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Title: LX-07 Quasi-Static Compression Tests

Author(s): Thompson, Darla Graff
DeLuca, Racci

Intended for: Report

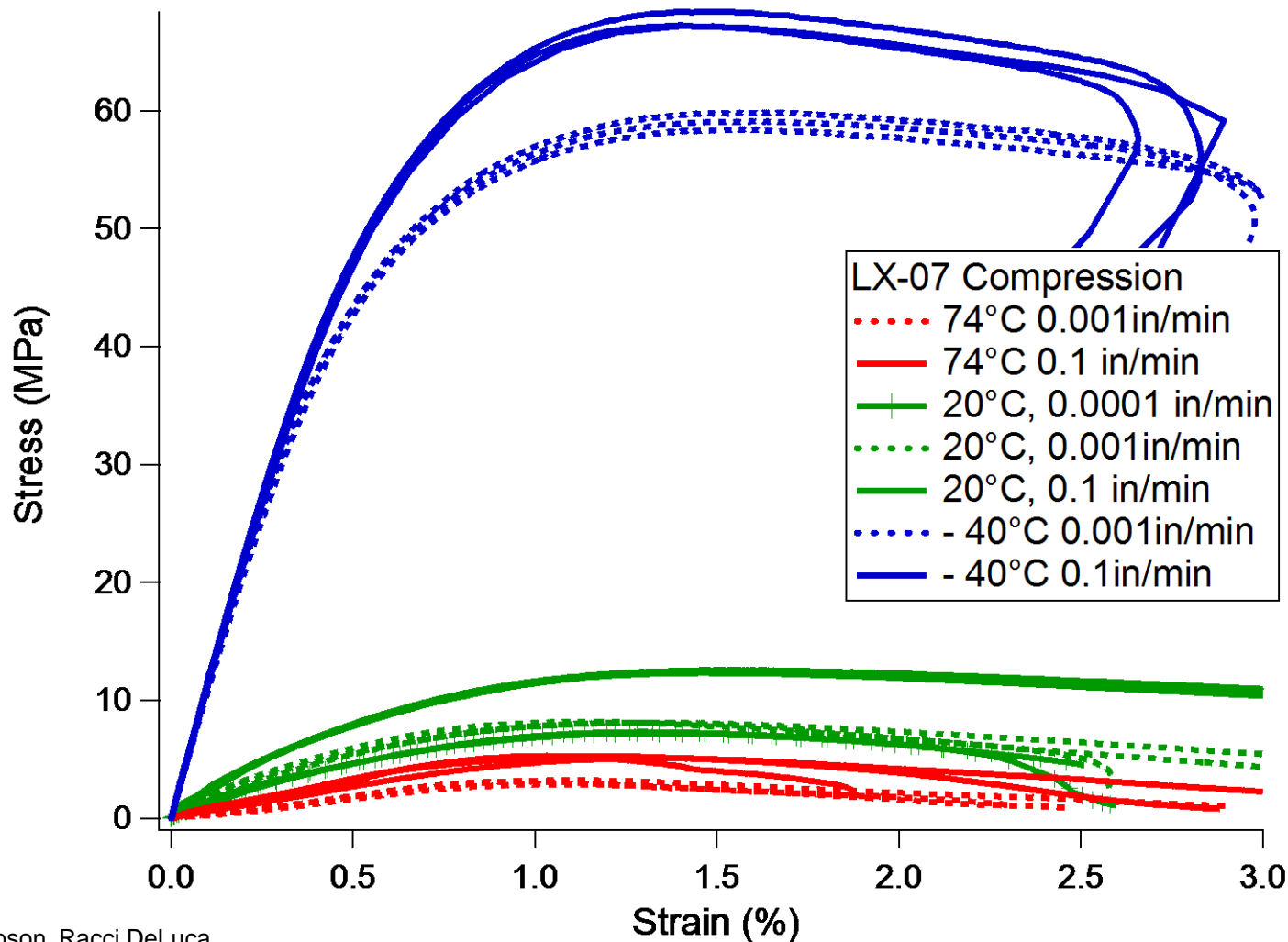
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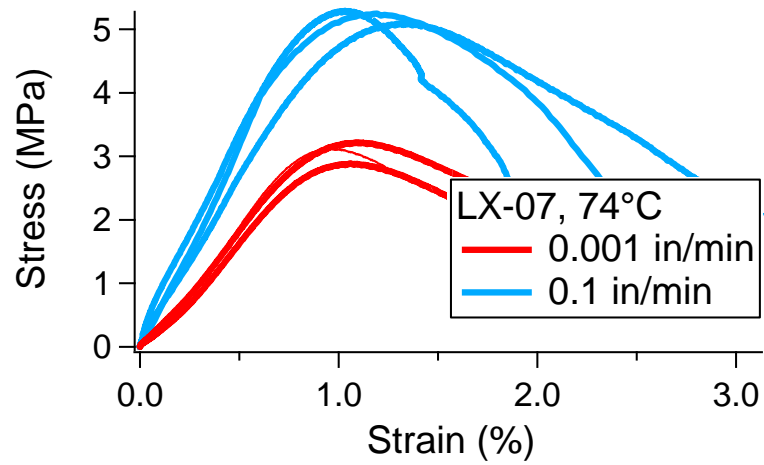
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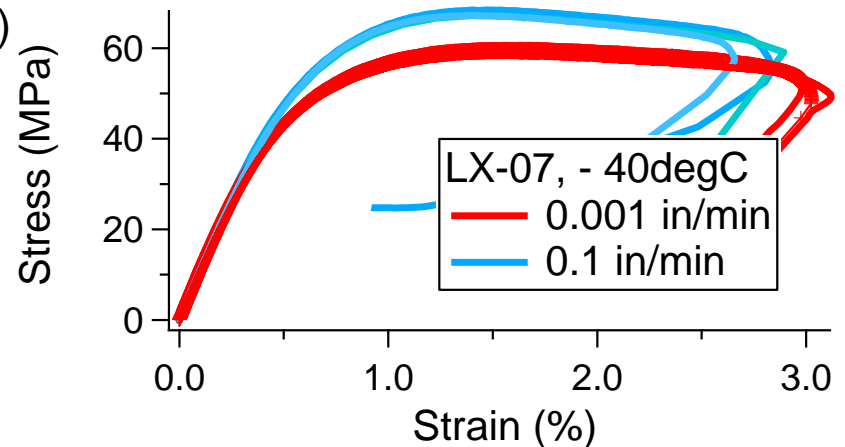
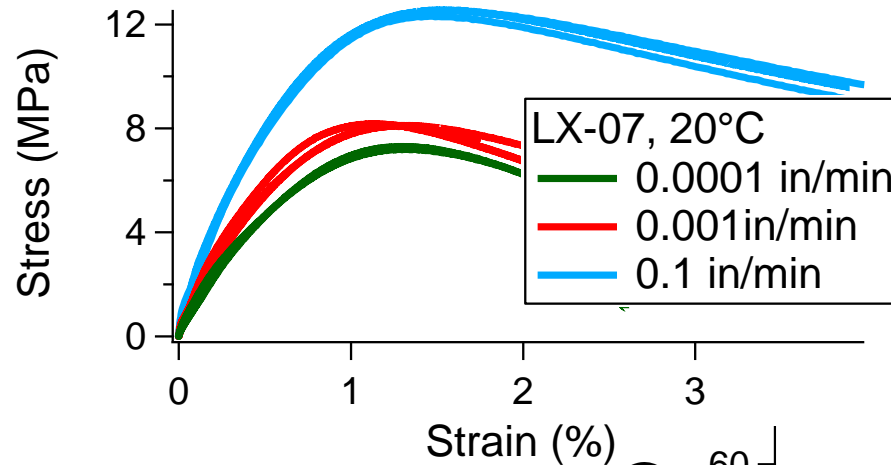
LX-07 Quasi-Static Compression Tests
Billet-Pressed, Machined Specimens
All data (strain rates and temperatures);

