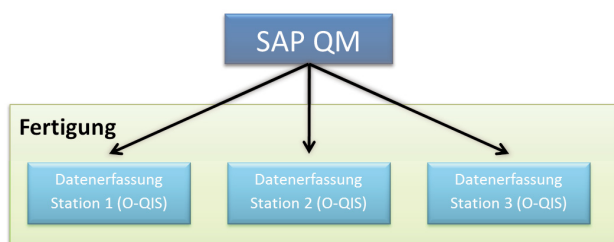


SAP-IDI – Recording Data in procella®

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Many companies use the ERP system SAP as a leading system for the administration of business processes. In order to have a consistent data structure in the processes, even quality processes fall within the administration of SAP QM. Thus it is reasonable to arrange the production planning with SAP, too. So you already have to define products and their characteristics in SAP QM. In addition, information about the respective order shall control the recording of data in the running manufacturing process. You can apply the Q-DAS® software procella® for the recording of data at this point.



SAP QM for the Planning Phase

SAP QM defines production parts in test plans. They are assigned to a description and a number and are linked to customers and suppliers etc. In addition, you have to define the test characteristics in the software. This is how the master data for data recording is created. In order to record measurement data now, you have to generate a production order and create an inspection lot. Assign this inspection lot to a measuring station in production. The inspection information (inspection lot) is transferred via SAP QM interface (SAP IDI) to a procella® work station recording data.

procella® for Recording Data

Based on an adjusted selection, the procella® work station displays the transferred SAP inspection lots directly. Now, operators on site know which inspection lots, i.e. production parts, to inspect. They select the inspection lot and start the measurement. procella® is designed to facilitate the recording of data for the operator. You may even connect serial measuring equipment to collect data.

After completing the measurement, you can transfer the measured values back to the leading SAP system. You can even transmit usage decisions via SAP IDI interface.

Why procella®?

When recording measurement data, there is frequently more at stake than the transfer of the measured value. The operator should have a suitable tool to enter the measurement data for the measuring task appropriately.

In order to achieve this goal, procella® applies plausibility limits. The software does not accept any measured values exceeding these limits. Additionally, you can apply serial measuring equipment for collecting data in order to avoid faulty insertions.

procella® informs the user about deviations by showing respective dialog boxes. Use them to input events, causes and measures for the respective alarm. You may display these additional pieces of information in an analysis of data. The information help you understand why the deviation occurred.

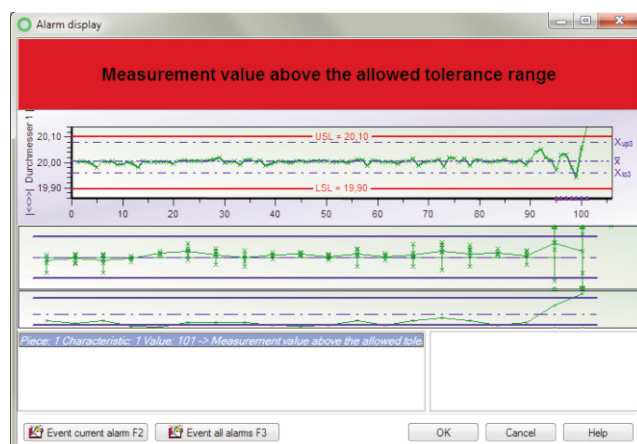


Figure 1: Alarm dialog box including value chart and quality control chart

You can define alarms and deviations, of course, e.g. tolerance limits, control limits of a quality control chart, warning limits, etc. Additionally, you may react to the violation of different control limits in different ways; you may even send an e-mail to third parties. procella® also helps you define the adherence to a measuring process. The program can also show respective notes every time you do not adhere to the measuring process.

procella® is also capable of collecting additional data, such as operator, order, batch, etc. You may search for these data in later evaluations or generate comparisons. procella® requests this information automatically from the operator. The query always opens every time additional data might change, e.g. when starting the program, before each sample, before starting a part measurement, etc.

Displaying the Measurement in an Appropriate Way

Another special feature of procella is the individual design of the summary / input masks for recording data. Depending on the complexity of a measuring process, you need different designs. As an example, you may

show drawings of characteristics to visualize the exact position of measurement or you may add “o.k.” and “n.o.k.” buttons to record attribute data quickly.

