

Identification for Mooney model: Hardness (65), Damping (Small), V=2

ADINA

Mooney model

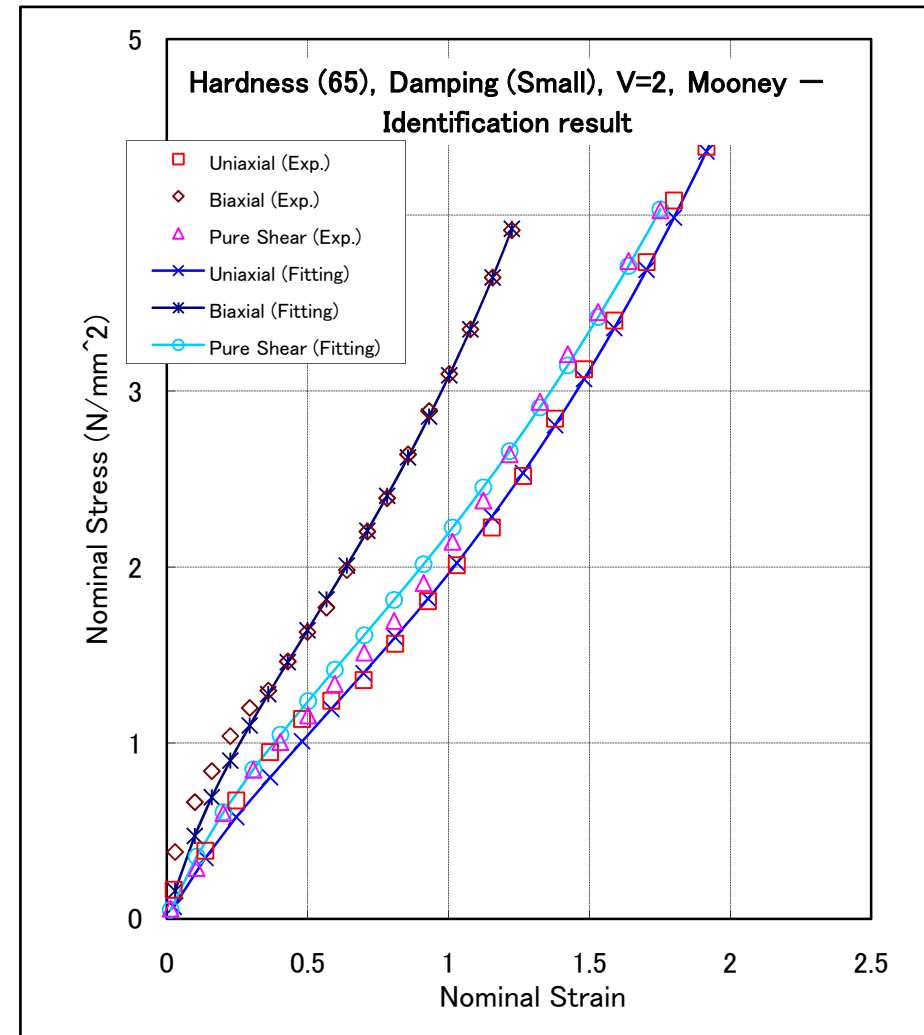
$$W = \sum_{m=1}^N \sum_{n=1}^N C_{mn} (I_1 - 3)^m (I_2 - 3)^n$$

Rate of Loading in Tension Test(s)

2 mm/s

Coefficient

Coefficient	
C10 (C1)	0.437710745
C01 (C2)	0.042994156
C20 (C3)	0.029096118
C11 (C4)	-0.006909869
C02 (C5)	0.001029044
C30 (C6)	
C21 (C7)	
C12 (C8)	
C03 (C9)	
C40 (C10)	



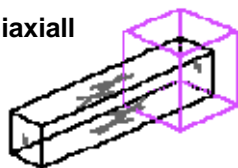
Identification result:
Stress-strain relationship

