

Product Note S47 - 04/22

OPUS TOUCH Multi-Evaluation workflow for increased productivity



IR spectroscopic analysis allows determination of a variety of qualitative and quantitative sample parameters in an extremely efficient manner. Typically, no or very little sample preparation is needed, measurement times are short, and the resulting data is very rich in information.

What is the Multi-Evaluation (MEV) workflow?

In many cases, a comprehensive analysis of a given sample requires two or more evaluation methods to be conducted in parallel or in sequence. Also, subsequent calculations using the gained analytical values, and their ratings (pass/warning/fail) are common requirements.

Wouldn't it be great if these separate methods and data evaluation tasks could be combined into a single method? This is exactly what the Multi-Evaluation (MEV) workflow does. Manual evaluations are no longer a necessity and you can get the requested results and their assessment automatically after the sample measurement just in a few seconds!

Why the need for Multi-Evaluation?

The desire for simple and automated workflows has always been a priority of chemical analysis. With the OPUS TOUCH Multi-Evaluation a novel workflow is provided that performs the chemical analysis individually tailored to your sample by a simple and highly automated procedure.

The Multi-Evaluation workflow acts like a short-cut from measurement to results, giving you the answer that you need immediately and without additional evaluation steps.

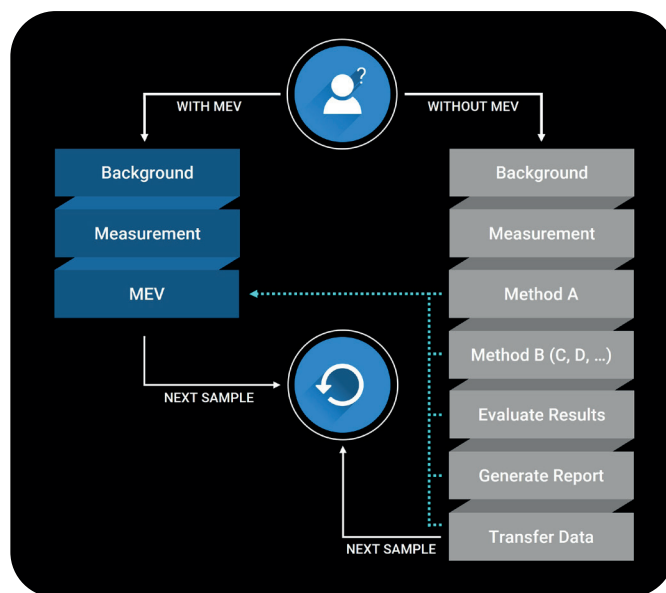


Figure 1: MEV vs. traditional manual analysis. Streamlining your sample approach with MEV simplifies your workflow dramatically.

Who should use the Multi-Evaluation workflow?

All operators and laboratory employees who repeatedly perform defined tasks in IR analysis will greatly profit from using the novel MEV workflow. Lab managers or supervisors will setup the MEV workflow and make it a standard to use for the operators. Typically this is in the field of Pharma, Polymer and other manufacturing industries where high productivity and reliability is required.

Benefits of Multi-Evaluation workflow

- One simple workflow for IR spectroscopic sample analysis
- Automated data evaluation, result display, and reporting
- Parallel, hierarchical use of multiple quantitative methods
- Combination of qualitative and quantitative analysis
- Calculations using initial analytical values

When is the right time to apply the MEV workflow?

MEV will boost the efficiency of standardized, repetitive analytical tasks. With this tool, performing sample analysis requires very little expertise from its users.

At the same time, IR data evaluation becomes more reliable, reproducible and independent of how sophisticated the applied procedure is.

Finally, the result is delivered with a clear indication of its meaning - without the need for manual interpretation.

Real-life example: Hand sanitizer

In Figure 2, a customer's MEV method is shown. The ALPHA II and OPUS TOUCH are used for the quality control of mass produced hand sanitizer.

Especially here, the qualification bar proves very handy for untrained operators. It provides a rating of quantitative results and users immediately know, if the sample fulfills regulatory requirements.

Green means pass and that the measured value is within specification. Yellow indicates a warning and that the parameter is within range, but close to tolerance limits. Red, of course, means that the the measured value is outside of the accepted range and quality is not ensured.

Conclusion: MEV is a Multi-talent

Whether you need to get a pass/fail decision from a quantification, or have to apply multiple evaluation methods on your sample's IR spectral data, MEV enables you to perform the analysis with maximum ease and efficiency.



Figure 2: A customer's MEV final result screen shown from OPUS TOUCH. All information is clearly displayed so even untrained operators can interpret the evaluation result. The hand sanitizers critical parameters like water, alcohol, and glycerol content is within good limits (green pass). User's can now sign the results, take a look at the report or continue, automatically saving a report on the file.