

Identification of material property 2hs65 Hardness (65), Damping (Large)

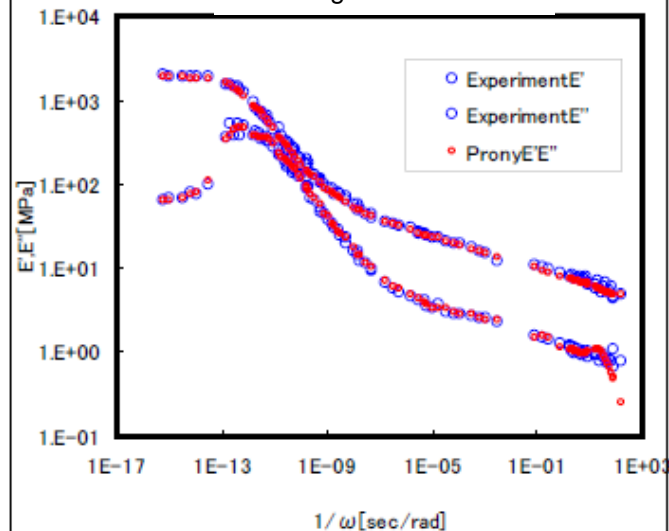
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	G[Mpa]	β [1/sec]
∞	1.59E+00	
1	3.55E+01	1.57E+15
2	3.08E+01	1.57E+14
3	7.49E+01	6.28E+12
4	2.41E+02	1.89E+12
5	1.66E+02	1.89E+11
6	6.48E+01	1.89E+10
7	1.89E+01	1.89E+09
8	8.96E+00	1.89E+08
9	4.14E+00	1.89E+07
10	2.01E+00	1.89E+06
11	1.78E+00	3.14E+05
12	1.49E+00	3.14E+04
13	1.30E+00	3.14E+03
14	1.27E+00	3.14E+02
15	5.55E-01	1.26E+01
16	5.43E-01	3.77E+00
17	3.97E-01	5.03E-01
18	6.20E-01	5.03E-02
	K[Mpa]	
∞	3.28E+05	

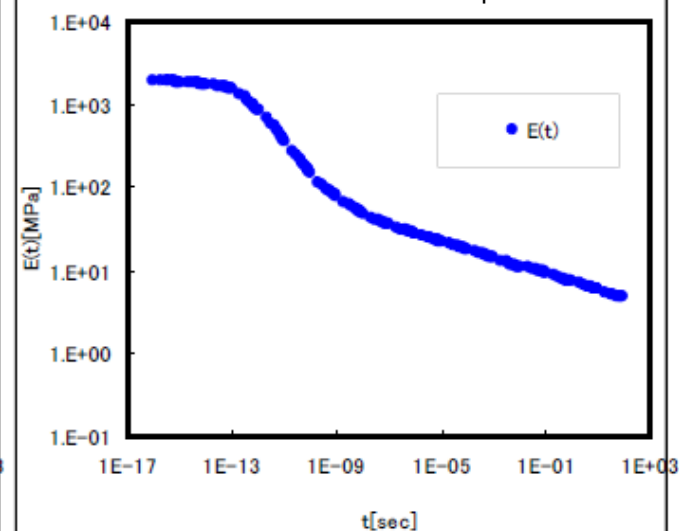
Prony series

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

Actual measurement along with fitted curve

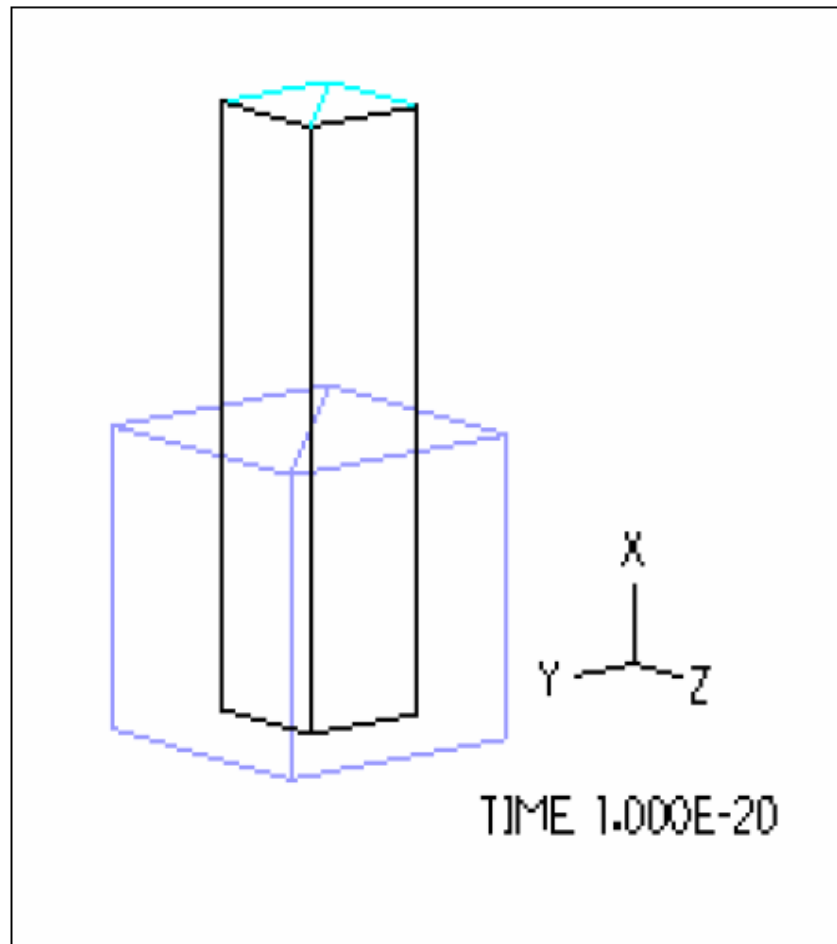


Stress-relaxation curve with identified parameters

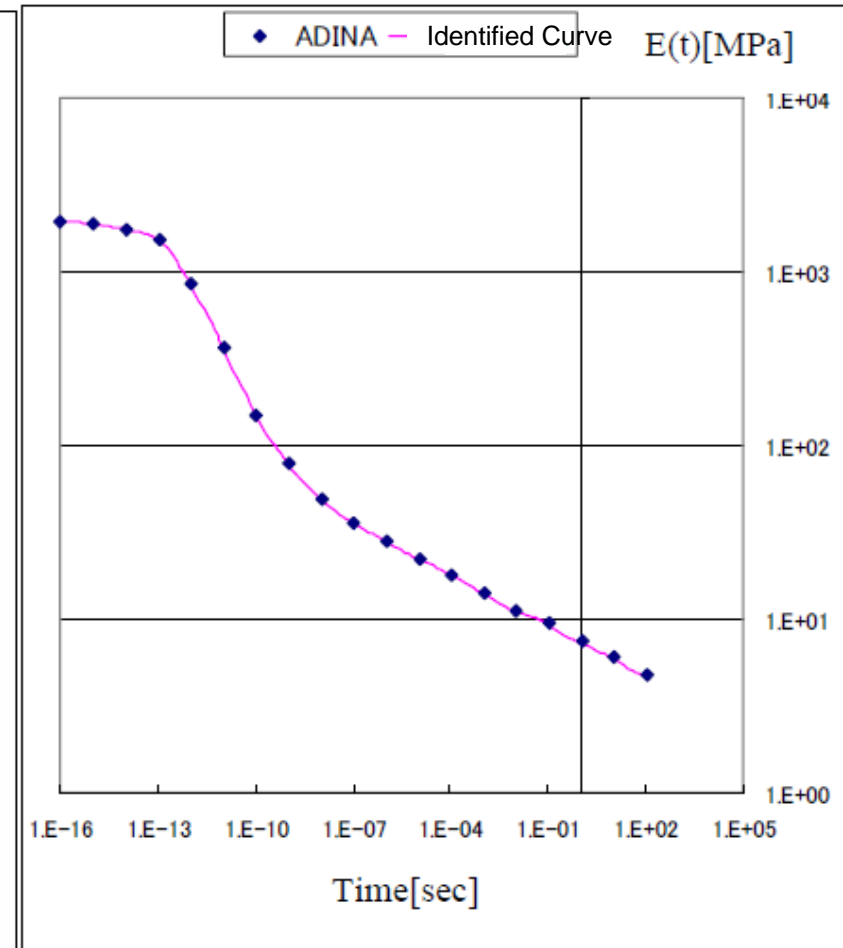


Stress-relaxation analysis (relax_2hs65.in) Hardness (65), Damping (Large)

