

Classic knowledge base application examples

KOAS

The first serious industrial implementation was at [Van Voorden Gieterij \(VVG\)](#). With Quaestor the route from offer, propeller design to production preparations was automated based on existing knowledge and tools.

The KOAS-knowledge based system in Quaestor has reduced turnaround time in design and engineering by about 60 percent. Moreover, the amount of additional pitch correction after production has been reduced by half.

KOAS is an important innovation in the design and engineering process of VVG. The main innovation is full integration of knowledge, databases and applications combined with automation of reporting (offers) and production files (CAD drawings, CAM files).

Quaestor has enabled the KOAS to be set up as a very flexible and open system and therefore has been awarded with the Timmersprijs 2002 for innovation in the maritime industry.

MVR

The business unit Ships-Powering of [MARIN](#) uses the Quaestor knowledge-based system MVR for the analysis and reporting of model test results.

The MVR-system manages the total route from data management, test preparations, measurement data analysis to complete (knowledge-based) generation of data reports. MVR is a very important innovation for MARIN, changing the previous process with several separate programs, documents and spreadsheets into an open and efficient integrated system, based on the same, existing, knowledge and tools.

MVR has reduced turnaround times by half together with a reduction in data transfer and reporting errors.

KPDS

KPDS means Knowledge-based propeller design system, a knowledge base development at [Wärtsilä Propulsion the Netherlands \(WPNL\)](#) by means of Quaestor. The goal is to integrate the preliminary propeller design in the quotation stage into the global quotation system of Wärtsilä.

The first phase of the project has been finalized. In this phase a selection of in-house propeller design tools and methods for the preliminary design are integrated into one knowledge-based system. And this knowledge system is connected to MSQ, the global Wärtsilä Quotation support system.