



## RUMUL Software Rissfortschritt LabVIEW

### Hauptmenü bei laufendem Versuch:

The screenshot displays the RUMUL software interface during a test. It features several key sections:

- Dynamic Regulation:** Shows a force of 0.201 kN and a frequency of 92.139 Hz.
- Static Regulation:** Shows a force of 0.289 kN.
- Real-time Data:** Displays current values for Force (0.088 kN), Frequency (92.139 Hz), Displacement (0.069 mm), and others.
- Monitoring Table:** A table with columns for Date, Status, and Parameters, showing test history.
- Control Panel:** Includes buttons for 'STOP', 'History', 'Probe', and 'Riss-Modul'.

### Versuchsvorbereitung Proben:

The screenshot shows the specimen preparation interface, including:

- Specimen Diagram:** A technical drawing of a specimen with dimensions labeled.
- Dimensions:** Input fields for a (13.00 mm), W (30 mm), B (25 mm), and W1 (10 mm).
- Formulas:** Displays the stress intensity factor formula  $\Delta K = \Delta F / (B \sqrt{W}) \cdot f(a/W)$  and the displacement formula  $U = a/W$ .
- Digital Channels:** A list of channels for the fractometer, such as 'Fractomat (U, a2) analog (V1, V2)'.
- Buttons:** Includes 'Export to Excel', 'SAVE', 'CANCEL', and 'OK'.



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### Versuchsvorbereitung Testmodus:

**Versuchsmodus**

- Mode 1 - Delta-K falling + const. Kmax
- Mode 2 - Delta-K falling + const. R-ratio
- Mode 3 - Delta-K falling + const. Kmean
- Mode 4 - Delta-K rising + const. Kmax
- Mode 5 - Delta-K rising + const. R-ratio
- Mode 6 - Delta-K rising + const. Kmean
- Mode 7 - const. Delta-K
- Mode 8 - const. Delta-F

**Skizzen Versuchsmodi**

- Delta K fallend
- Delta K steigend
- Delta K
- Delta K
- Delta K
- Delta K
- Delta K constant
- Delta F constant

**Parameter**

- Delta-K [MPa√m] 1.00
- Konstante C 0.10
- Kmax [MPa√m] 1.15
- Kmittel [MPa√m] -3.00
- R-Wert 0.80
- Messinkrement da [mm] 0.02

**f(U):**  $K \cdot \exp(C \cdot \delta a)$  Edit DEFAULT

Print Settings SAVE CANCEL OK

### Compliance Graph:

