

Identification of material property: Hardness (65), Damping (Small)

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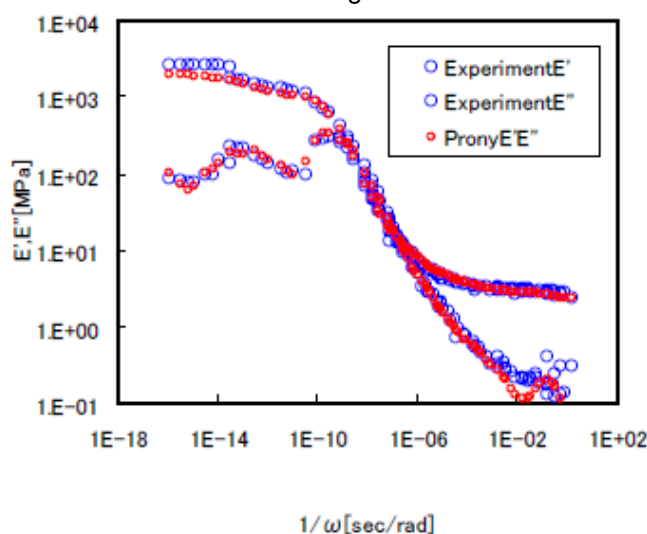
Young's Modulus [N/mm ²]	Poisson's Ratio
2.42684E+03	4.99C00E-01

G_i [N/mm ²]	t_i [sec]
1.57210E+02	1.59155E-12
1.16489E+02	1.59155E-11
1.57228E+02	3.97887E-10
1.34635E+02	3.97887E-09
1.69863E+02	1.59155E-08
5.49237E+01	1.59155E-07
1.11643E+01	1.59155E-06
3.40500E+00	1.59155E-05
1.27201E+00	1.59155E-04
4.17878E-01	1.59155E-03
2.65841E-01	1.59155E-02
2.08364E-01	1.59155E-01
1.72282E-01	1.59155E+00
1.40306E-01	1.59155E+01
1.25121E-01	1.59155E+02
1.65513E-01	1.59155E+03

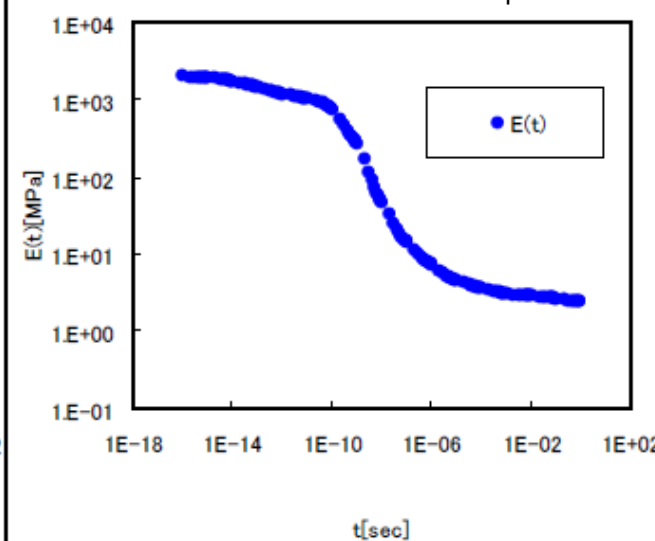
Prony series

$$G(t) = G^\infty + \sum_{n=1}^N G^n \exp\left(-\frac{t}{\lambda_d^n}\right)$$

Actual measurement along with fitted curve

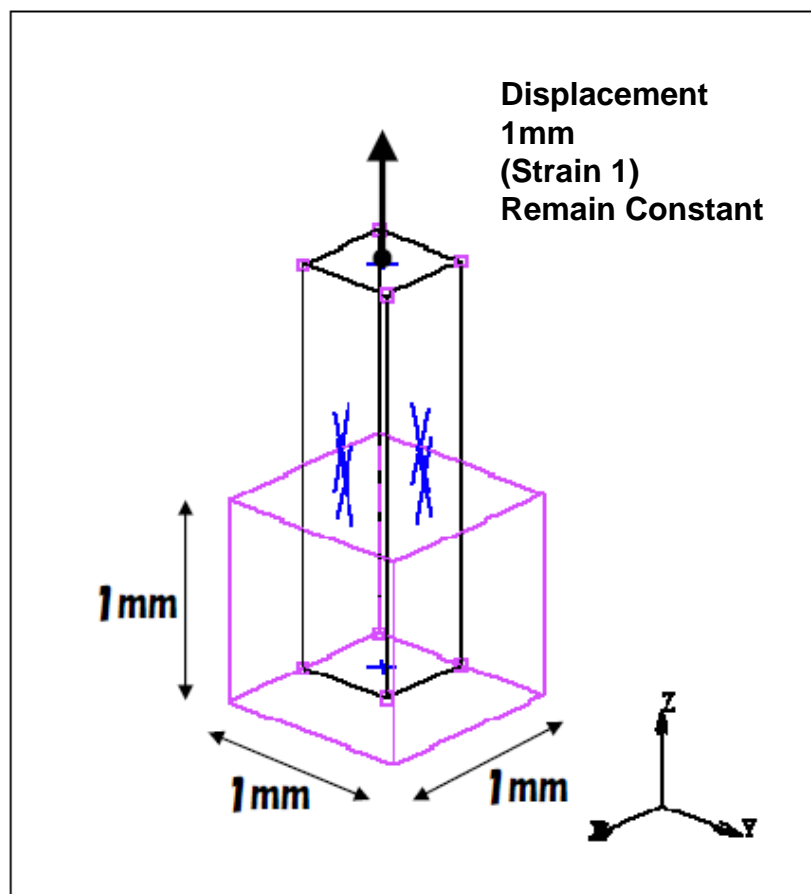


Stress-relaxation curve with identified parameters

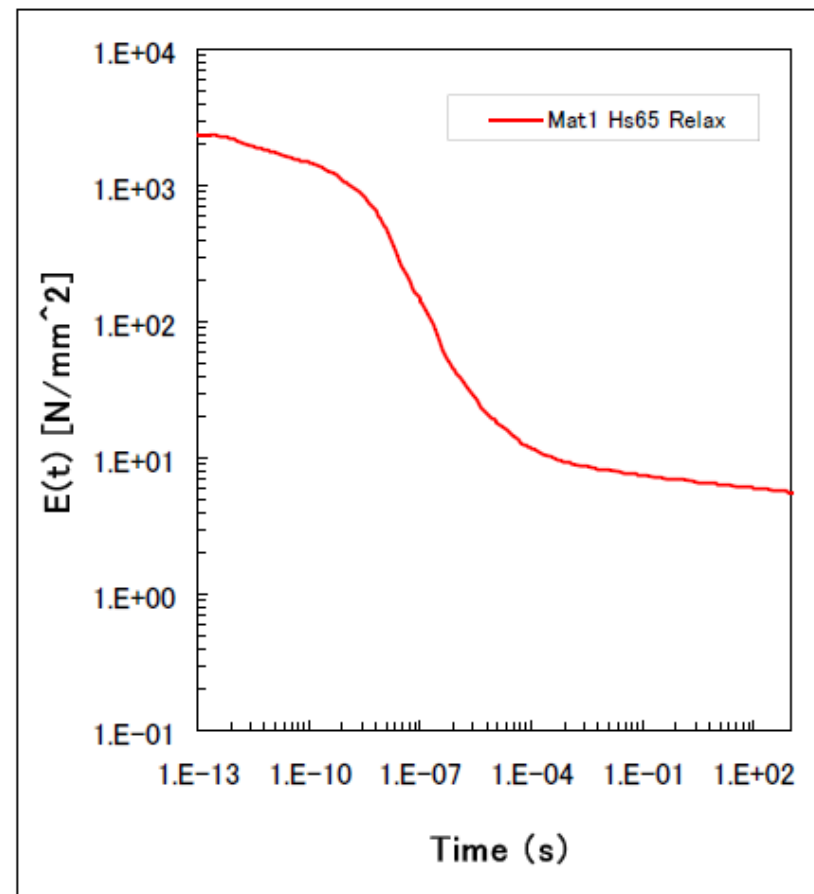


Stress-relaxation analysis (mat1_hs65_marc.dat) Hardness (65), Damping (Small)

