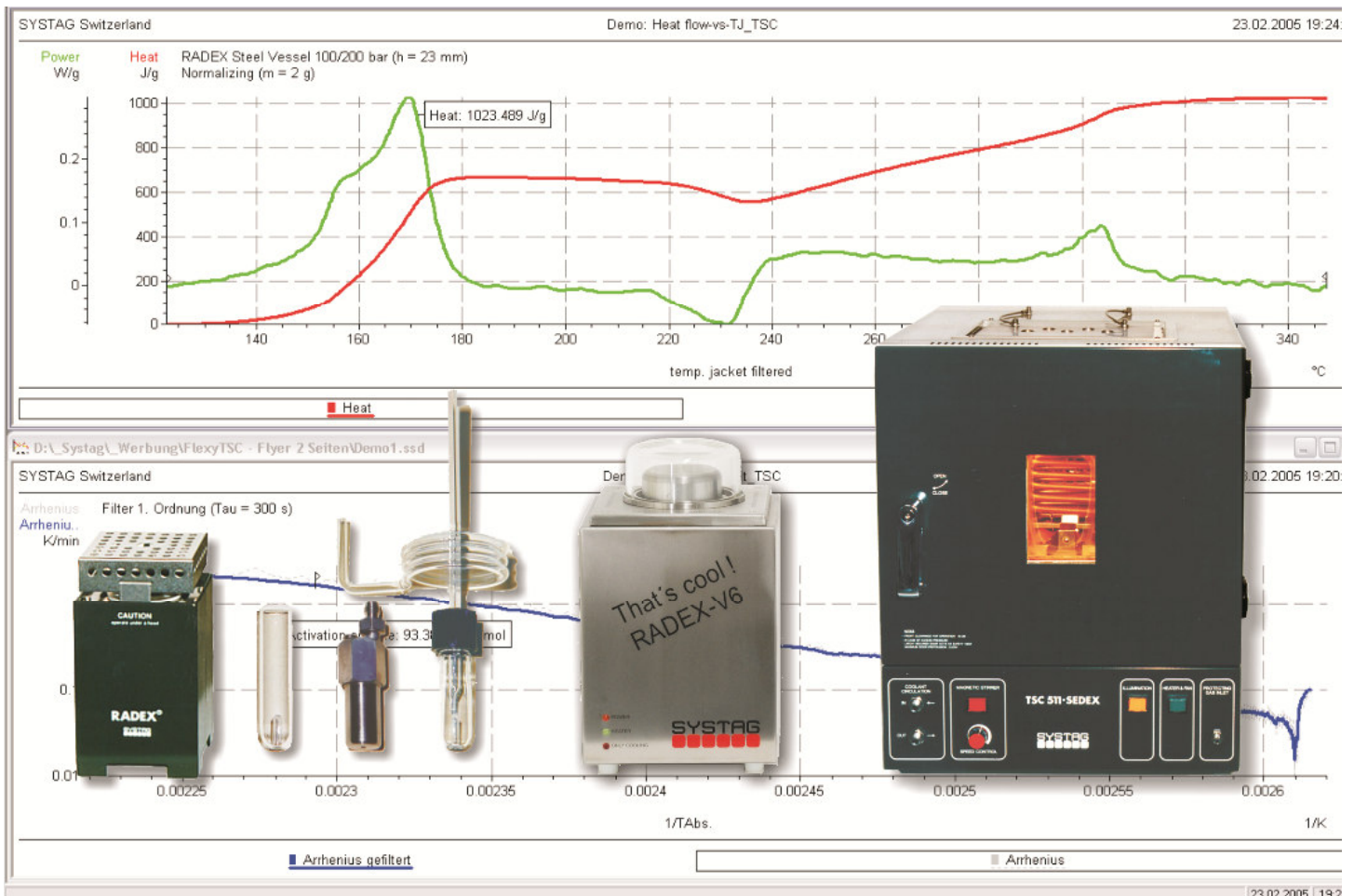


# FlexyTSC

Your perfect pathway to thermal safety



- **Simple operation** throughout from measurement to evaluation
- Required sample size within gram range, ideal for **non-homogenous samples**
- Up to 6 **measuring cells** can be operated simultaneously and within independent time frames
- Wide selection of **cost-effective sample vessels**

- **Freedom of choice of test conditions** for thermal safety evaluations
- **Standardised measuring procedures** to determine thermal stability, storage stability, self generated heat, heat build up, and gas evolution
- Automatic **test report** generation, **qualitative and quantitative data evaluation**

# FlexyTSC

## The versatile thermal safety calorimeter

### Valid, thermal analysis

Only thermal safety evaluations that are based on sound principles can make a significant contribution towards process safety.

FlexyTSC supports this process by using varying sample sizes and an individual choice of test conditions. Nevertheless, all measurements are directly comparable. This provides an exact characterisation of the sample.

### Measuring Methods

- Scanning
- Iso-peribolic steps
- Long-term isoperibolic evaluations
- Adiabatic operation
- IsoARC method (heat-wait-search)

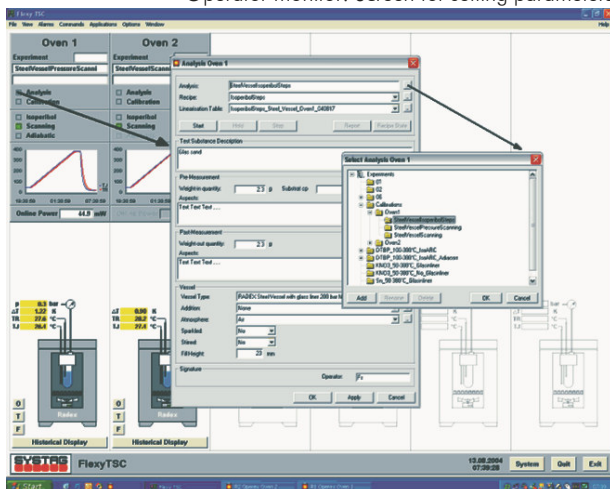
### Experimental Conditions

- Atmospheric, inert gas or oxygen atmosphere
- Use of a catalyst
- Measuring gas evolution
- Pressure measurement
- While stirring

### Recording

- Description of sample, sample serial No.
- Sample weight and appearance of sample
- Test conditions
- Vessel type

Operator monitor: Screen for setting parameters



### Evaluation

- Easy diagram generation
- Output [W/g] / Enthalpy [J/g]
- Adiabatic temperature increase
- Time to maximum rate (TMR)
- Arrhenius plot (Activation energy)
- Self heating rate (SHR)
- Onset temperature

### Measuring Cells

- RADEX V5, test vessel, typically 2.5ml
- RADEX V6 for low temperature down to -50°C
- SEDEX, choice of test vessels, up to 1l

### Test Vessels

- Glass test vessel
- Open and closed, Autoclave
- Stainless steel, Hastelloy
- Dewar-vessel (mirrored glass)
- Wire cage (transport safety, UN-Test)
- Three-necked flask
- Choice of any other vessel designs

### One modular control unit

It is possible to incorporate up to 6 measuring cells simultaneously. Temperature difference resolution: +/-0.01K.

Control unit with control monitor (on left) and FlexyTSC controller, plus power unit for 1 measuring cell. Up to 6 units linked to a single PC