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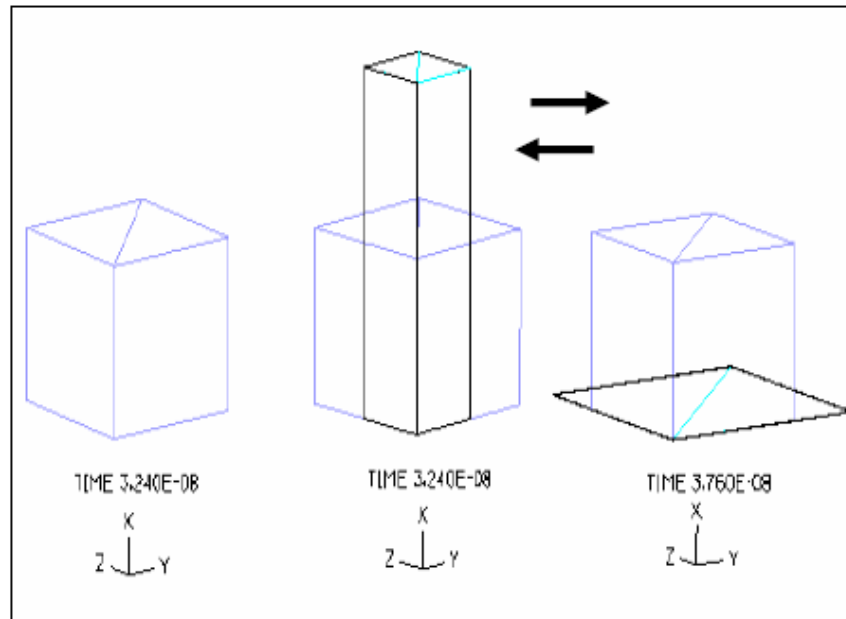
Analysis model



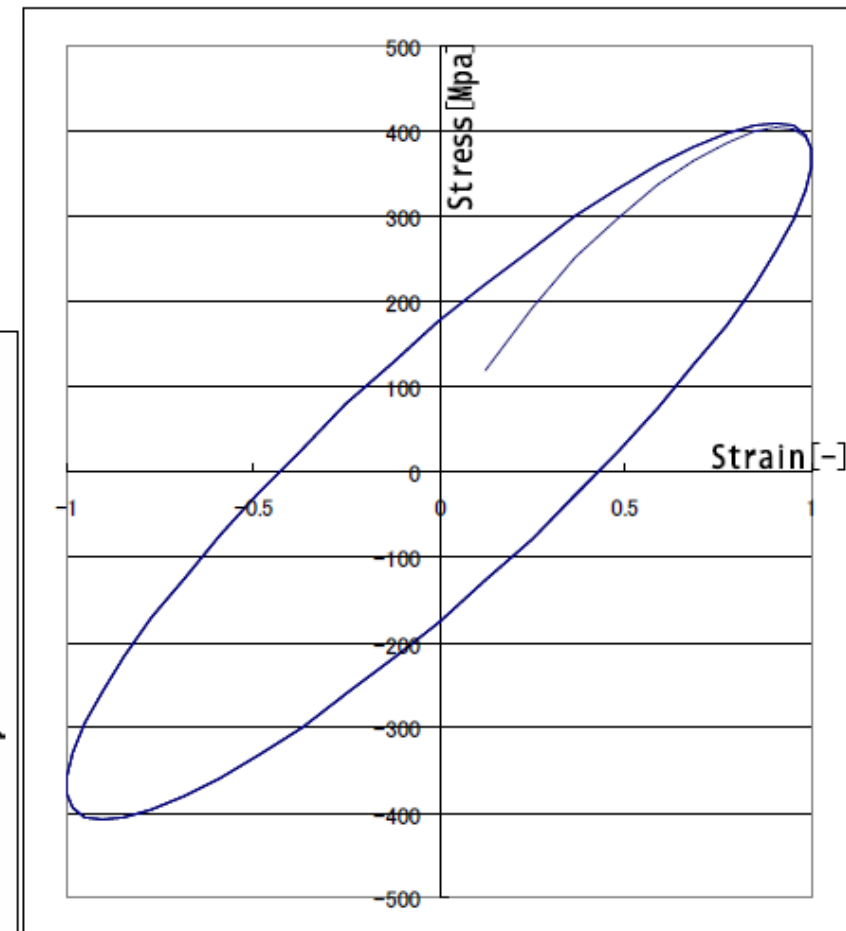
Stress-relaxation curve

Harmonic vibration analysis (freq_2hs65.in) Hardness (65), Damping (Large)

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Analysis model



10^{10} Hz hysteresis curve