

Figure 19: Strain Gauge Accumulation

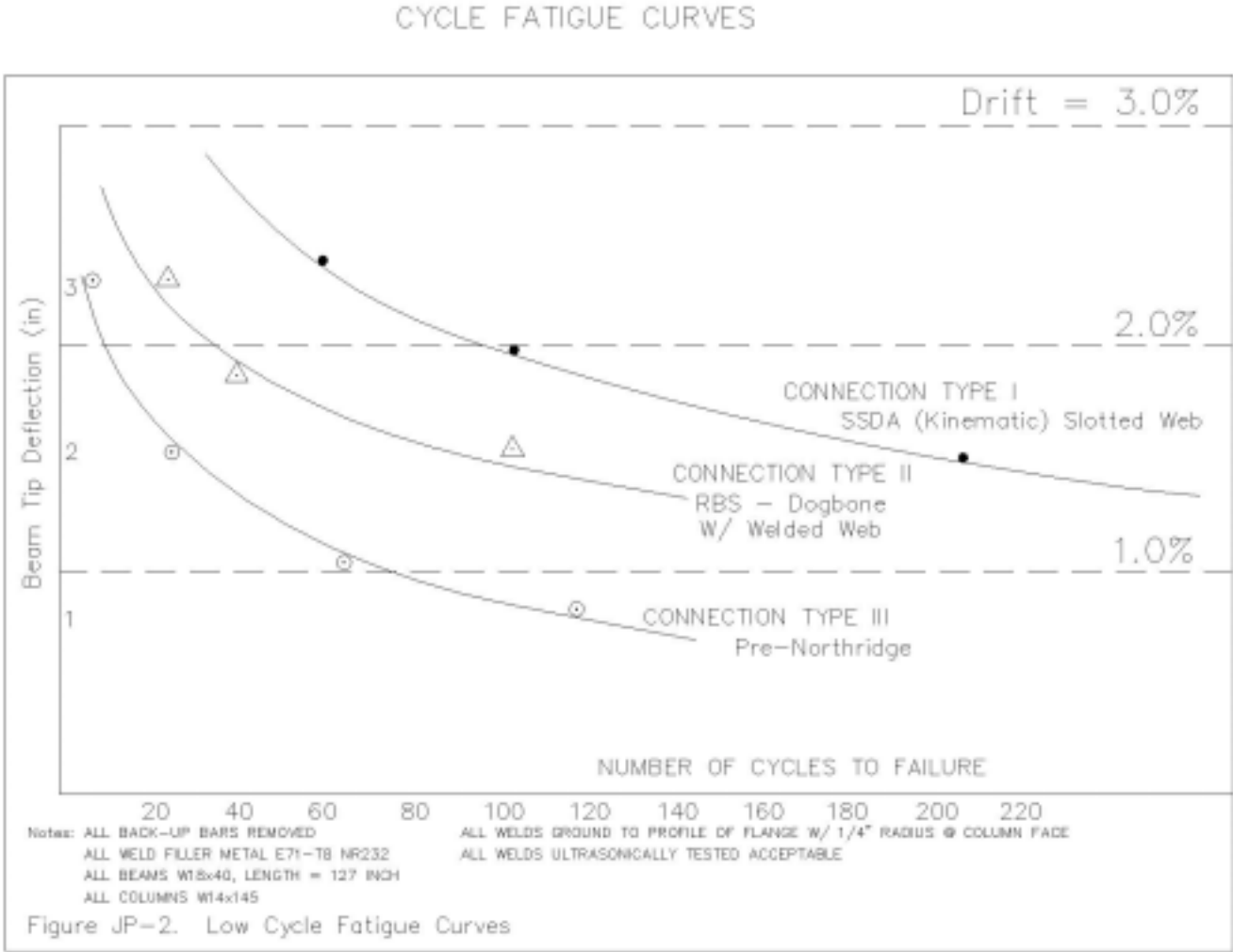


Figure 20: Low Cycle Fatigue Curves

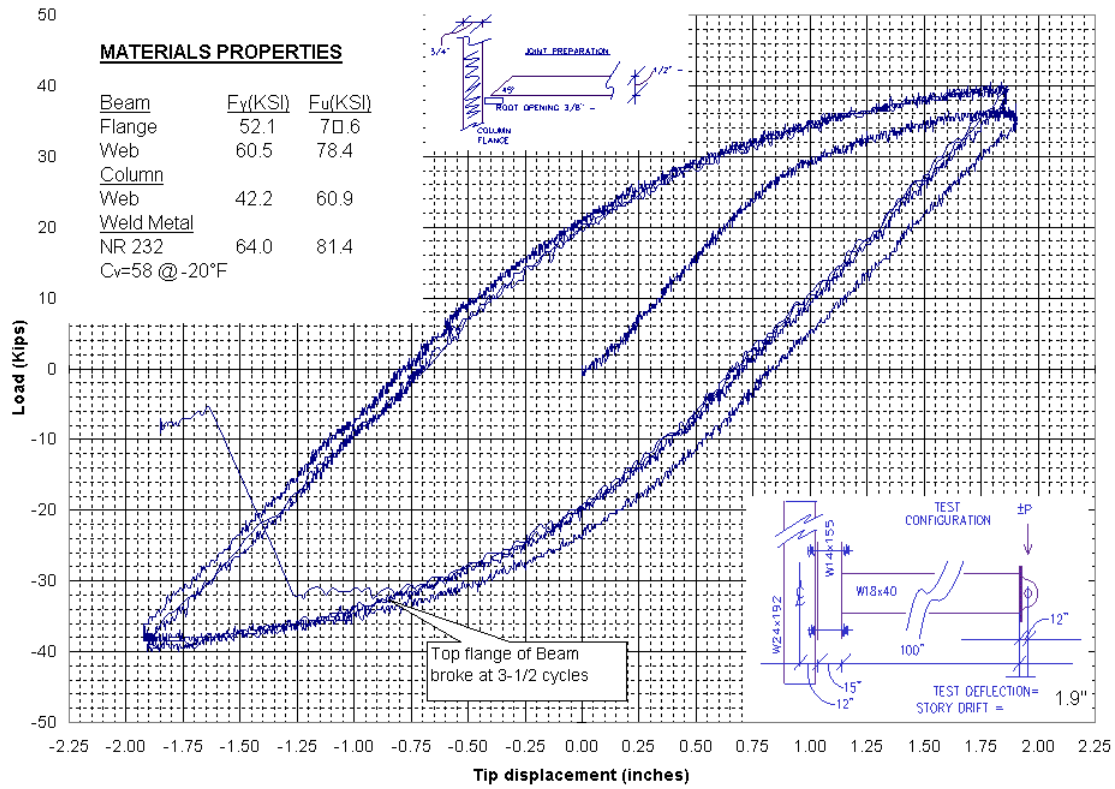