Incidentally, procella is available in 21 languages, so you can even use it immediately in another language.

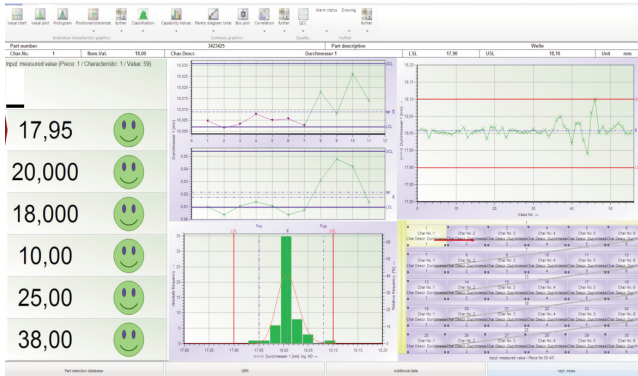


Figure 2: Example of a summary / input mask in procella®

Brief overview of outstanding advantages of procella®

- Individual design of summary / input masks
- Input of additional data (operator, machine, order, etc.)
- Interface to serial measuring equipment; currently more than 180 measuring instruments and multiplexers are connected via standard interface
- Avoiding faulty insertions due to different alarms and options (plausibility check)
- Alarm system (tolerance, QCC, trend, warning limits, etc.)
- Recording of attribute data
- Error log sheets
- Inspection process control
- Measurement reports
- User management (only authorized users can modify settings)
- Data are available in the Q-DAS® format and can be evaluated in qs-STAT® immediately after recording
- 21 languages included

These are the reasons why many companies consider procella as a suitable tool for collecting data and apply it in combination with SAP QM.

Visualizing Data in O-QIS MCA/CMM Reporting

It is not always the case that you enter measured values directly in the program as the procella example illustrates. When you take measurements e.g. by using coordinate measuring technology, the respective device stores a file including all measured values after completing the measurement. O-QIS MCA/CMM Reporting imports these data automatically after their generation

and visualizes the measurement. The operator is able to identify the characteristics with the sharpest deviations from the target value and can decide whether he wants to release the measurement for statistical evaluation.

You may use the SAP IDI interface in this process, too. The inspection lots are loaded in the local database. After the measuring program is completed, the SAP employee enters the SAP inspection lot number. This number helps to assign the measurement to the SAP inspection lot.

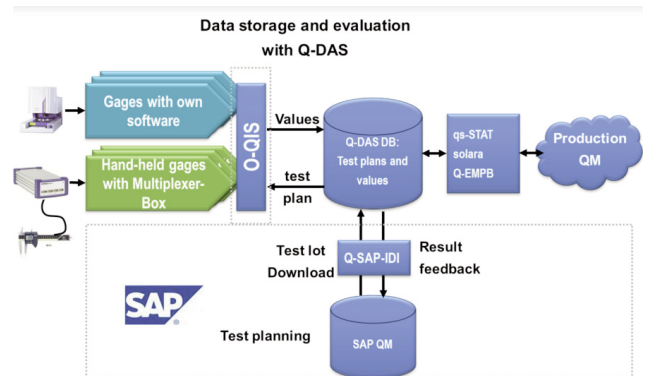
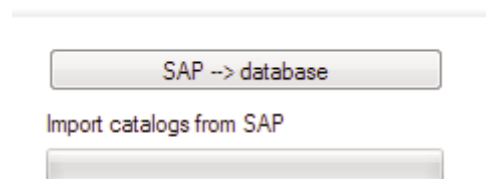


Figure 3: Application of O-QIS and the SAP IDI interfaces of the SAP QM module (procella® and MCA/CMM Reporting are components of O-QIS)

Catalogs

You also transmit catalog information already maintained in SAP QM via IDI interface. While recording data you use catalogs for the collection of additional information, such as events or machines. So SAP QM is the leading system, even when creating catalogs.



Advantages

By applying SAP IDI and procella, you combine the advantages of SAP as a leading system with O-QIS as a flexible tool for data recording. Storing the information in both systems is redundant. SAP is always the leading system, so you may store the recorded measured values in SAP or use them for statistical analysis in qs-STAT® in the Q-DAS® environment. Please contact us in case you are interested in a SAP/procella® software solution. We will be pleased to advise you on and support you in a successful implementation of this solution.