

θ8 Identification for material property t8

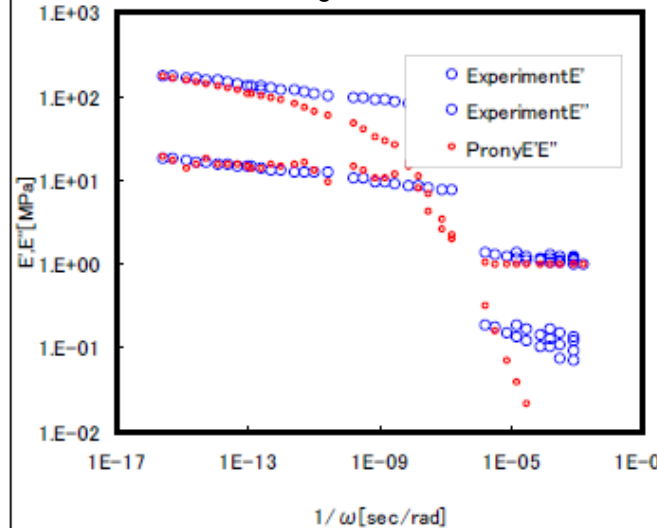
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	G[Mpa]	β [1/sec]
∞	3.21E-01	
1	1.17E+01	3.77E+15
2	8.97E+00	1.89E+14
3	6.91E+00	1.89E+13
4	6.49E+00	1.89E+12
5	8.47E+00	1.89E+11
6	7.60E+00	6.28E+09
7	2.30E+00	1.26E+09
8	8.64E+00	1.26E+08
9	5.71E-01	6.28E+06
10	3.04E-05	6.28E+05
11	5.16E-03	6.28E+04
12	1.11E-10	6.28E+03
	K[Mpa]	
∞	3.10E+04	

