

# Sick of experiments?

Does this sound familiar to you?

- Excessive experimentation,
- poor test records,
- · redundant tests, and
- test results that defy interpretation?

## **Our solution: STAVEX 6.0**

The expert system STAVEX for statistical design and analysis of experiments (DoE) examines the relationship between factors and responses of interest. The ultimate goal is to find the optimal settings of all factors that really have an influence.

The current version 6.0 is the **first web-based DoE tool for the Intranet**. It is as easy to use as any mobile app, i.e. even much easier than the previous versions which were already very user-friendly. Thus, experimenters in research and development can apply STAVEX in their routine work without the support of a statistician.

The software allows for **process factors** (temperature, concentration, ...) as well as for **mixture factors** (mixture components for galenic or adhesive formulations, ...) which have to fulfil a summation condition typical for formulations. It also supports the calculation of the **Design Space** by combining several responses in the form of a **desirability function**. This enables making trade-offs between possibly contradictory responses.

STAVEX is based on the concept of **sequential DoE**. The tool integrates the experimental design, the statistical analysis of results, and provides guidance to select follow-up designs, i.e. it covers the whole experimentation process. STAVEX typically runs through three stages of statistical experimental design:

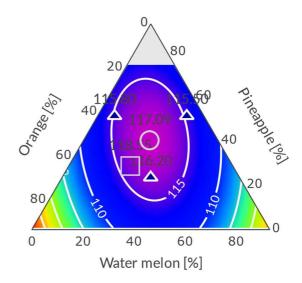
- screening using linear models for factor reduction.
- modelling for eliminating further unimportant factors using linear models with interactions, and
- optimization for determining the optimal levels of the remaining factors.

The major strengths of STAVEX – which was originally developed as an in-house tool of Novartis – are its **user-friendliness** and its **flexibility**. Since now 25 years, the software is developed further on the

basis of the experience gained from its practical use by engineers and scientists. The software is used in more than 200 companies of various sectors.

#### **Technical properties**

- runs on PC's with at least 8 GB RAM under Windows 7 to 11
- web-based: easy access in the web browser, e.g. from the office or from the lab
- documentation: online help, tutorial videos and PDF version
- English, German, French and Spanish versions available.



A product optimization with mixture factors

You can download STAVEX from our website for a **free one-month test** to evaluate the usefulness of STAVEX in your own environment. We also offer training sessions (2 to 4 days), as well as consulting services.

### For more information

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#### STAVEX.

We bring experimentation to a fine art.

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