

# Why SIMCA® Multivariate Data Analytics Solution ?



**Ease in use.** From customers who have tried or used several offline solutions we learn that SIMCA Multivariate Data Analytics Solution is the world leading software solution for multivariate data analysis. SIMCA has a quick drill down functionality, using contribution plots that are unique and enable the investigator to quickly switch between the different levels and model diagnostics, displaying information as plots or lists easily.

**Simple (!):** In SIMCA go from the top, Observation level --> Batch evolution level --> Contributions plot --> SPC chart of individual process variables is 4 clicks.

**Hierarchical modelling** SIMCA handles hierarchical modelling easily and allow rapid overview and drill-down diagnostics between the levels (Batch level and Observation level).

**Reading in different data sources.** In SIMCA it is easy to align different data sources. In SIMCA both data import, alignment and merging are straightforward. Technical matters like "How do I deal with batches that have different lengths" are solved and easy to manage. Other concerns are "how is missing data dealt with?", "how are data sources that don't have the same sampling rate, or processes with different phases handled?". All have been solved and are implemented in SIMCA 14.1.

**Spectral processing.** Today, the spectroscopy skin in SIMCA Multivariate Data Analytics Solution matches all other software programs on all aspects except baseline correction. Historically, customers used the spectroscopic instrument software to do many of the spectral processing routines but due to a shift in customer requirements MKS Data Analytics Solutions developers have included and continue to work to implement and make more of these available in one complete package - SIMCA Multivariate Data Analytics Solution.

**SIMCA®-online solution.** When it comes the development in the methods and making these accessible to use by customers in a simple manner MKS Data Analytics developers have been at the forefront implementing new technology in the methods into our off-the-shelf software solutions. In particular the batch modelling capabilities in SIMCA Data Analytics Solution and the ease and availability for real-time batch process modelling in manufacturing using the SIMCA-online solution has been a significant market leader. The SIMCA-online solution is an off-the-shelf **robust** software solution with a world leading team of experts to support and offer consultancy services.

**Control-Advisor** – Continuing the trend to offer off-the-shelf solutions at the forefront of data analytics developments, Control-Advisor offers a platform that enables real-time multivariate monitoring that includes forecast and advised future mode for process optimisation. This adds to the existing capability of real-time process monitoring to enable manufacturing operations to implement operator assisted (open loop) or automated (closed-loop) control based on batch or continuous multivariate process control models.

**Quality** – All MKS Data Analytics Solutions software meet and comply with the regulatory requirements in Pharma and Biopharmaceutical industries and are GAMP 4 and 21 CFR Part 11 compliant.

**Support in many Countries.** Smit Consult has chosen MKS Data Analytics Solutions and we are pleased to provide you a demonstration and show the features of SIMCA and what the solution will enable: faster, easier data analytics to give more insight into the process, modelling of the process and forecasting of quality. We are much pleased to assist you with your needs for qualified tools such as SIMCA Data Analytics Solution and SIMCA-online solution. You can contact us at [jan.smit@smitconsult.nl](mailto:jan.smit@smitconsult.nl) for technical matters and details on the products and Nina Brands [nina.brands@smitconsult.nl](mailto:nina.brands@smitconsult.nl) for licensing and offers. Visit our website : [www.smitconsult.nl](http://www.smitconsult.nl)