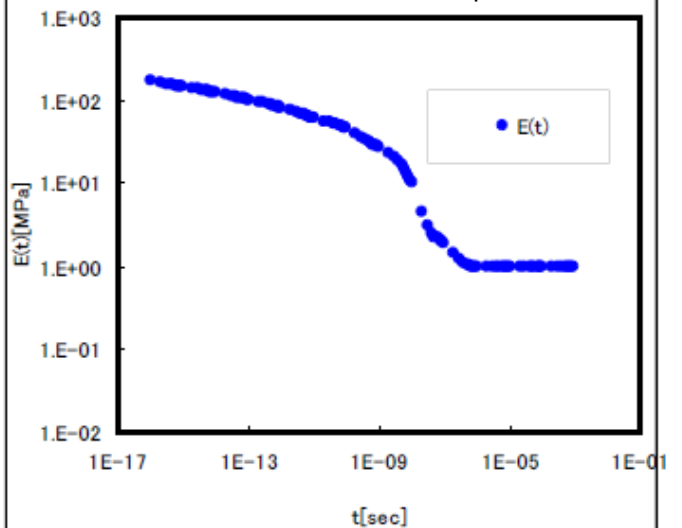
Prony series

$$G(t) = G_{\infty} + \sum_{i=1}^N G_i e^{-\beta_i t}, \quad K(t) = K_{\infty}$$

Actual measurement along with fitted curve

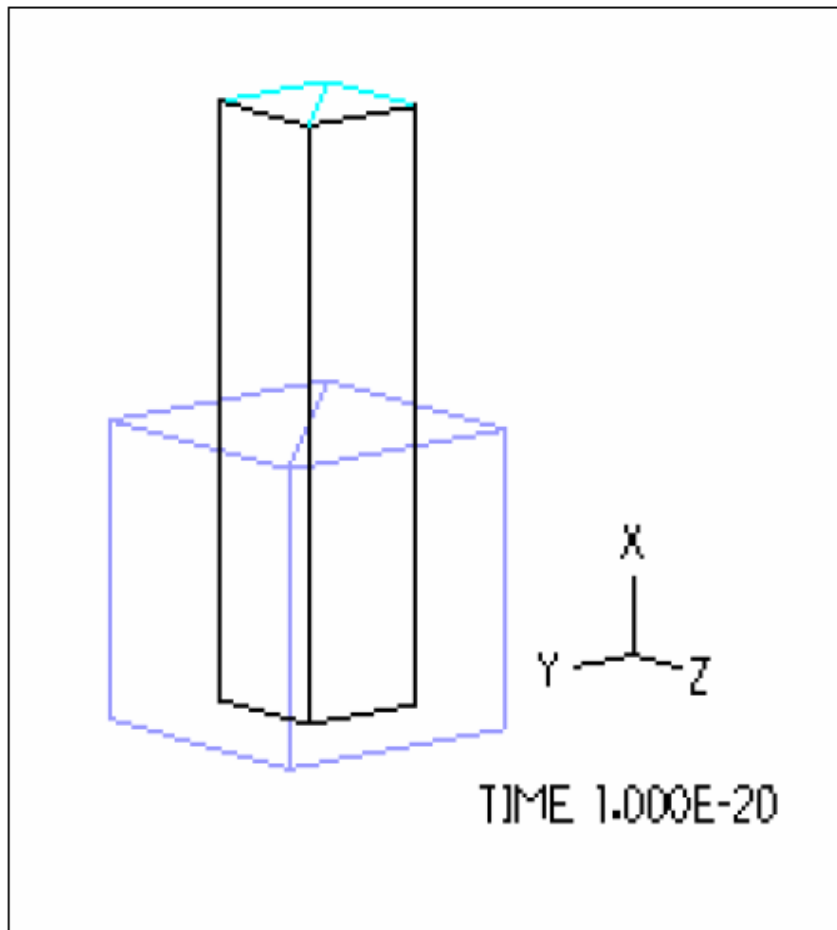


Stress-relaxation curve with identified parameters

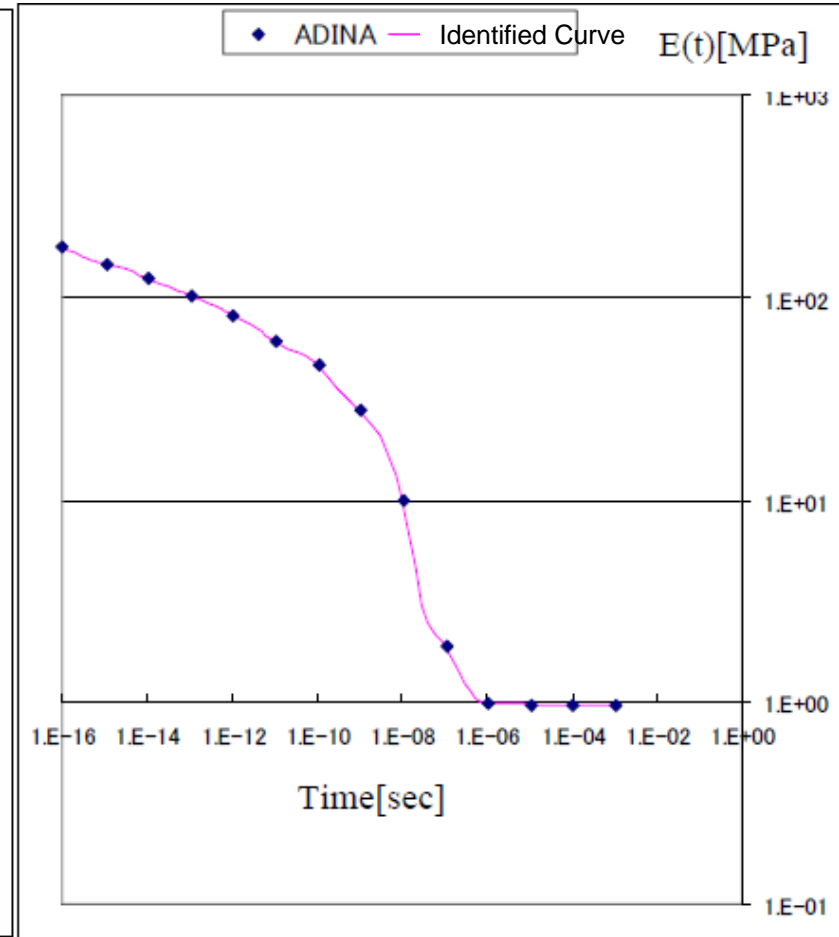


θ8 Stress-relaxation analysis (relax_t8.in)