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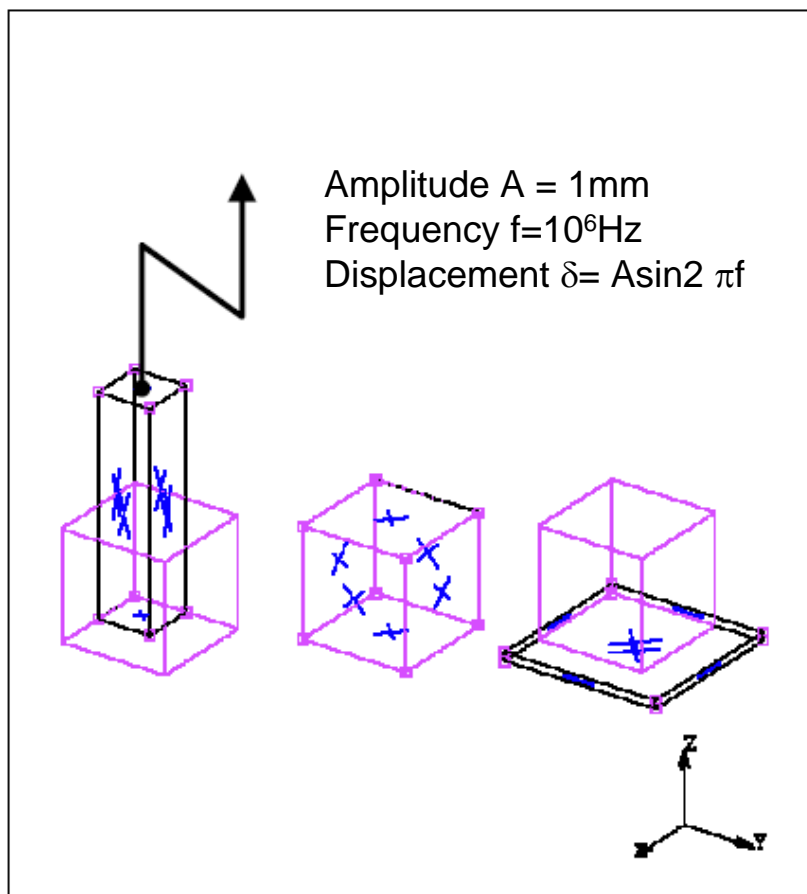
Analysis model



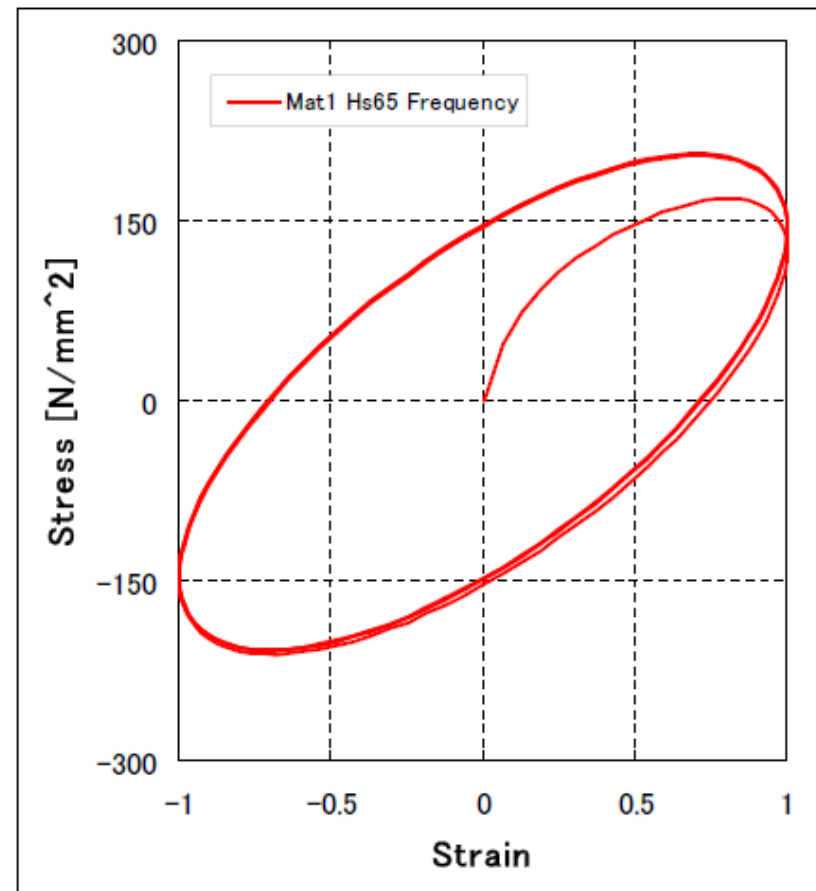
Stress-relaxation curve

Harmonic Vibration Analysis (mat1_hs65_freq_marc.dat) Hardness (65), Damping (Small)

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Analysis model



1000Hz hysteresis curve