CREEP CRACK GROWTH MODULE

FPM
CR

Recommended for cases involving long periods under static load

Lab ambient temperature (23°C)

The creep crack growth rate module produces information useful for cases involving long-term static loads under which time-dependent crack growth (rather than cycle-dependent crack growth) may occur.
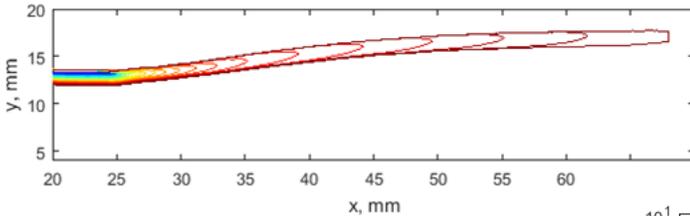
Experiment Overview
- raw data from quasistatic creep crack growth procedure
- number of slabs needed for test: 1

Use with
- Powerlaw creep crack growth model
- Table lookup creep crack growth rate law

Analysis and Reporting / Deliverables
- creep crack growth rate curve and its parameters (T_q, r_q, and F_q)

Typical crack tip images collected during fatigue testing. Each contour represents the crack tip shape at a given number of cycles. Colors indicate time, with blue at the beginning of the test, and deep red at the end.

Fatigue crack growth rate observations and model fit parameters.

F_q=3.69
T_q=2.54e+03
r_q=1.26
B_q=3.33e-13

Fit dc/dt=B$_q$(T$_q$)^F$_q$
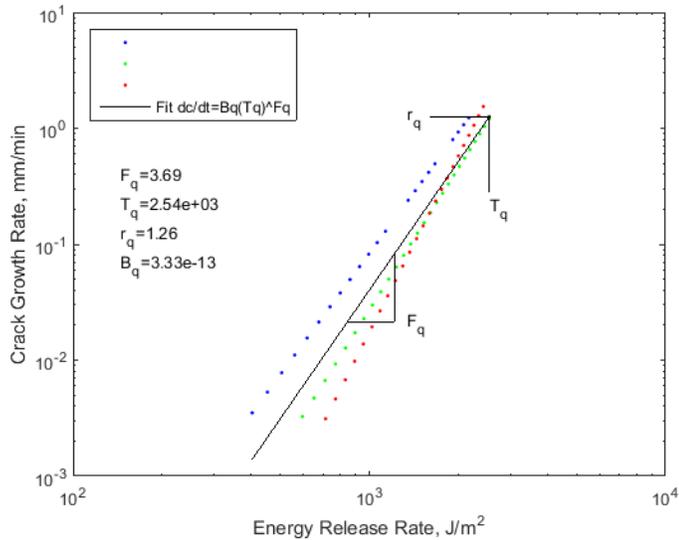
FPM-CR	Elastomer Fatigue Property Map – Creep Crack Growth Module	$2,140

Additional Options

FPM-CR-HOT	Elastomer Fatigue Property Map – Creep Crack Growth Module	$770
	Indicate temperature with range of >23°C to 150°C	

FPM-CR-COLD	Elastomer Fatigue Property Map – Creep Crack Growth Module	$1,390
	Indicate temperature with range of -40°C to <23°C	