

Railway

Havelländische Eisenbahn

Background:

The Adtranz DE-AC33C 'Blue Tiger' originally used throwaway paper filters on its GE 7FDL-12 diesel engine. BOLLFILTER offers a superior solution to oil filtration that extends oil life and produces far less waste. We set out to prove that with Havelländische Eisenbahn (hvle).



Adtranz DE-AC33C 'Blue Tiger'

Description of the system:

The system consists of a BOLLFILTER Automatic Type 6.46 mounted directly after the oil cooler in the main flow. The filter uses a backflushing mechanism to continually clean the candle elements. Clean elements provide consistent and reliable oil filtration. An oil centrifuge is mounted in a separate bypass line. Driven using oil pressure, the centrifuge rotor spins at a very high speed creating extremely high centrifugal forces to remove tiny soot particles from the oil. This means that the centrifuge can remove far smaller particles from the oil than what the paper filters can remove.

Advantages and added value:

The initial oil change interval using paper cartridges was 9 months of running. After our automatic filter and oil centrifuge were installed, the oil was carefully monitored with viscosity, total base number (TBN), soot levels and other relevant parameters being measured. It was found that the oil change interval could be safely increased from the original 9 months to 15 months. This directly resulted in running cost savings of 4,400 € per year.



BOLLFILTER Automatic Type 6.46 DN 100 in use

	Paper cartridges	BOLLFILTER Lube Oil System
Oil change interval	9 months	15 months
Yearly oil cost	7,100 €	4,240 €
Yearly cartridge cost	500 €	0 €
Yearly downtime cost	1,300 €	640 €
Yearly workshop cost	700 €	320 €

Yearly total	9,600 €	5,200 €
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Cost reduction with BOLLFILTER	46%
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Customer: Havelländische Eisenbahn AG

System: BOLLFILTER Automatic Type 6.46 DN 100