

Reducing testing iterations and gaining greater system visibility with Flowmaster® V7.

The Company

“Flowmaster V7 has been a real success at Hansen, it has allowed us to model and understand the complete lubrication network; we now know what is happening internally. It has significantly reduced the testing effort required to design a new system.”

*Joris Boeye,
Technology Engineer,
Hansen Transmissions*

Hansen Transmissions International NV is an established global wind turbine gearbox designer, manufacturer and supplier, with a leading position (by MW supplied) in the wind turbine gearbox market. The company supplies gearboxes with a power capacity ranging from 1.5 to 6.15 MW to the world’s major manufacturers of gear-driven wind turbines.

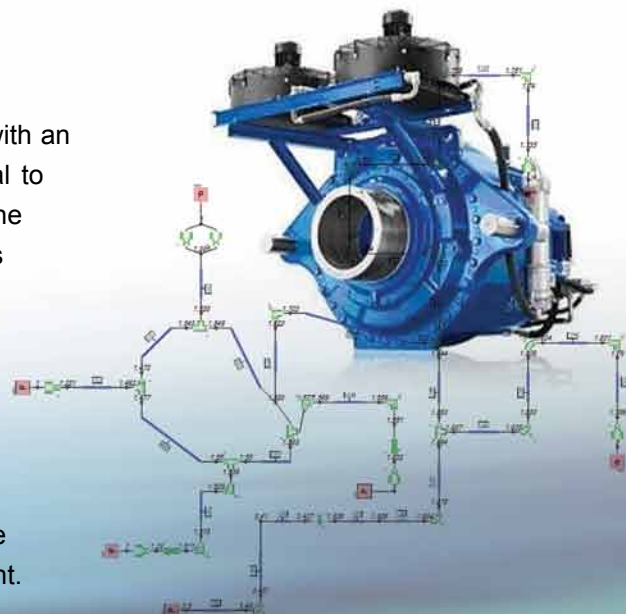
In addition to its principal state-of-the-art manufacturing facilities located in Flanders, Belgium, Hansen has a production plant for wind turbine gearboxes in Coimbatore, India and an assembly and testing plant for the Chinese market, located in Tianjin, China.

Founded in 1923 to supply the industrial gearbox market, Hansen has since 1979 increasingly focused on the supply of gearboxes to the growing wind energy generation sector. Strong in-house R&D operations maintain Hansen’s technological leadership and the company employs 1390 people worldwide.



The Challenge

Hansen’s gearboxes are supplied with an integrated lubrication system critical to the safe and efficient operation of the unit. Qualitative design demands for upfront identification of internal areas which may not be receiving the optimum amount of lubricant. Before introduction of Flowmaster prediction of oil flow distribution had to be backed up with several expensive testing iterations to ensure optimum operation of the lubricant.

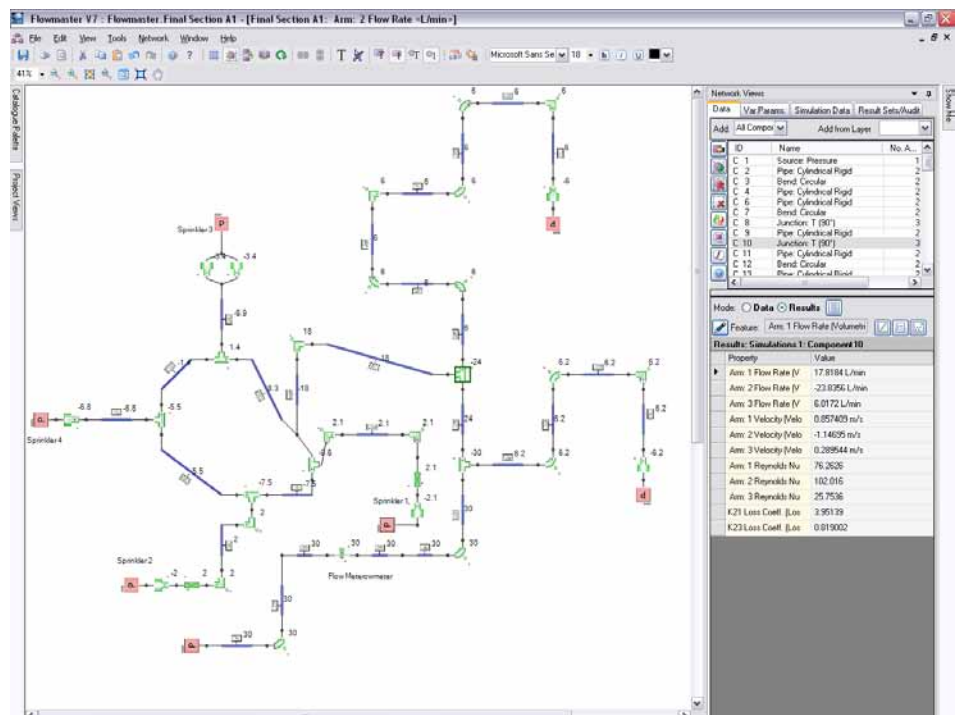


The Solution

Flowmaster software was used to model the entire lubrication system. It was deployed in early 2009 and real tangible results were available and validated by the middle of 2010. The visibility offered by Flowmaster V7 has given the engineers an in-depth understanding of how the entire lubrication system behaves and helped to further increase robustness of design solutions, with a considerable reduction in the number of required test runs.

The support offered by Flowmaster in the set up phase with on-site visits and remote support has proven invaluable in delivering the required value on this project.

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The Future

Hansen are working with the Flowmaster V7 software to further increase the robustness of the lubrication system and at the same time reduce time-to-market. Flowmaster V7 has now been rolled out across two more sites with several Design and Testing Engineers now trained in the use of the software.