Figure 21: Pre-Northridge Cyclic Test #1 @ 1.9" - February 8, 2000

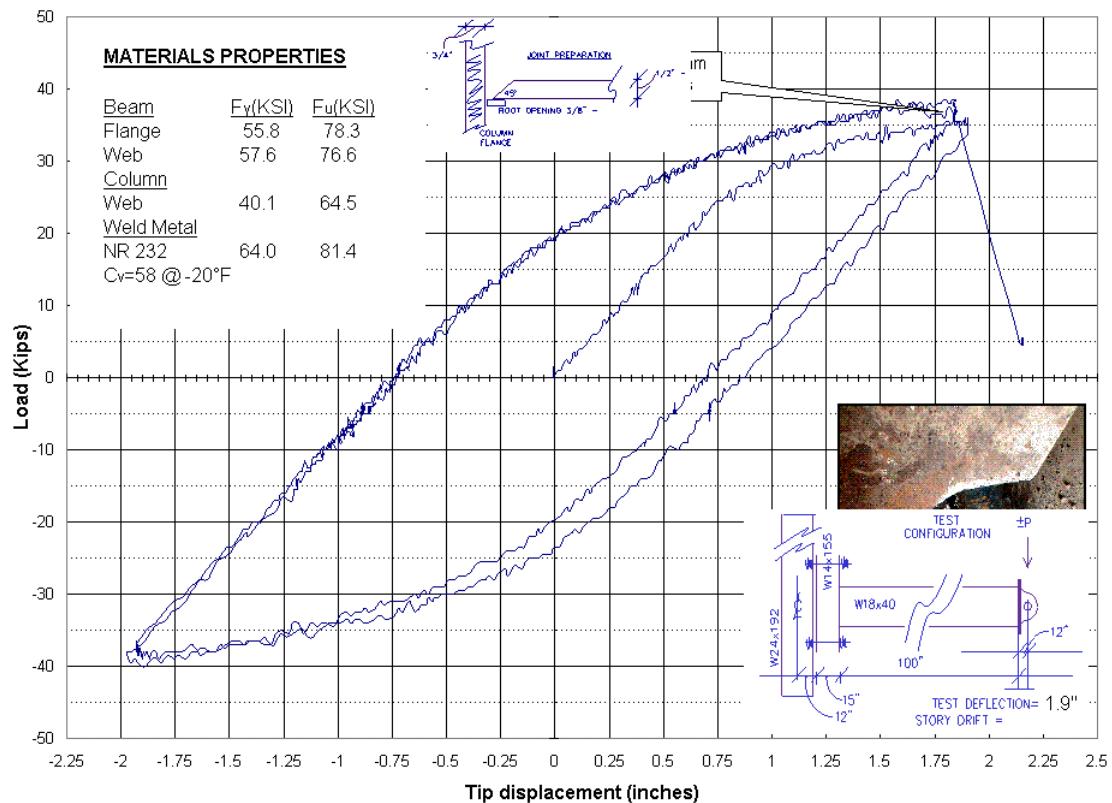


Figure 22: Pre-Northridge Cyclic Test #2 @ 1.9" - February 10, 2000

