

Wärtsilä

A New Era of Measurement with Metronor

Wärtsilä's significant position in the global market can be explained by the fact that 1% of the world's energy is produced in Wärtsilä's power plants, and that every third ship on the high seas is fuelled by Wärtsilä power. Noteworthy is also Wärtsilä's service program. For example, every second ship worldwide is serviced by Wärtsilä.

Wärtsilä's success is reliant upon its ability to constantly innovate and develop new products. With the help of a Metronor DUO measuring system, they are now able to do so with increased efficiency and quality assurance.



Large Volume Inspection - A Key Factor Contributing to Wärtsilä's Success

Development engineer Tero Kujamäki states that quality is one of the factors key to Wärtsilä's success. "After all, Wärtsilä works in sectors which require absolute performance. For example, power plants need to produce energy every single hour, and ocean ships cannot stop due to engine failures."



To ensure efficiency and quality, Wärtsilä acquired a Metronor DUO measuring system equipped with 3 cameras, LED-pad and LED-kit as well as PowerINSPECT inspection software. The Metronor system is already delivering great benefits to the Finnish giant. "Before purchasing Metronor, scanning inside large engine blocks was a laborious combination of laser measurement and traditional instruments. Metronor's efficiency and clarity enhance the manufacturing process with additional speed", says Kujamäki.

"Metronor is for instance used for casting block measurements. We do quality checks on subcontractors' casting blocks on arrival so we can determine if they are acceptable for machining. Metronor is very suitable for this type of application. It is commonly known in the industry that poor stock geometry can lead to scrapping or extensive re-work. If stock excess is not accurately recognized, extensive and unproductive 'cutting air' may well be the result. We utilize Metronor diversely for measuring excess material and alignment of the casting block on the machine and thereby significantly reducing time spent and general costs", he says.

"Metronor is also used in the production line where it determines the quality of the end product, for example measuring hole patterns on different levels. These were time-consuming measurements that also used to be difficult to perform using traditional methods. By using the Metronor system, we are able to measure big blocks with high accuracy as well as save valuable time", states Kujamäki.



Effective Tools Equals Multiple Savings

Kujamäki is also impressed with Metronor's inspection reports. "We are able to take advantage of Metronor's reports and the clarity of the 3D verification. Previously, the results of measurements needed to be recorded manually which resulted in different measurement protocols. After purchasing Metronor, results can be understood at a single glance and color coordination means that everyone in the organization can understand the results. In the long run, we believe that Metronor has helped us to achieve multiple savings. First of all, inspection times have been reduced significantly." Kujamäki also recognizes the benefits of process optimization, material savings as well as reduced machining bring to the organization.



Metronor

Portable Measurement Solutions

Improved Quality in a Challenging Environment

Vossi Group Oy, Metronor's Distributor in Finland, provided basic training for 10 of Wärtsilä's employees to ensure appropriate use of the Metronor system. Not only did the training improve the quality and efficiency of the alignment process, but it also aided in increased safety and the proper use of ergonomic positioning when measuring hard-to-reach points.



About Metronor

Metronor is a privately held ISO9001:2008 certified high technology company headquartered outside Oslo, Norway. Metronor has developed a range of high accuracy, large volume, portable electro-optical coordinate measuring systems that provide excellent return on investment for customers as well as facilitate a highly efficient dimensional management of manufacturing processes.

Metronor's Industrial Systems Business Unit provides a range of measuring systems to a variety of industries worldwide, either through trusted partners or directly through offices in the US, Germany and China. The flexible and robust nature of the systems enables them to be applied to a multitude of different applications within automotive, casting and machining, mold and die, energy and other transport and heavy industries. The systems are considered especially valuable when used for large measurement volumes, to optimize processes and in challenging environments.

Metronor's Military Systems Business Unit provides customized MIL-STD 3D and 6D boresight systems and solutions. The product line includes systems for boresighting/harmonization of various airborne and ground based weapon system platforms. HarmoLign also allow for full alignment/harmonization of Helmet mounted display and Sight tracker systems, making it a complete solution for the Military industry.

For more information:
www.metronor.com and www.harmolign.com



About Wärtsilä

Wärtsilä is a global leader in complete lifecycle power solutions for the marine and energy markets. In 2012, Wärtsilä's net sales totaled EUR 4.7 billion with approximately 18,900 employees. The company has operations in nearly 170 locations in 70 countries around the world and manufactures one third of the world's ocean liner moving equipment. By emphasizing technological innovation and total efficiency, Wärtsilä maximizes the environmental and economic performance of customer vessels and power plants.

Wärtsilä Finland Oy

Established: 1834
Net sales: € 4.7 billion (Wärtsilä Group)
Locations: Operations in Finland: Vaasa, Turku and Helsinki
Personnel: 18 900, 3 600 in Finland

For more information: www.wartsila.com