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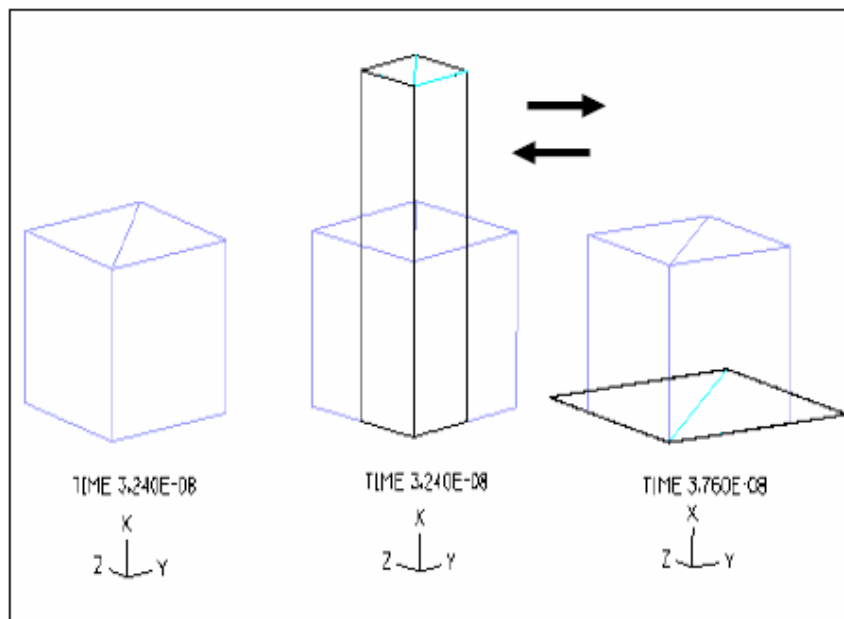
Analysis model



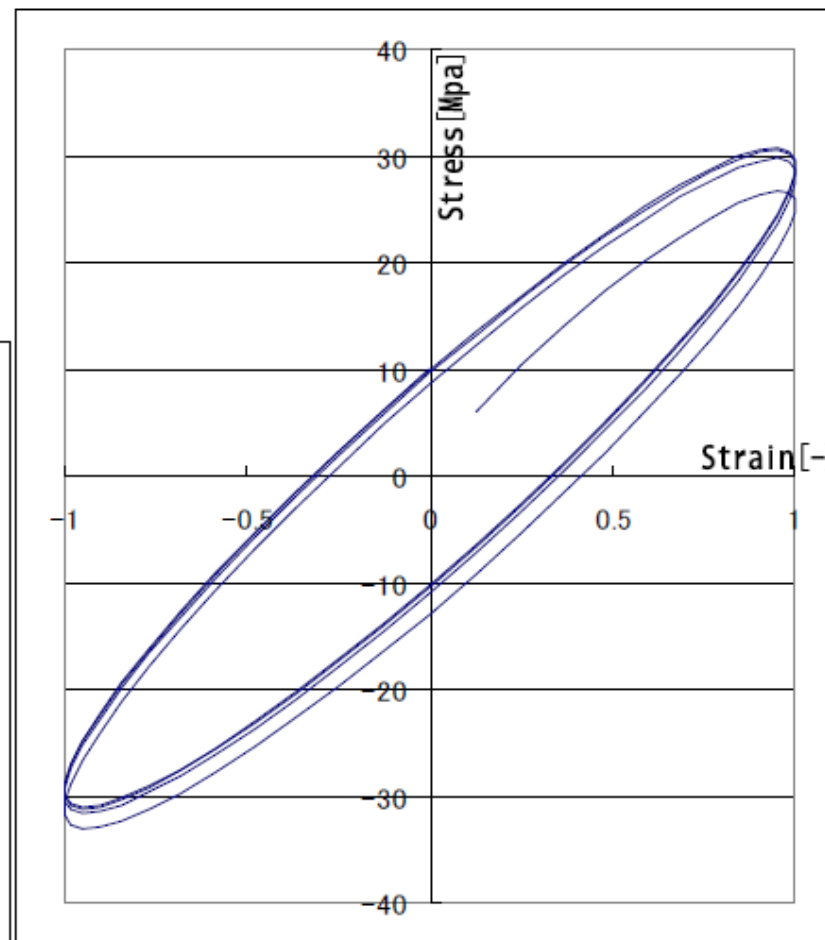
Stress-relaxation curve

θ -8 Harmonic vibration analysis (freq_t8.in)

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Analysis model



10^8 Hz hysteresis curve