Schaeffler Group

Making products traceable and tamper-proof with GS1 standards

Challenge

To meet growing customer demands, the Schaeffler Group needed a solution that would uniquely identify each of its individual bearings to protect against counterfeiting and efficiently provide maintenance services for installed bearings around the world.

Solution

Schaeffler decided to use a serialised Global Trade Item Number® (GTIN®) encoded in a GS1 DataMatrix barcode that is directly engraved on each bearing. The decision was based on these GS1 standards' global interoperability, robust data availability and the ease of integrating them into business processes.

Benefits

• Verifies the authenticity of each Schaeffler bearing to combat counterfeits

• Protects the Schaeffler brand and its customers

• Enables the traceability of each bearing for proactive planning and efficient maintenance services

• Provides additional useful information such as country and batch/lot data

Fighting counterfeits

The Schaeffler Group is one of the world's leading integrated automotive and industrial supply companies with approximately 84,000 employees in over 50 countries. The company manufactures and markets precision components and systems for engines, transmissions and chassis, as well as bearing solutions for industrial applications.

Schaeffler is well known for its high-quality standards, making the company's products especially vulnerable to counterfeiting activities. Schaeffler has pursued a zero-tolerance strategy to protect the company's interests as well as those of its customers. Since 2004, Schaeffler's brand protection team has worked on a variety of counterfeit attacks. In 2015 alone, the team initiated 156 raid actions against trademark infringers.

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Ingrid Bichelmeir-Boehn
Head of Global Brand Protection
Schaeffler Technologies AG & Co. KG

SCHAEFFLER

One barcode: many benefits

A serialised GTIN is encoded in the machine-readable GS1 DataMatrix barcode that is directly laser-engraved on the inner ring of the bearing. An engraved barcode is the best option in harsh environments where labels are likely to fall off. This gives Schaeffler and its customers the needed traceability to know exactly where the bearing was manufactured and where it is installed for maintenance services. Product data is read by using a scanner or a conventional smartphone with the appropriate software application installed.

As a supplier of high-tech industries, Schaeffler has also been faced with more and more requirements from its customers, such as assurance that the bearings they purchase are authentic, Schaeffler-branded products. Another customer demand has been that each bearing installed is traceable, for effective and efficient troubleshooting and maintenance.

Easily integrated with robust data

To combat piracy and satisfy customers, Schaeffler chose to implement GS1 standards, specifically a serialised Global Trade Item Number® encoded in a GS1 DataMatrix barcode that uniquely identifies each of its individual bearings. Furthermore, the serial component of the GTIN is randomised, adding an extra layer of anti-counterfeit protection.

Ingrid Bichelmeir-Boehn, Head of Global Brand Protection at Schaeffler, describes the reasons for the decision, "We chose the GS1 DataMatrix barcode as an identification method since the standards-based use of the barcode provides a wide range of capabilities—for us and for our partners. In addition, the DataMatrix barcode is robust and easy to implement."

Achieving traceability and security

Schaeffler has already generated an estimated 150 million randomly generated, serialised GTINs encoded in DataMatrix barcodes that have been engraved on its bearings. In fact, the company continues to generate 400,000 GTINs in DataMatrix barcodes each day for engraving or applying on products.

"With GS1 serialsation, the Schaeffler Group has easily met the requirements of its customers for authentication, traceability and access to more information about the product," says Dr. Daniel Dünnebacke, Senior Manager with GS1 Germany.

GS1 standards not only validate the authenticity of each bearing, additional information can be encoded in the GS1 DataMatrix barcodes to enable traceability of each bearing—from the factory site where it was manufactured to the exact installation where it is ultimately used.

For example, in the wind energy sector, Schaeffler and its customers can determine exactly which bearing has been installed in which wind turbine. With this information, Schaeffler can better plan and more efficiently perform maintenance services for its customers—an increasingly critical need when faced with the difficult access to bearings in wind turbines.

Thanks to GS1 standards, the global Schaeffler Group is meeting its customer requirements by making each individual bearing traceable, tamper-proof and available with useful information.

Learn how GS1 standards can help your business achieve traceability, guard against counterfeiting and more. Visit www.gs1.org.