**−20 °C**
Outlet air temperature, start of run	**55 °C**	**54 °C**	**−1 °C**
Outlet air temperature, end of run	**60 °C**	**58 °C**	**−2 °C**

The “before” and “after” measurements were taken in service by the plant chief mechanic together with the XADO LLC representative.

Report conclusion

The ECOAIR D40 compressor, fifteen years in service by the start of the treatment, was overheating: oil temperature in the system stayed at **80 °C**, the electrical overload thermal protection tripped and shut the machine down. XADO revitalizant gel was added to the oil bath in stages, from 22.09 to 16.11.2009, with the compressor kept running throughout. After **300 hours** of operation the oil temperature dropped to **60 °C**, the thermal protection stopped tripping, noise and vibration decreased, and the time to charge air from **6.5** to **8 atm** fell from **55** to **50 s**. Conclusion of the report: “The results of applying XADO technology to restore the compressor in service allow it to be recommended for use instead of conventional restoration repair with replacement of parts”.

XADO

The results relate to the ECOAIR D40 rotary screw air compressor treated in service; on other equipment and under different conditions the figures may differ. The original PP «Dyvany-Mebli» report, signed and stamped, is published in full and available for download.