Analysis with Mooney model: Hardness (65), Damping (Small), V=2

ADINA

Input File: nsl_v1_uni_m.in (Uniaxial)
nsl_v1_bi_m.in (Biaxial)
nsl_v1_shear_m.in (Pure shear)

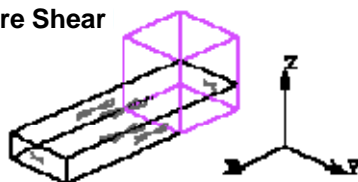
Uniaxial



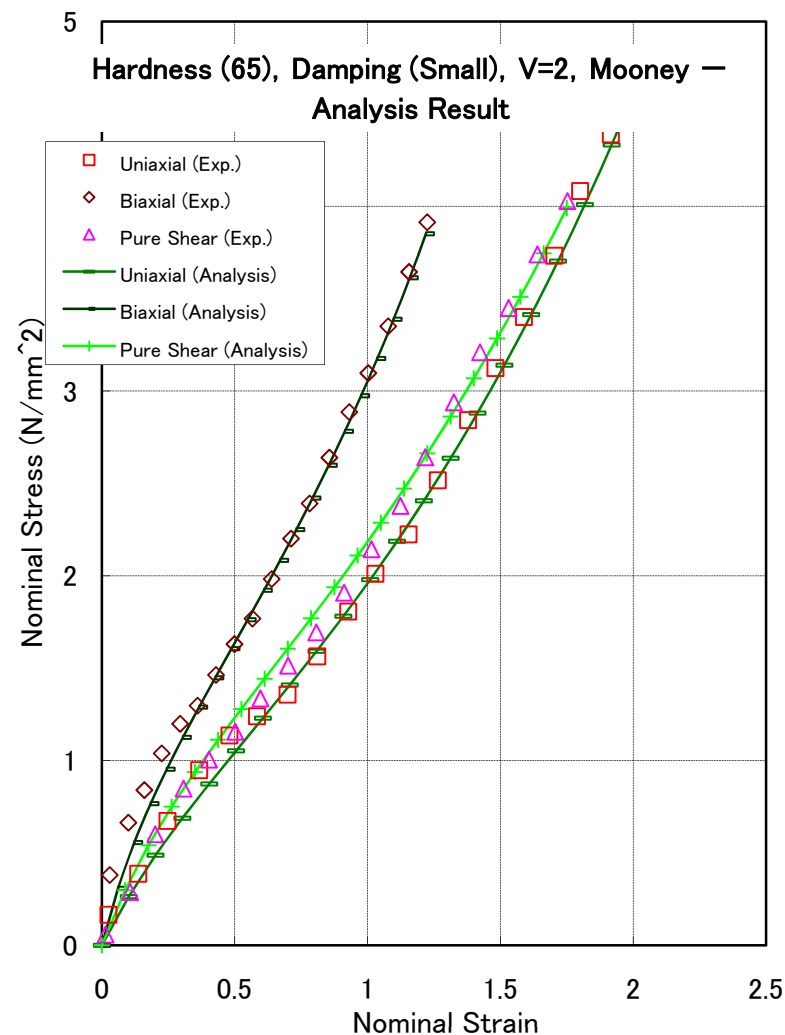
Biaxial



Pure Shear



Analysis model



Analysis Result:
Stress-strain relationship

Identification for Mooney model: Hardness (65) Damping (Small), V=20

ADINA

Mooney model

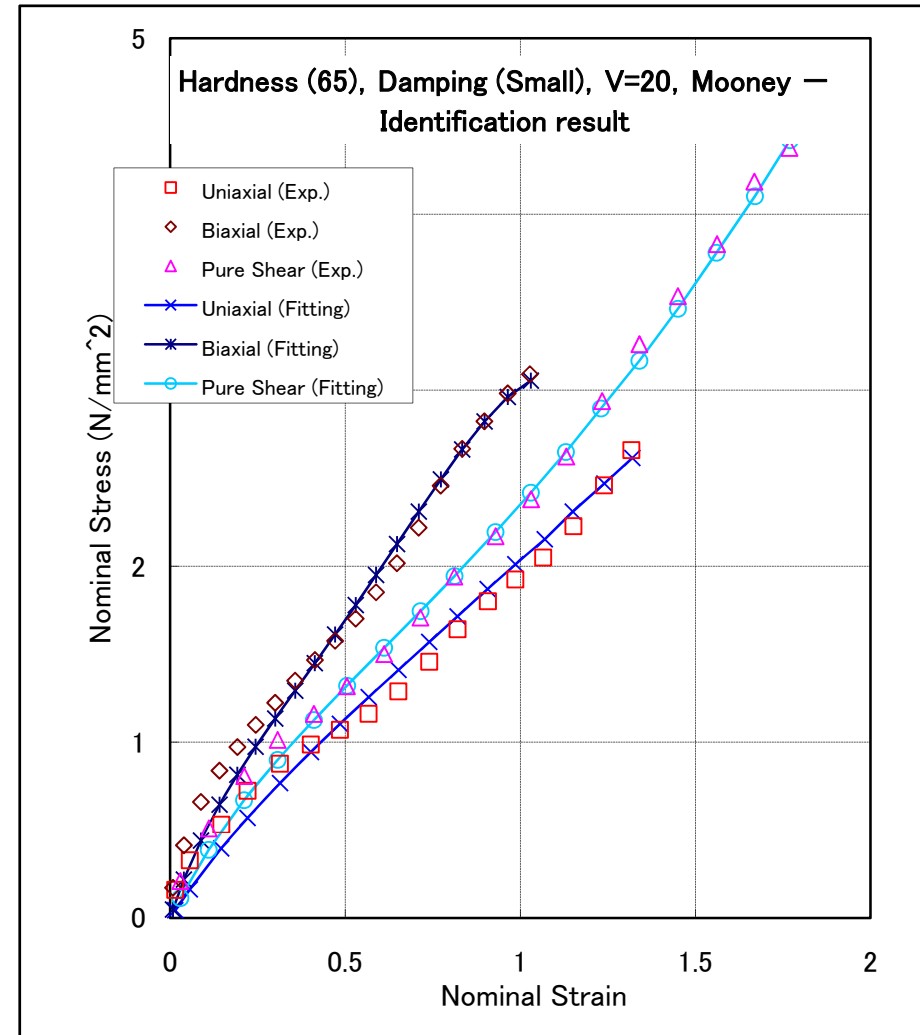
$$W = \sum_{m=1}^N \sum_{n=1}^N C_{mn} (I_1 - 3)^m (I_2 - 3)^n$$

Rate of Loading in Tension Test(s)

20 mm/s

Coefficient

Coefficient	
C10 (C1)	0.519531074
C01 (C2)	-0.011550673
C20 (C3)	0.000580658
C11 (C4)	0.0342009
C02 (C5)	-0.007782623
C30 (C6)	
C21 (C7)	
C12 (C8)	
C03 (C9)	
C40 (C10)	



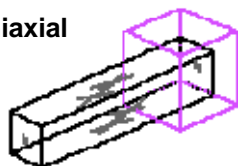
Identification result:
Stress-strain relationship

Analysis with Mooney model: Hardness (65), Damping (Small), V=20

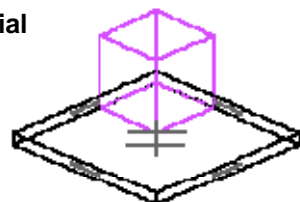
ADINA

Input File: nsl_v10_bi_m.in (Uniaxial)
nsl_v10_uni_m.in (Biaxial)
nsl_v10_shear_m.in (Pure Shear)