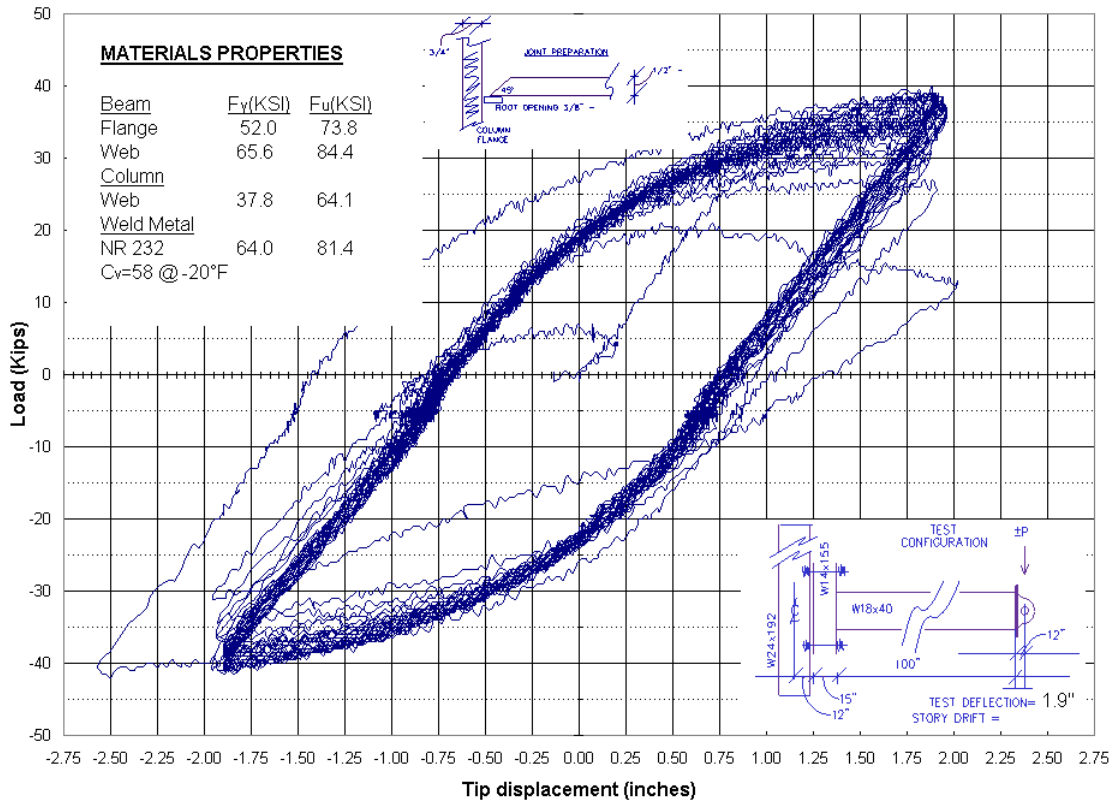


Figure 23: Pre-Northridge Cyclic Test #4 @ 1.9" - February 17, 2000

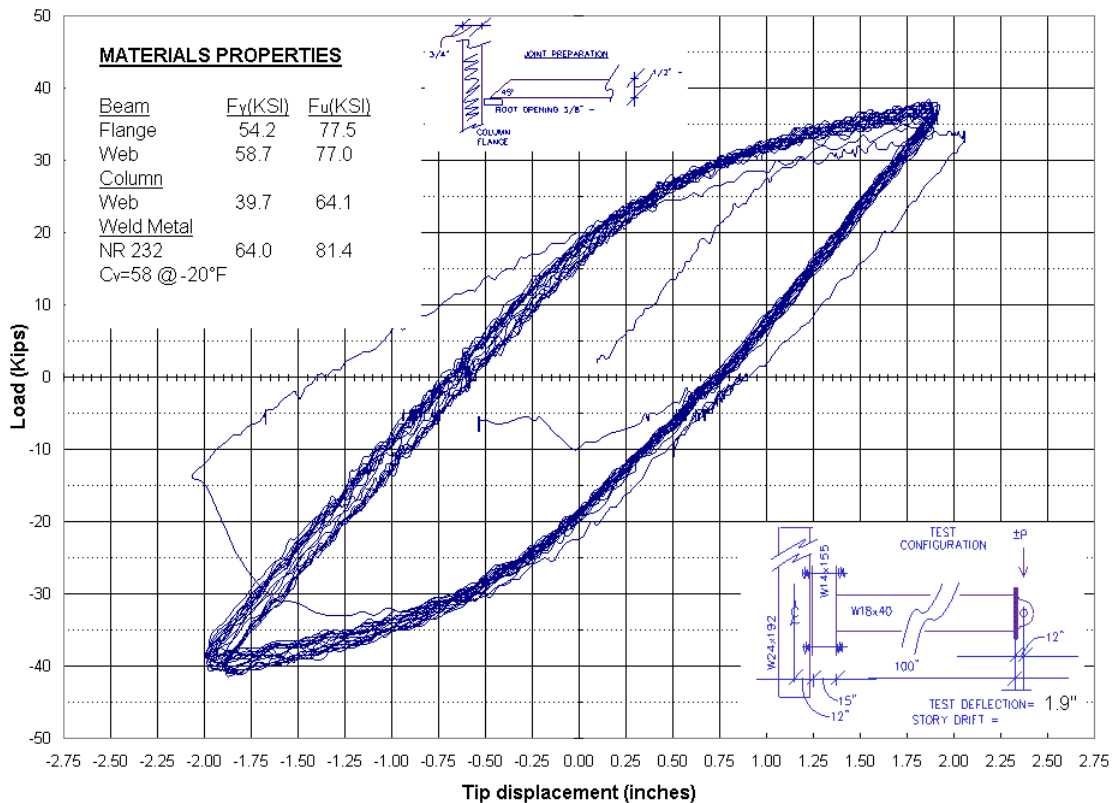


