CYCLIC SOFTENING MODULE

Recommended for cases where stiffness degradation limits durability

The cyclic softening module produces information about the rate at which stiffness evolves under cyclic solicitations. This information is useful for modeling stiffness evolution under fatigue cycles using Endurica DT's stiffness loss cosimulation feature. The experiment is run in displacement control, and it records the evolution of the peak stress with cycles.

Experiment Overview

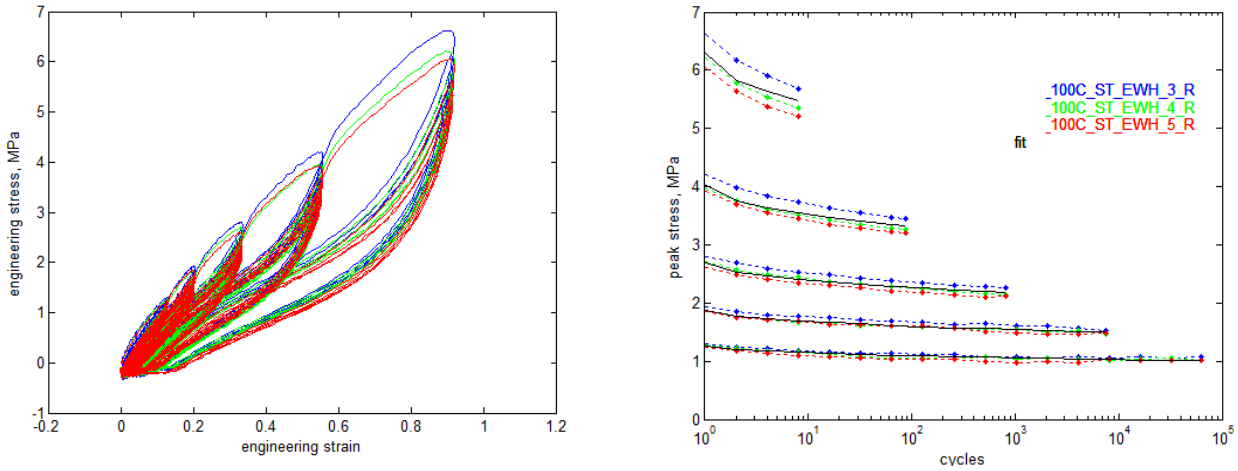
- raw data from cyclic softening procedure on simple tension strips at 5 strain levels
- number of slabs needed for test: 1

Analysis and Reporting / Deliverables

- family of cyclic softening curves showing stiffness degradation rate as a function of life consumed
- curve fit to cyclic softening model

Use with

- Cyclic softening model



Cyclic softening stress-strain response (left), and evolution of peak stress at 5 different strain levels.

FPM-S **Elastomer Fatigue Property Map – Cyclic Softening 23°C** **$3,170**

Additional Option

FPM-S-HOT **Temperature Upcharge for >23°C Cyclic Softening Module** **$880**
Indicate temperature with range of >23°C to 150°C

FPM-S-COLD **Temperature Upcharge for <23°C Cyclic Softening Module** **$1,440**
Indicate temperature with range of -40°C to <23°C