T4SM
TOOLS FOR SMART MINDS

Case Study

An easy-to-use software allows TSM Sensors S.r.l. to automate wire position transducer test and calibration

TSM Sensors S.r.l.

Challanges

- ♦ To automate wire position transducers test

- ♦ To automate sensor calibration

- ♦ Automatic generation of sensors certificates in PDF format

- ♦ To evaluate functionality and sensor performance

- ♦ Intuitive interface

Solutions

- ♦ An easy-to-use software with an intuitive interface

- ♦ Automation of the procedures to test wire position transducers

Resources

- ♦ LabVIEW 2014

- ♦ Windows 10

- ♦ IXXAT CAN adapter for linear axis control

- ♦ IXXAT CAN adapter for sensor control
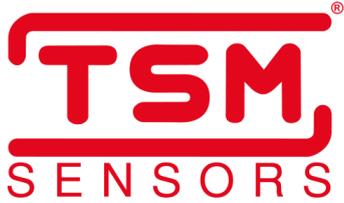
- ♦ SQL Server 2014

Challanges

TSM Sensors S.r.l., leader in designing wire position transducers, needs to automate some fundamentals procedures for the company:

- • Wire position transducer test;

- • Sensor calibration;

- • Generation of the sensors certificates based on communication between the computer and the machinery used.

TSM needs also a tool that allows engineers to evaluate functionality and sensor performance.

The software has to had a user-friendly and intuitive interface, which reduces the time required to perform the sensor calibration and maximizes operator productivity.

TSM is a designer and manufacturer of innovative industrial sensor solutions for position and control measurements with the highest quality standards.

With its highly specialized technical department, TSM offers a complete range of sensor solutions specifically for mobile automation that ensure robustness, reliability and safety in any environment or work condition.

TSM offers a product portfolio of sensors especially:

- Cable Extension Transducers

- Inclination Sensors

- Rotary Encoders

- Magnetostrictive Linear Position Transducers

- Accessories

The diverse product portfolio offers sensors for standard applications as well as customized solutions.

TSM SENSORS S.R.L.

Via Del Lavoro Artigiano 13/15
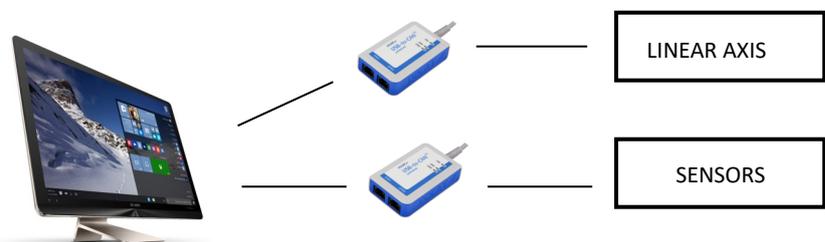
25032 Chiari (BS)

Soluzione

To meet the demand of TSM Sensors Srl, T4SM carried out a detailed research of the interface and the working methods adopted by the customer. It led to the creation of an innovative software, developed with LabVIEW, which allows TSM to automate the necessary procedures, as the simplified interface allows making the sensor calibration from the first use.

The software includes functionalities addressed to technicians and researches that allows them to evaluate the performance of prototypes.

The implemented solution allows analysis of the data obtained from an IXXAT CAN adapter that connects the computer to the linear axis and another IXXAT CAN adapter that connects the sensors to the computer.

The software automatically generates and stores the calibration certificates in PDF format on the corporate server.

Benefits and results

The implemented solution is easy to use thanks to its intuitive and clear interface. It provides essential information for the operator who can easily use it and allows the traceability of all performed tests.

The automation of test procedures and sensor calibration and the automatic generation of certificates in PDF format allows a drastic reduction of working times.

TOOLS for SMART MINDS (T4SM) is a system integrator that develops software solutions for manufacturing companies.

T4SM is Alliance Partner of National Instruments and the development team consists of Certified LabVIEW Architects (CLA) who have long experience in LV Real-Time Programming and LV-FPGA.

T4SM designs from scratch to high-quality solutions easily integrable with third-party products, which help customers to shorten time-to-market of their systems.

T4SM uses the AGILE methodology for the development of software projects and the co-design of applications with immediate benefits for customers, helping them to gain a competitive advantage over competitors.

"The collaboration with T4SM, thanks to the high competence of its staff, has enabled TSM to have an easy-to-use software for the calibration of its wire position transducers thus optimizing production time and ensuring the reporting required for a proper quality management."

Dott. Agnesi— CEO TSM Sensors

For technical support and product information:

www.toolsforsmartminds.com

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