Figure 24: Pre-Northridge Cyclic Test #4 @ 1.9" - February 17, 2000

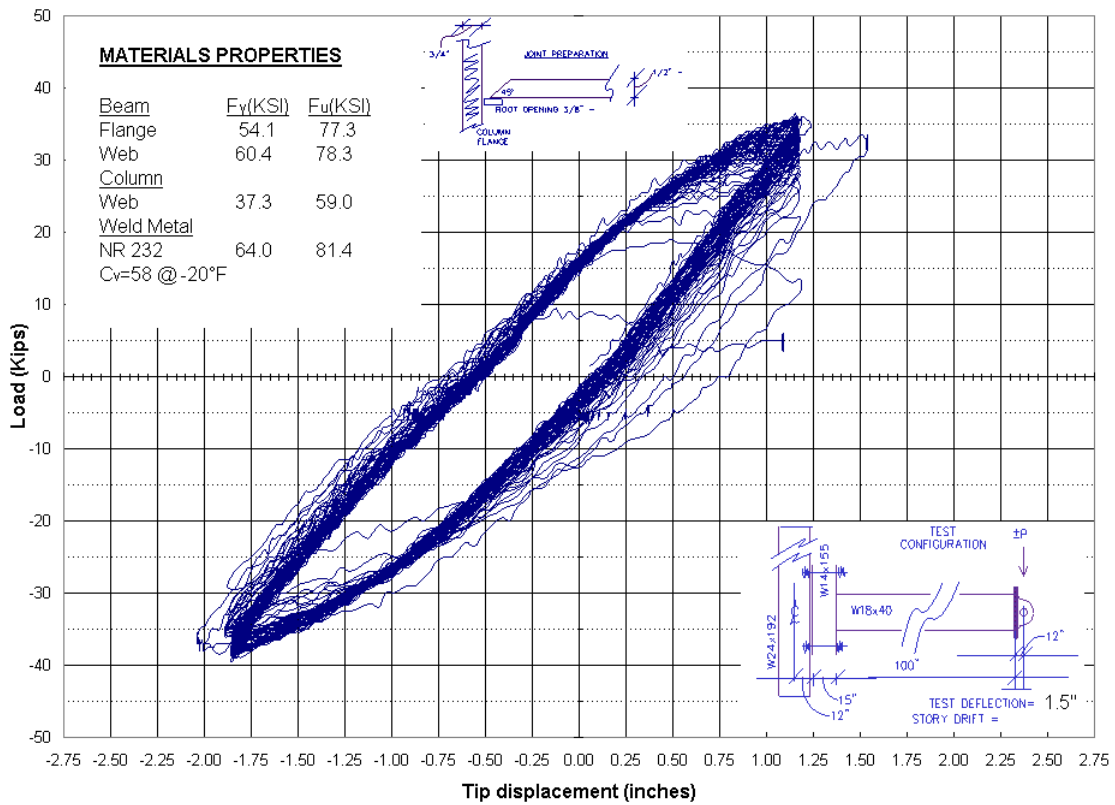


Figure 25: Pre-Northridge Cyclic Test #5 @ 1.5"