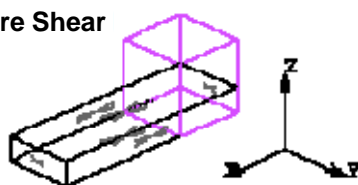
Uniaxial



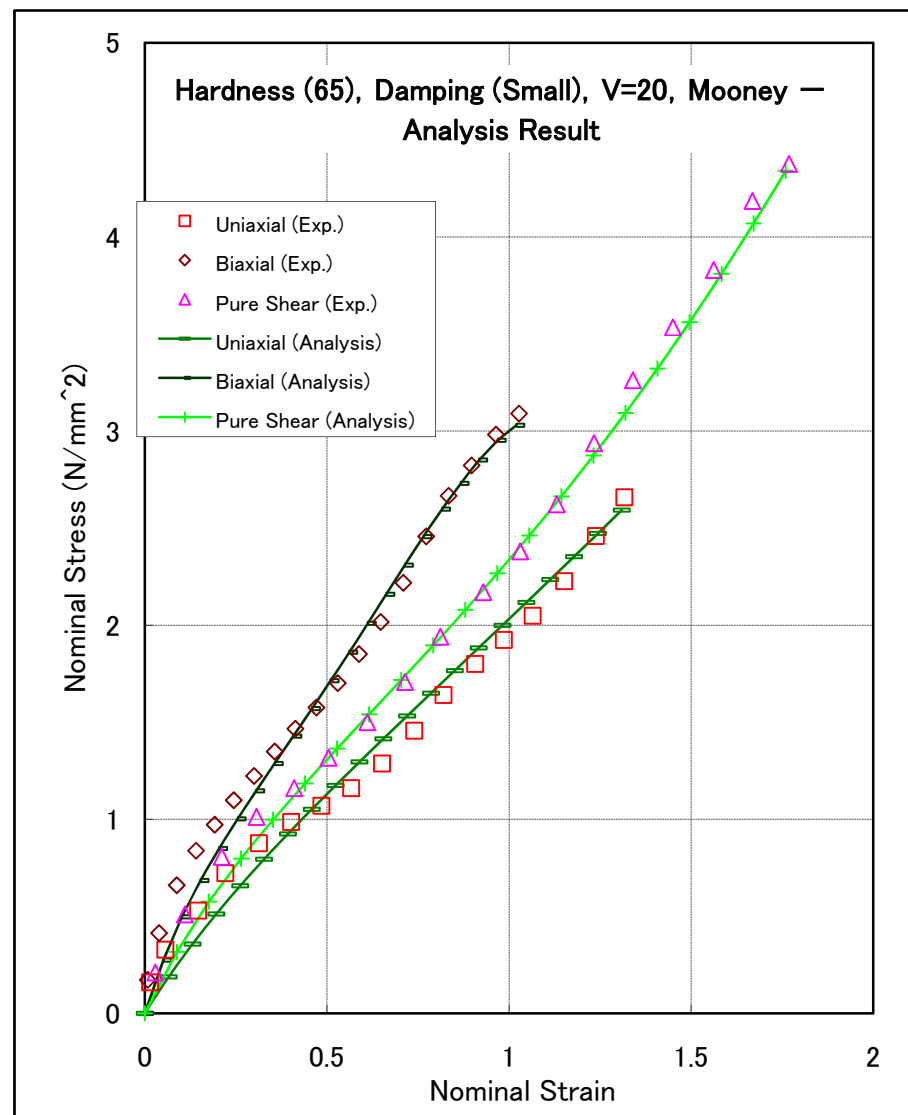
Biaxial



Pure Shear



Analysis model



Analysis Result:
Stress-strain relationship

Identification for Ogden model: Hardness (65), Damping (Small), V=2

ADINA

Ogden model

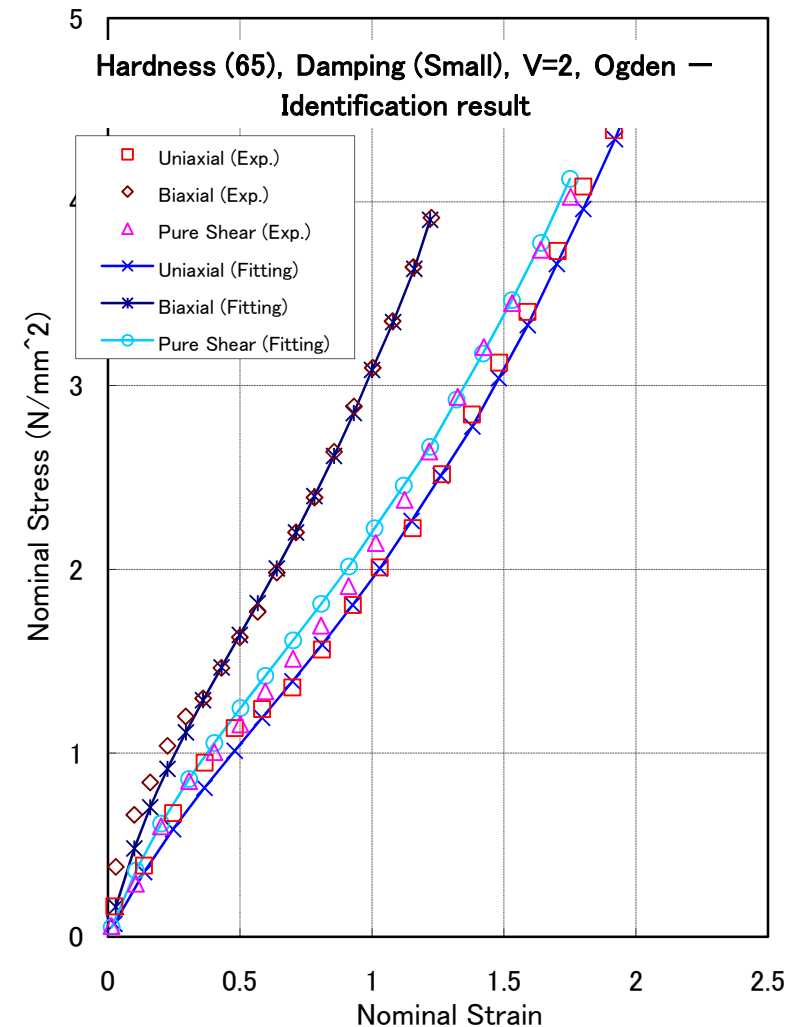
$$W = \sum_{n=1}^N \frac{\mu_n}{\alpha_n} \left[(\lambda_1^{\alpha_n} + \lambda_2^{\alpha_n} + \lambda_3^{\alpha_n}) - 3 \right]$$

Rate of Loading in Tension Test(s)

2 mm/s

Coefficient

Coefficient		
Order	μ	α
1	-0.126336343	-2
2	0.816873499	1
3	0.200249088	2
4	0.121534245	4



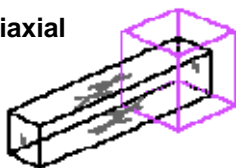
Identification result:
Stress-strain relationship

Analysis with Ogden model: Hardness (65), Damping (Small), V=2

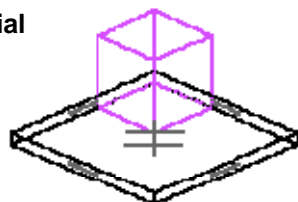
ADINA

Input File: nsl_v1_uni_og.in (Uniaxial)
nsl_v1_bi_og.in (Biaxial)
nsl_v1_shear_og.in (Pure Shear)

