



Your project - Together we succeed

Return filters for telescopic crawler cranes

INITIAL SITUATION

A manufacturer of telescopic crawler cranes was developing a new machine and looking to establish a second filtration supplier. In addition to a reliable return line filter, the customer placed great importance on close development support, including simulation and field-testing expertise.

Another key goal was to reduce the tank volume without compromising air content. The system had to be compact, modular in design, and capable of handling two filters per machine at approximately 850 l/min (225 gpm) each.

SOLUTION

ARGO-HYTOS was able to convince the customer through strong development support, a detailed requirement analysis, and fast delivery of prototypes for integration into the test machine.

In a two-day on-site measurement, the performance of ARGO-HYTOS' return filter E 644 in combination with the AirEX air separation module was validated under real-life conditions.

The results confirmed: the filtration concept works – and the desired reduction in tank volume was achievable. Even with a reduced tank volume, AirEX provides the benefit of a lower air content and faster air separation capacity than previously with a large tank volume. Further potential was identified through additional analysis using the ARGO-HYTOS tank simulation software.

The customer also benefited from the modular connection concept, which allowed easy adaptation to the machine's design.

CUSTOMER BENEFITS

- Efficient air separation: AirEX reduces air content in the oil by more than 50%
- Smaller tank, same performance: Tank height reduced by over 20% without performance loss
- Cavitation protection: Effective air separation protects hydraulic components
- Compact design: Saves installation space and reduces system weight
- Less oil volume: Reduced oil requirement cuts costs and conserves resources
- Improved uptime: Less foam, stable and quiet system operation
- Innovation: Combined filtration and air



APPLICATIONS



Curious?

Do you have a similar challenge for us?
Contact our expert.



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