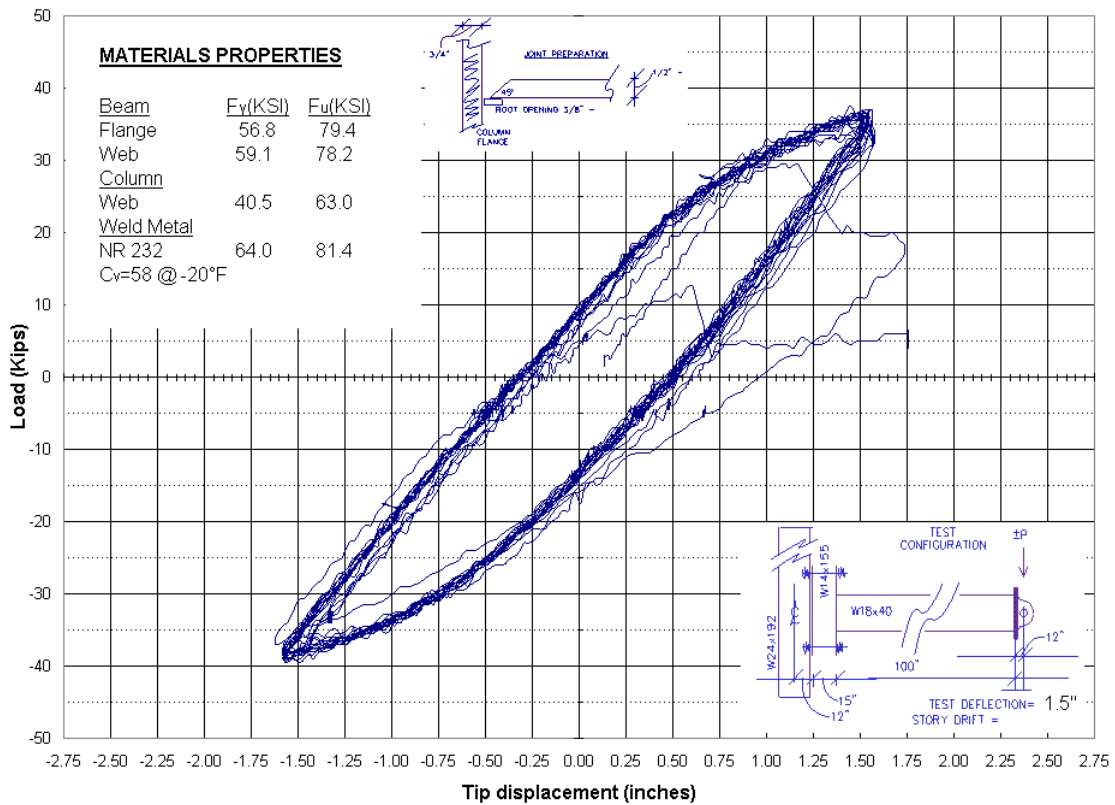


Figure 26: Pre-Northridge Cyclic Test #6 @ 1.5" – February 24, 2000

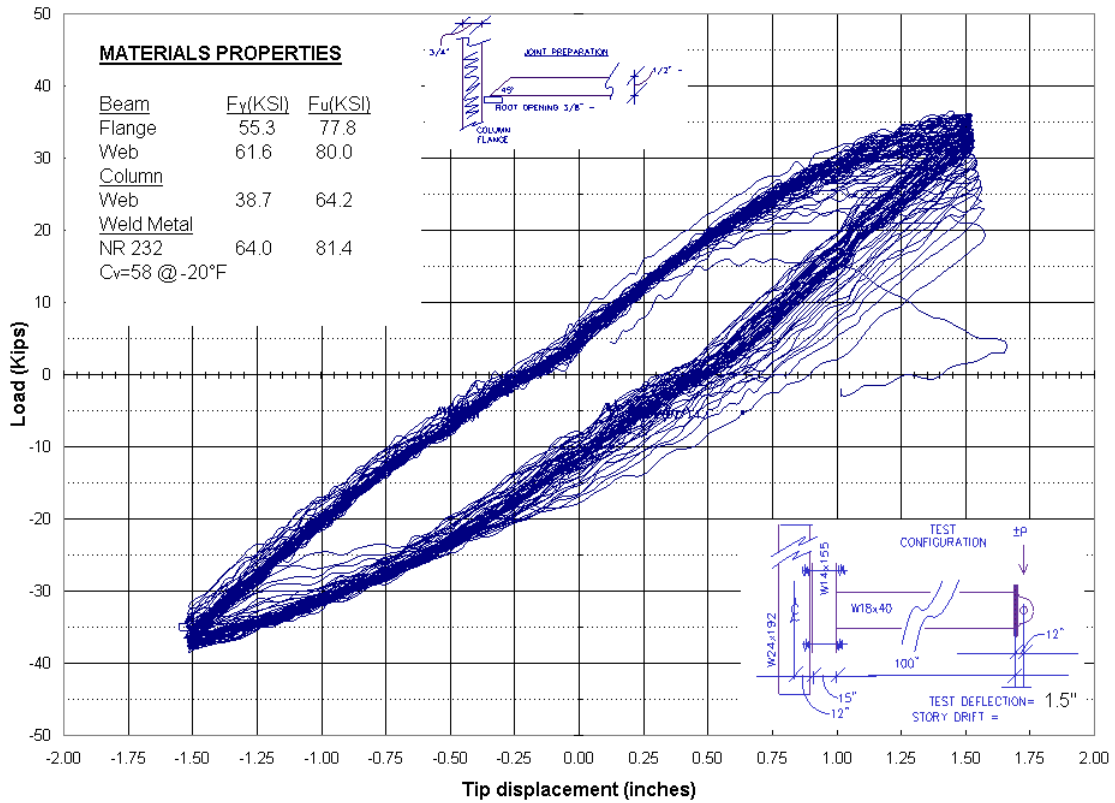


Figure 27: Pre-Northridge Cyclic Test #7 @ 1.5" – February 25, 2000

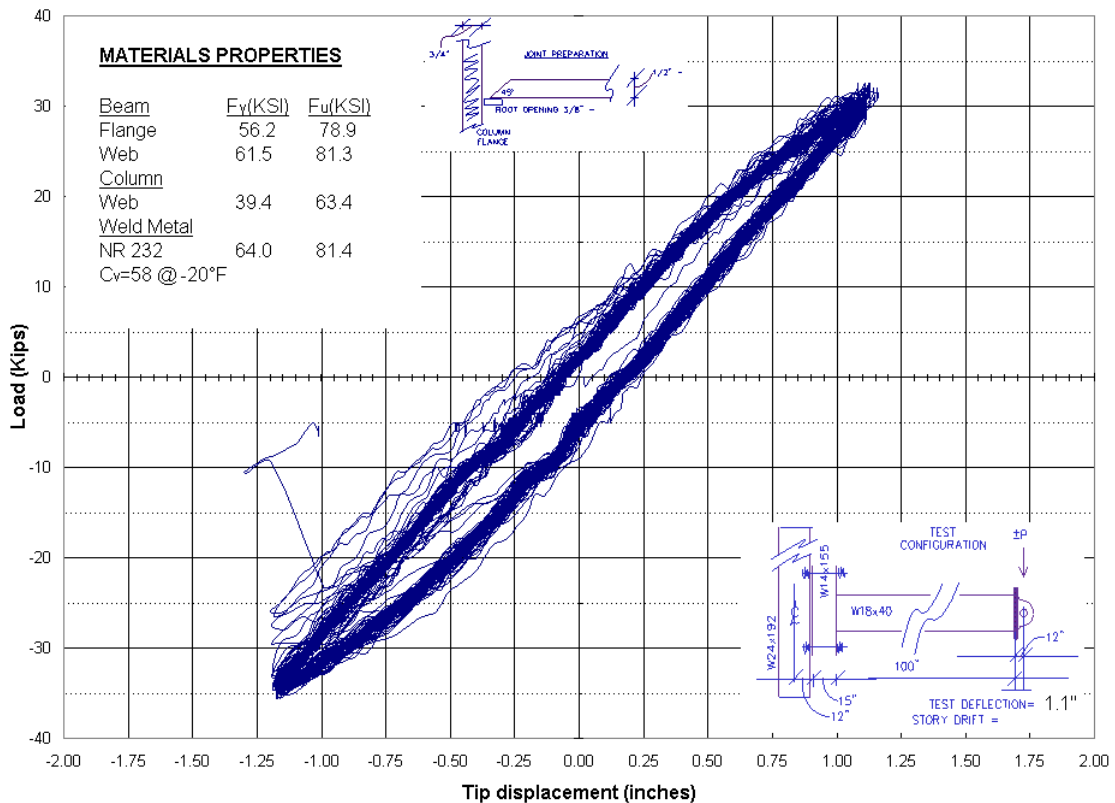