Viton A, $T_g = -27^\circ\text{C}$





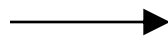
Data at each temperature showing strain rate effect (note different axis scaling);



LX-07, Pressed Cylindrical Billet, Machined Compression Cylinders, FY14
 Darla Graff Thompson, Racci DeLuca, WX-7
 September 2014
 length = 1.0 inch, diameter = 0.5 inch

Temp (°C)	Crosshead (in/min), Strain Rate (s⁻¹)	Filename	Ultimate Stress (MPa)	Strain at Ultimate Stress (%)	Modulus at 25% Ultimate Stress (MPa/%)	Density (g/cm ³)
74	0.001 1.67e-5	072914a	2.891	1.055	3.527	1.8535
		080414a	3.118	0.961	3.497	1.8545
		080514c	3.222	1.091	3.496	1.8540
	0.1 1.67e-3	073014a	5.090	1.352	4.896	1.8550
		073114b	5.292	1.032	5.339	1.8544
		080514a	5.247	1.195	5.949	1.8560
20	0.0001 1.67e-6	073014b	7.306	1.275	9.815	1.8562
		080614b	7.206	1.365	11.076	1.8546
	0.001 1.67e-5	072914b	8.095	1.231	13.559	1.8543
		073114c	8.177	1.117	16.589	1.8556
		080614a	8.114	1.337	13.816	1.8552
	0.1 1.67e-3	072914c	12.562	1.535	16.174	1.8557
		080514b	12.322	1.458	16.325	1.8549
		080514d	12.529	1.537	18.826	1.8540
-40	0.001 1.67e-5	081114a	59.131	1.596	103.17	1.8548
		081214a	59.858	1.697	105.97	1.8558
		081414a	58.419	1.570	99.08	1.8551
	0.1 1.67e-3	080714a	68.425	1.501	108.25	1.8564
		081114b	67.192	1.402	107.87	1.8550
		081314a	67.245	1.400	105.41	1.8549

UNSHIFTED Parameters



Time-Temperature Master Curves (equivalent test temp of 20°C) SHIFTED using 13.5°C/decade

