

BMW-MINI Project in England

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“Whenever we have a problem, we no longer simply measure it ...We Q-DAS® it!”

This is a clear statement issued by the manufacturing manager of the BMW-MINI plant in Oxford, England!

The MINI – who does not know this car? The car has been an eye-catcher on the streets for years and since MINI’s cooperation with BMW, it has “grown up”. This is really a success story and nowadays almost 7 million BMW MINIs drive on our streets all over the world. Meeting high quality standards is BMW-MINI’s top priority. So the implementation of a SPC project based on Q-DAS® software products was quite obvious.

In the past, measurement and test data was recorded manually by using pen and paper in the assembly department. Data were collected once a week in order to conduct a rudimentary process analysis. A real statistical evaluation including a “drill-down functionality” was not feasible because of the data structure. The first Q-DAS® licenses were installed in 2003. These licenses were single-workstation solutions, i.e. there was no system network. However, the single-workstation solutions provided the basis for implementing the Q-DAS® software in the entire final vehicle assembly.



Figure 1: The Mini - then and now

BMW-MINI defined the following project aims together with our English partner Measurement Solutions:

- Introduction of real-time SPC in the entire vehicle assembly
- Automated data recording (instead of hand-written on paper)

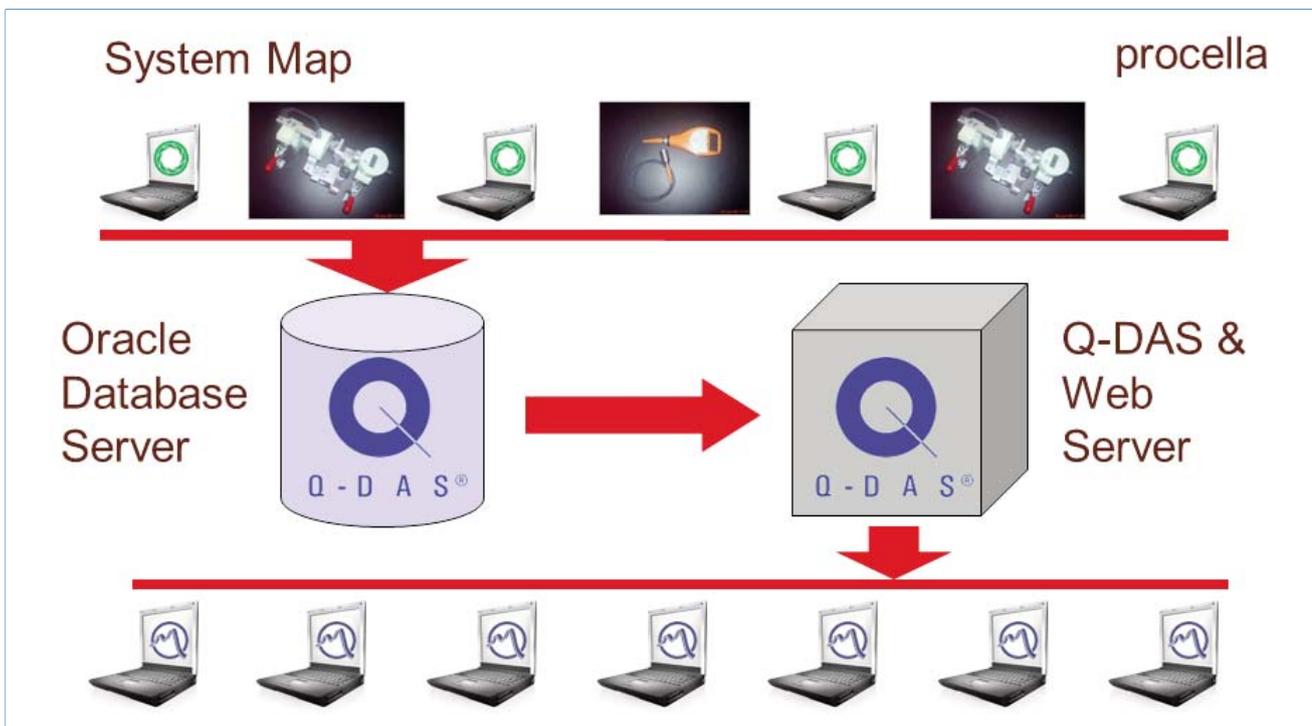


Figure 2: System layout

- Provide evaluation results to the management promptly
- Generate reports “on demand”
- Analysis of the processes based on the “drill-down” functionality
- Application of the intranet for visualization purposes and for the reporting system.

The project was implemented in multiple steps. In the first step, BMW-MINI and Measurement Solutions generally specified definitions for the project requirements together. The result was the basic configuration of the Q-DAS® software. Based on this configuration, the first training courses were provided in the following steps in order to acquaint employees with the software and to learn more about the options the software offers. Now they were able to consider the software and its functions in the definition of further project requirements. New definitions formed the basis for the installation and configuration of the Q-DAS® systems in the BMW-MINI plant in Oxford (procella for data recording, Q-DAS® Web for evaluation and qs-STAT® for detailed analyses).

After some training and completing the installation, the first data were recorded by means of procella® in the assembly. At the same time, BMW-MINI started to specify the layout of reports and websites the management once would access for statistical evaluations.

An easy access to the data via intranet and the integration of the functionality to click through different levels of detail - from an overall summary to single depart-

ments of the plant to individual characteristics - were of top priority. Even this stage of the project was completed successfully. Thanks to intuitive website navigations users only required a short introduction into the handling of the software. Statistical trainings were also provided.

Overall the customer considered the project to be very successful and beneficial and they summarized it as follows:

- The Q-DAS® Web application helps us to visualize data for each employee in the entire plant
- Employees do not have to be experts in statistics to operate the system
- Configuring websites and adapting them to user requirements reduces the effort of additional training
- Focus on the most important process issues
- The management is always up to date about the quality status in the processes.

„The Q-DAS® solution enables us to focus on process issues when they occur and be pro-active rather than reactive towards problems. Whenever we have a problem, we no longer simply measure it ...We Q-DAS® it!“ (original quote by a BMW-MINI manager). Even after concluding the project, the customer and Q-DAS created new ideas of how to develop corporate Q-DAS® web solution.

Mini.... a success story to be continued!



Figure 3: Websites for evaluations via intranet