Figure 28: Pre-Northridge Cyclic Test #8 @ 1.1" – February 25, 2000

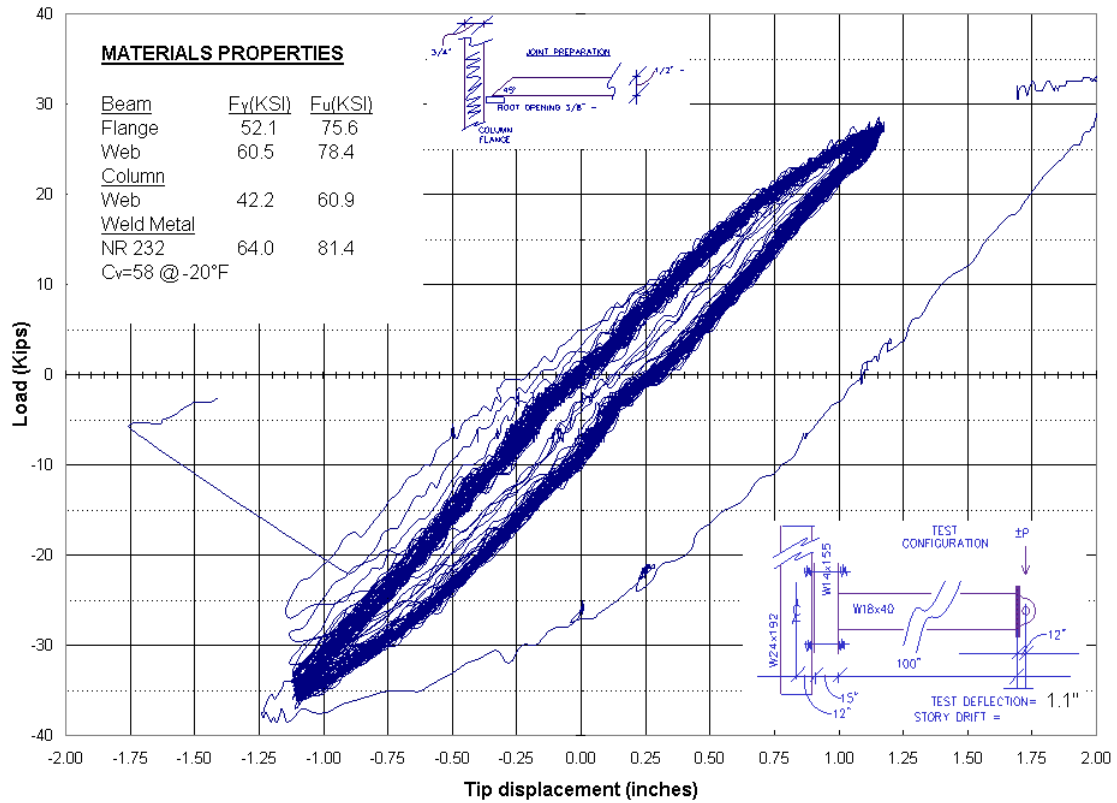


Figure 29: Pre-Northridge Cyclic Test #9 @ 1.1" – March 15, 2000

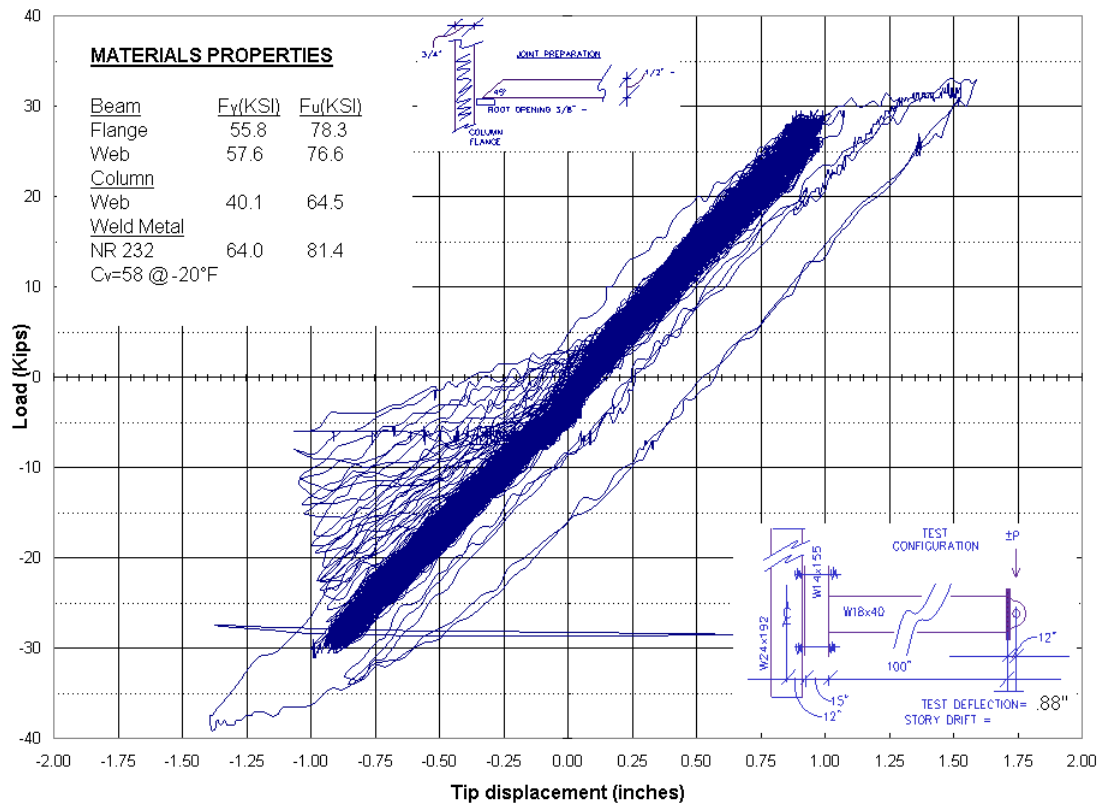


Figure 30: Pre-Northridge Cyclic Test #10 @ 0.88"