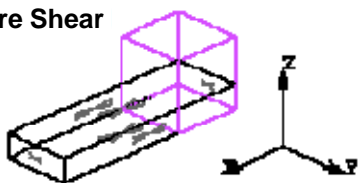
Uniaxial



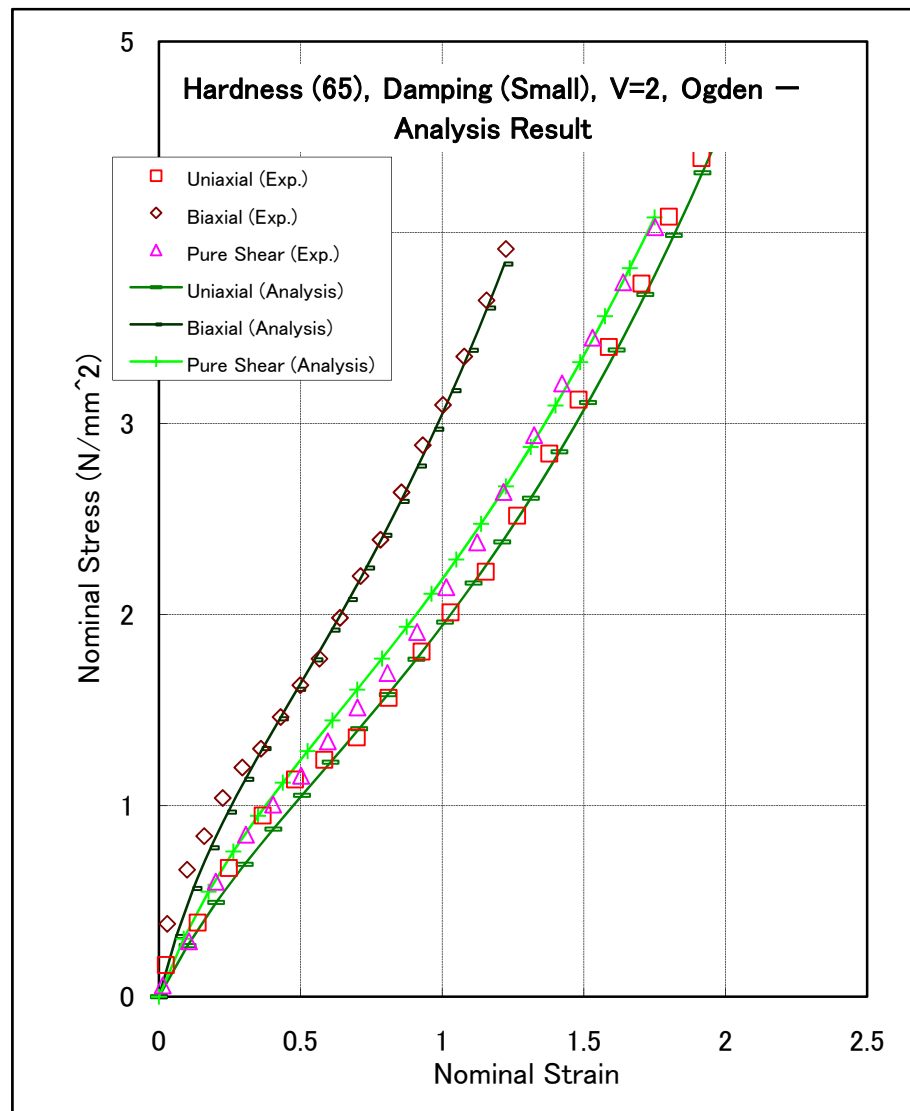
Biaxial



Pure Shear



Analysis model



Analysis Result:
Stress-strain relationship

Identification for Ogden model: Hardness (65), Damping (Small), V=20

ADINA

Ogden model

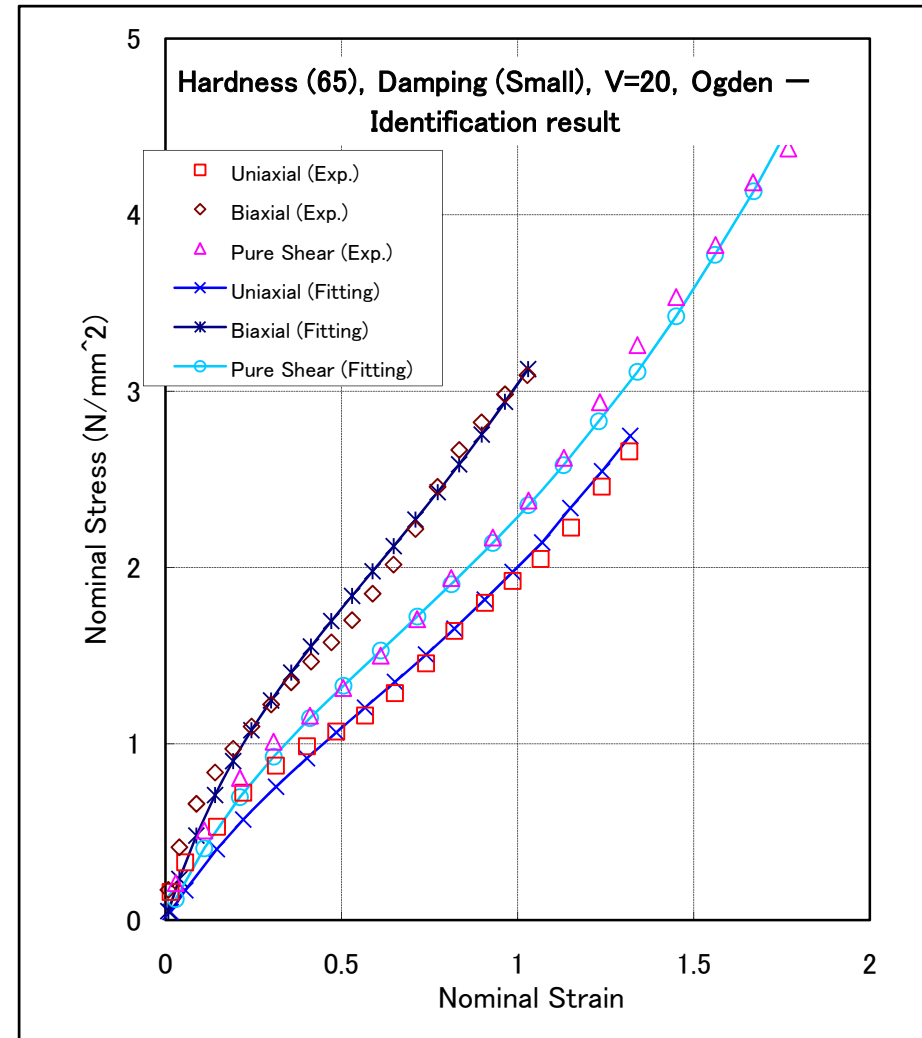
$$W = \sum_{n=1}^N \frac{\mu_n}{\alpha_n} \left[(\lambda_1^{\alpha_n} + \lambda_2^{\alpha_n} + \lambda_3^{\alpha_n}) - 3 \right]$$

Rate of Loading in Tension Test(s)

20 mm/s

Coefficient

Coefficient		
Order	μ	α
1	-0.081760245	-2
2	2.586318331	1
3	-0.666071358	2
4	0.181052561	4



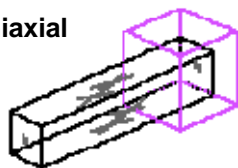
Identification result:
Stress-strain relationship

Analysis with Ogden model: Hardness (65), Damping (Small), V=20

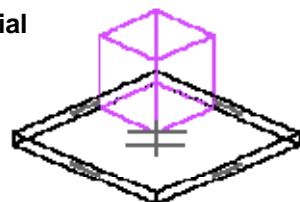
ADINA

Input File: nsl_v10_uni_og.in (Uniaxial)
nsl_v10_uni_bi_og.in (Biaxial)
nsl_v10_uni_shear_og.in (Pure Shear)

