

Fluitec Case Study



China | Major Petrochemical Plant

Estimated ROI
4,347%

Problem

In China, a major petrochemical plant had a scheduled lubricant replacement where they changed the oil on the compressor in their second air separation unit. During this time, they also performed conventional flushing of the system before filling it with a new fully synthetic PAO based oil. However, after 3 days, they noticed abnormal secondary shaft vibrations which continued to intensify. Upon inspection, they realized that some deposits which were lodged in hard-to-reach places such as; low-level zones, high-surface-area piping, and oil coolers were dissolved by the new oil and transported throughout the system to the critical components (bearings / journals) leading to the increase in vibrations.

Solution

Fluitec's partner, Finta advised the customer to add 5% DECON to the system.

Results

Immediately, the shaft vibrations stabilized and the upward trend was reversed. A couple months later, the plant was scheduled to perform another lubricant changeout (retaining the same OEM brand of lubricant as previously used which is 70% polyglycol and 30% jet-oil type polyol-ester). This time, the power plant did not flush the system and instead filled the system with the new oil. Within 10 days, sawtooth vibration patterns emerged which culminated in a forced shutdown a few weeks later. 5% DECON was added and the vibrations were reduced to stable levels.

Client:	Major Petrochemical Plant
Country:	China
Application:	Air Separation Unit, Ingersoll Rand Compressor
Estimated ROI:	4,347%