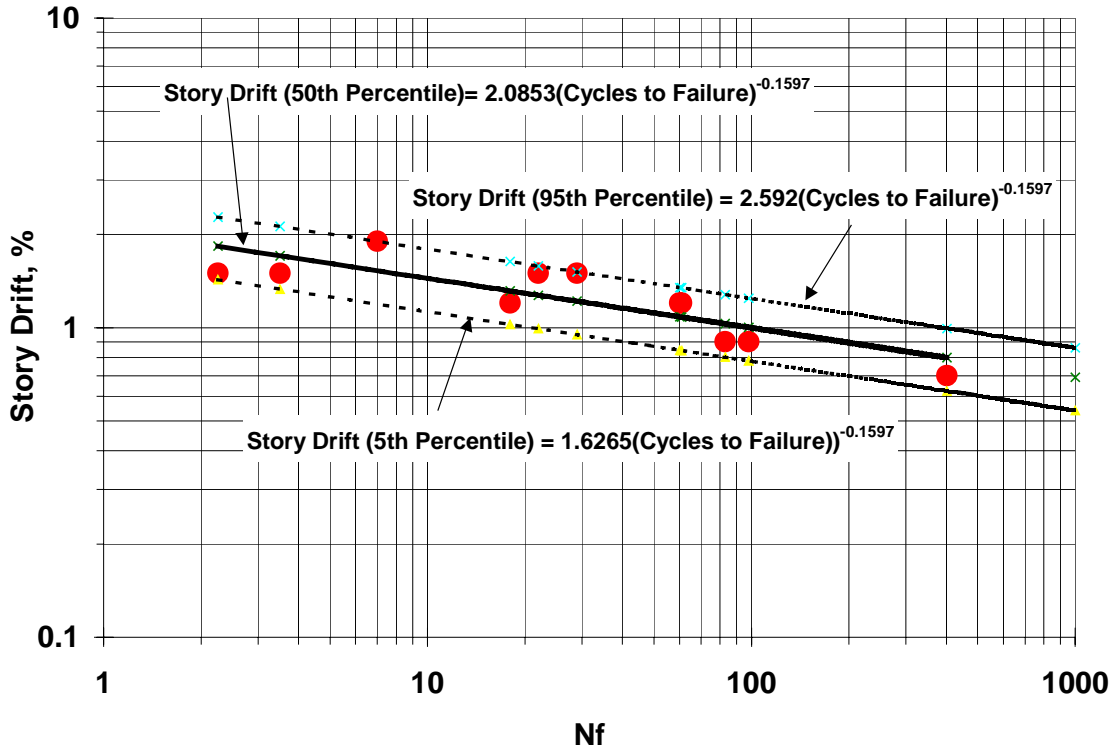


Figure 31: Low Cycle Fatigue Performance of W18x40 Beam-to-Column Connections Fabricated Using an AWS D1.1 TC-u4aGF Weld Joint (made with NR-232 FCAW wire and with the backing bar removed and a root fillet weld added)