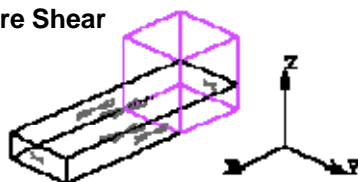
Uniaxial



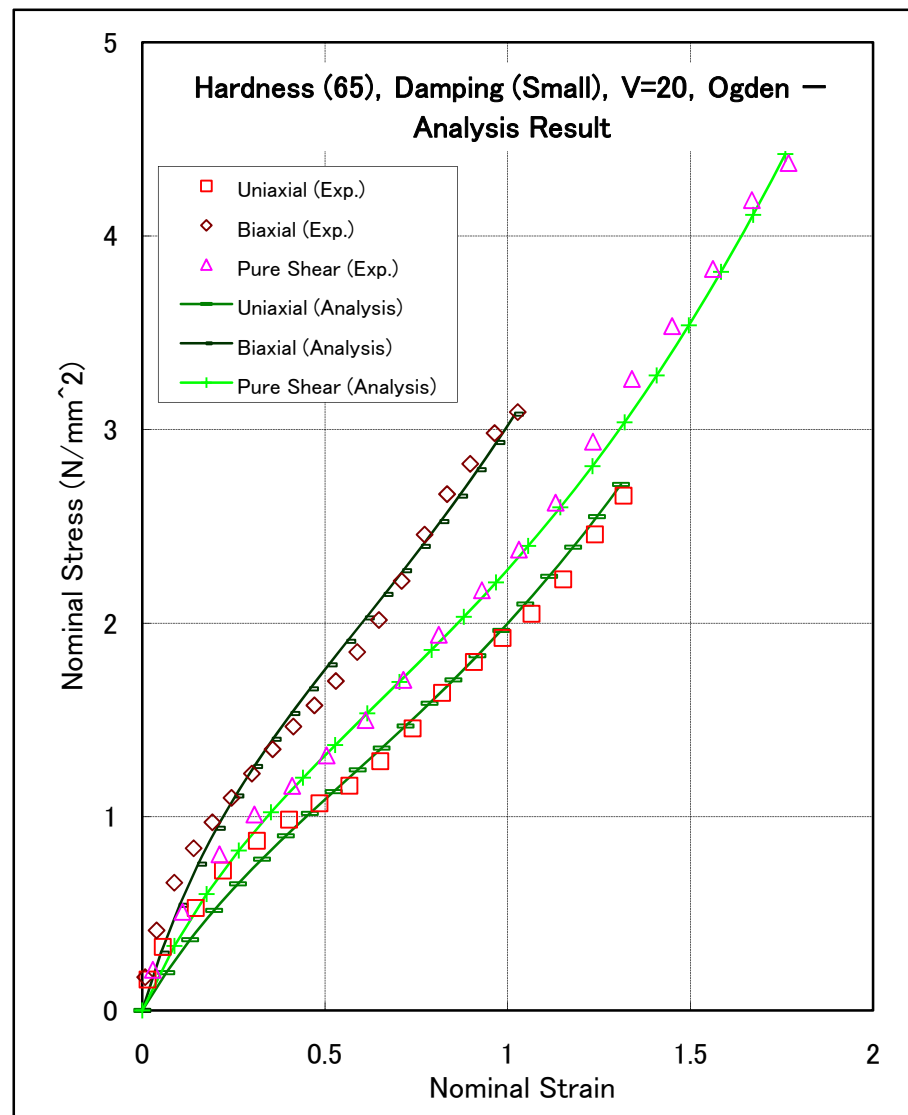
Biaxial



Pure Shear



Analysis model



**Analysis Result:
Stress-strain relationship**