

BCT INSPECTOR

EFFECTIVE QUALITY

MANAGEMENT

Image: Siemens Mobility GmbH

Siemens Mobility GmbH has stood for future-oriented transport solutions for over 160 years. The portfolio includes rail vehicles, rail automation and electrification solutions, intelligent road traffic technology, related services and ready-to-use systems.

Initial situation and challenges

At the traditional Nuremberg Vogelweiherstraße location of Siemens Mobility GmbH, a large amount of different data is generated during the product development process of electric motors, converters and

integrated drive solutions. These contain elementary knowledge for the continuous improvement of product and process quality and are decisive for quality management.

Until now, the high manual effort required for detailed inspection planning has been a major challenge for the company. In addition, the inspectors and workers in the company had to operate many different software solutions and programs. The manual entry of characteristics in Siemens Opcenter Quality (QMS Professional) requires additional time and is error prone.

This process should be optimized so that a direct link between the inspection data and the design data is possible.

These challenges were successfully mastered by integrated BCT solutions in Siemens NX, Teamcenter and Siemens Opcenter Quality, resulting in a reduction of the complexity of inspection planning.





Image: Siemens Mobility

The key to success

In order to be able to carry out the inspection planning with the quality management software Siemens Opcenter Quality, the characteristic data from the 3D model needs to be known. By using BCT Inspector this data can be transferred directly to Siemens Opcenter Quality where it is used for effective quality management.

BCT Inspector identifies and stamps the geometry and part properties. Throughout the whole life cycle of a component its inspection characteristics are extracted.

With the generated characteristic data, the inspection planning can already be started in BCT Inspector. For example, critical characteristics can be transferred into the inspection planning process. These are sent to Siemens Opcenter Quality for inspection planning.

When the geometry data is revised, BCT Inspector automatically detects changes in the stamped features. By transferring the data to Siemens Opcenter Quality, existing inspection plans are automatically updated as well.

The results at a glance

With the introduction of BCT Inspector, Siemens Mobility GmbH achieved significant improvements:

- Process stability and continuous process documentation.
- Automatic updating of the list of characteristics in the event of design changes as well as traceability.

EFFICIENT

INSPECTION PLANNING

- The integrated software solution reduces the complexity for the user with the help of a characteristics and work specific guide through the inspection process.

- Consistent linking of drawing data from design to shop floor.