MatchID

Metrology beyond colors

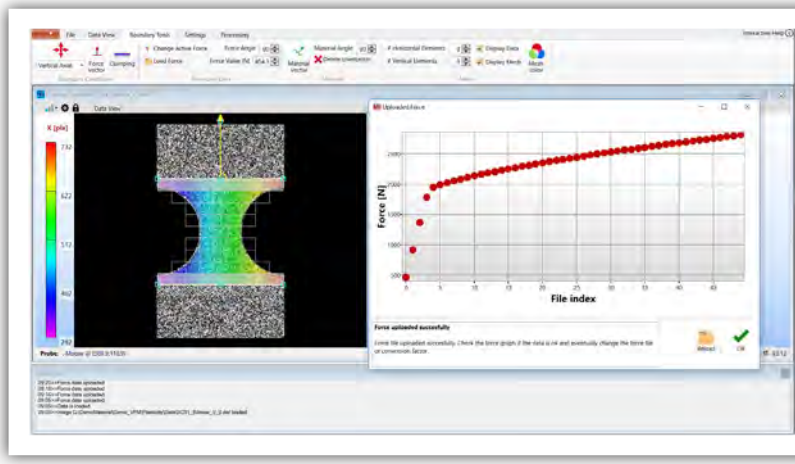
Material identification

MatchID has implemented the Virtual Fields Method (VFM) for identification of material parameters.

This material characterisation tool allows to identify mechanical parameters, for most types of material behaviour, over a plethora of material models.

As opposed to typical existing methodologies, VFM is applicable to far more complex material models, and provides very accurate results in much shorter time-frames.

In combination with high-end DIC, VFM can be used to adequately reconstruct full-field stresses, including their time, material & other dependencies



Key Features

- Any behaviour
- Almost any model
- Use own models
- Reconstruct stresses
- Extreme accuracy
- Directly integrate with DIC
- Sensitivity based
- Noise optimised

Applications

- Composites
- Steel
- Elastomers
- Polymers
- Static and dynamic

Customer Benefits

- Accessible for more materials
- Highly CPU efficient
- Reduced calculation time
- Reduced cycles
- Error & sensitivity bars

Competitive Advantages

- Less time needed
- More accurate results
- Less sampling material
- Faster engineering
- Test optimisation
- Uncertainties based on exp. errors

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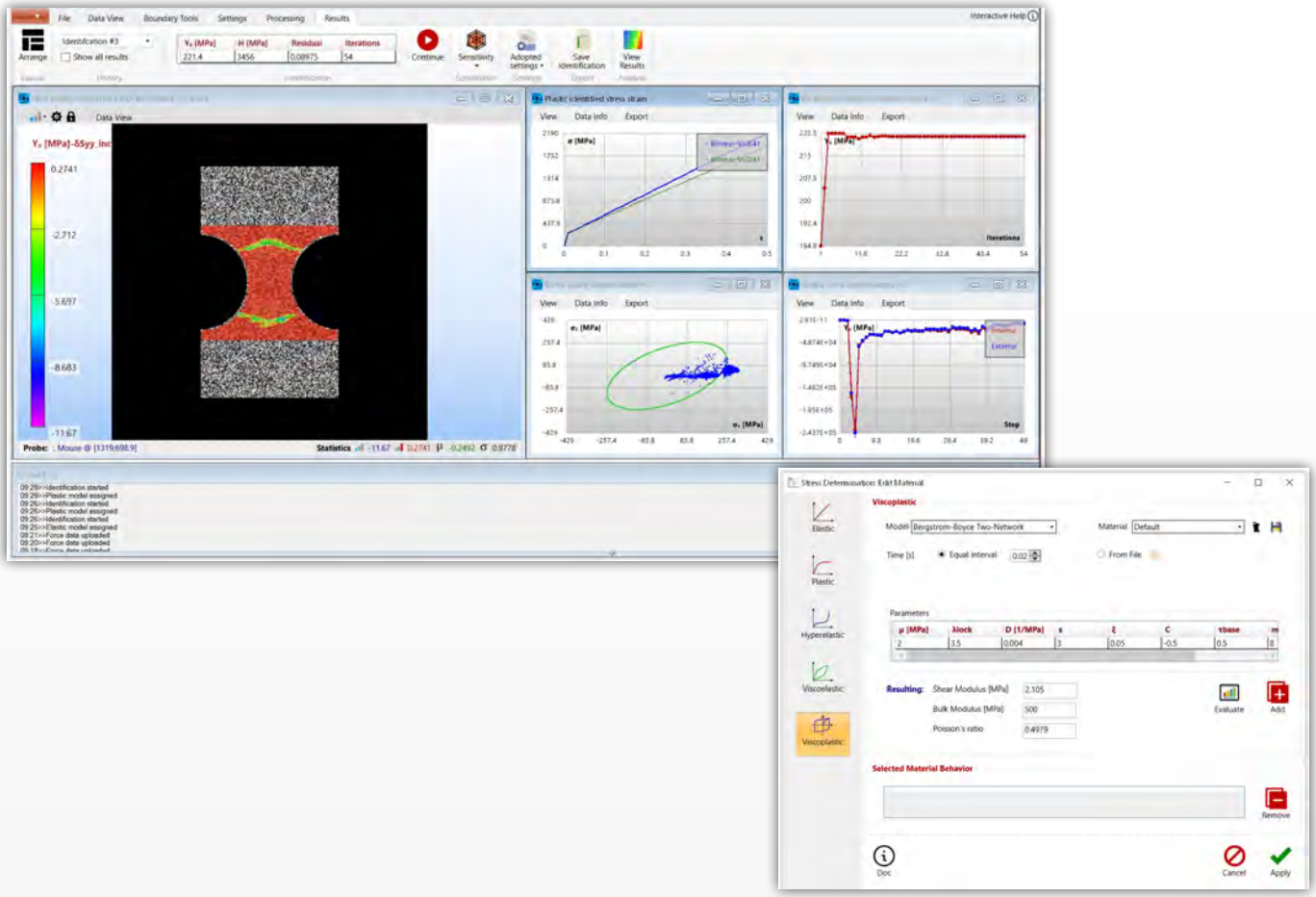

About MatchID

MatchID is a university spin-off, developing open, high-end, engineering software.

At the core of **MatchID**'s offering sits a holistic DIC-platform, providing quantitative result interpretation with integrated error assessment.

Many DIC systems generate coloured images to mark changes, such as strains or displacements; mostly operating by the black-box principle, these results merely show WHAT is happening in your experiment.

MatchID however answers the more important question: WHY and HOW does deformation happen; we provide insight into result creation, rather than having you test presumptions, thereby taking Digital Image Correlation to the next level.

Building on our DIC results, we do identification of mechanical properties of materials through the Virtual Fields Method (VFM).

Structural validation of Finite Element simulations is also supported, by establishing a one-to-one relation between model and experiment in the FEA module (FE-VAL).

Ultimate flexibility is offered by allowing direct interaction with external scripts, functions or programs through our universal Programming Language Interface (PLI).

The **MatchID** app-store allows for storing, using and buying or selling of third party tools.

In-depth training is available in the form of annual courses, webinars, self-training and online exercises.