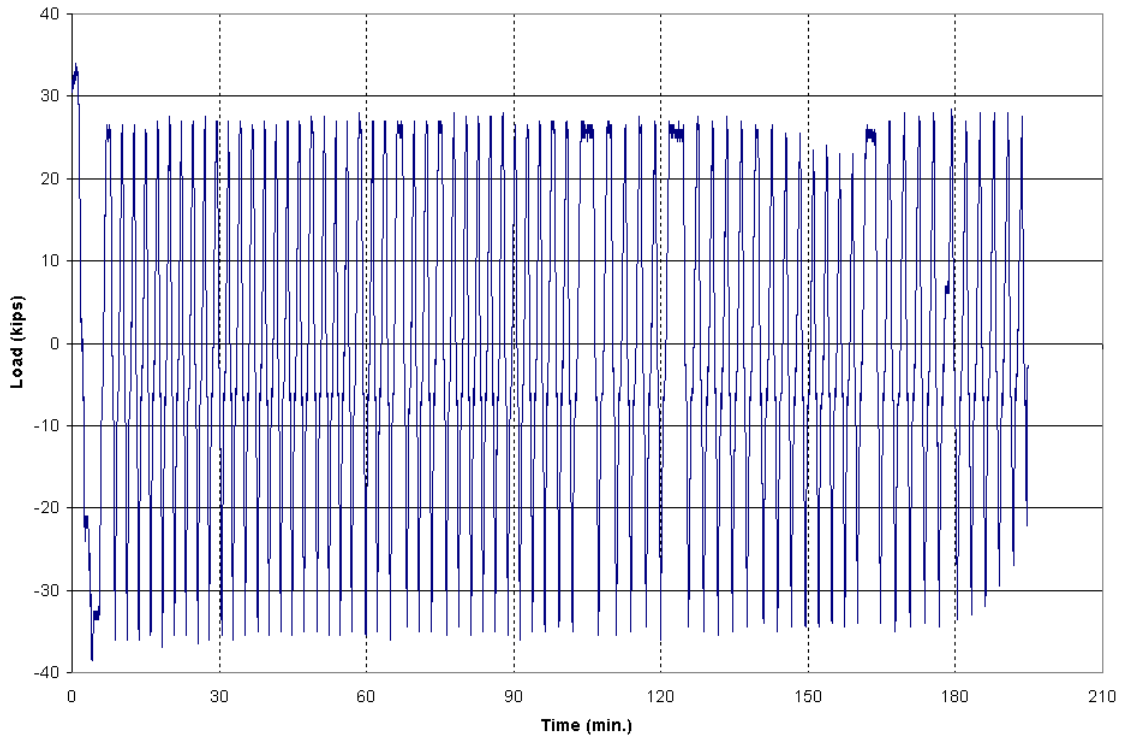


Figure 32: Pre-Northridge Cyclic Test # 9 @ 1.1” Load History – March 15, 2000

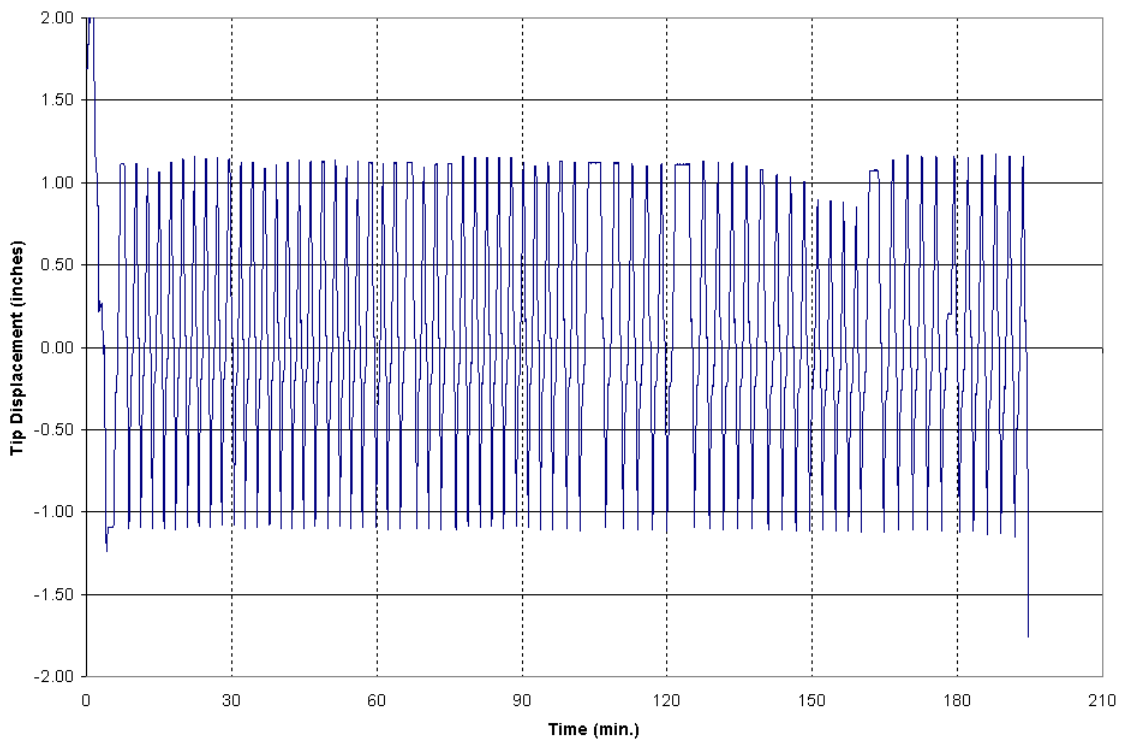


Figure 33: Pre-Northridge Cyclic Test #9 @ 1.1” Tip Displacement History – March 15, 2000