

Specimen A1:

O303053079: 3"x3" - 0.09" thk. / SB306: 3"x2 1/2" - 0.059" thk. / 0.136" thick, 3-Pin connector, B-0" Drop
(I_x , column = 1.15 [in⁴]; I_x , beam = 0.70 [in⁴])



Figure A1-1: Specimen Setup (before test)

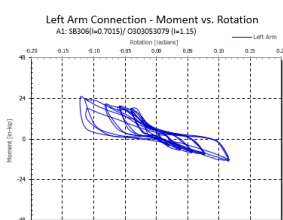


Figure A1-2a: Test Plot (LH)

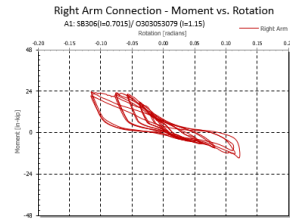


Figure A1-2b: Test Plot (RH)

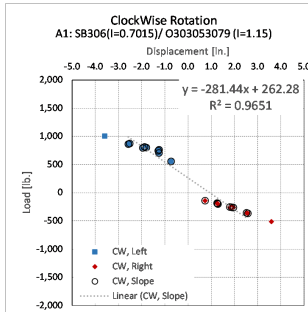


Figure A1-2c: Peak Loads in CW Cycle



Front (left oblique view)



Front (top view)



Front (right oblique view)



Rear (left oblique view)



Rear (top view)



Rear (right oblique view)

Figure A1-3b: Rear Views (after test)

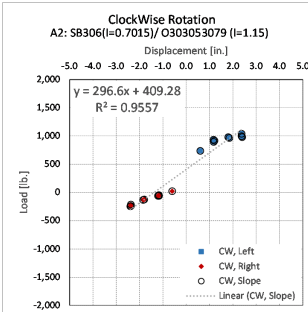


Figure A2-2c: Peak Loads in CW Cycle



Front (left oblique view)



Front (top view)



Front (right oblique view)



Rear (left oblique view)



Rear (top view)



Rear (right oblique view)

Figure A2-3b: Rear Views (after test)

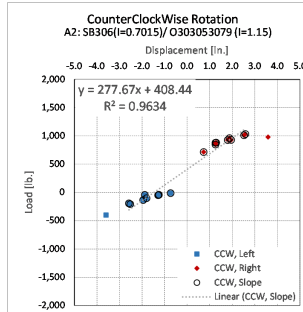


Figure A2-2d: Peak Loads in CCW Cycle

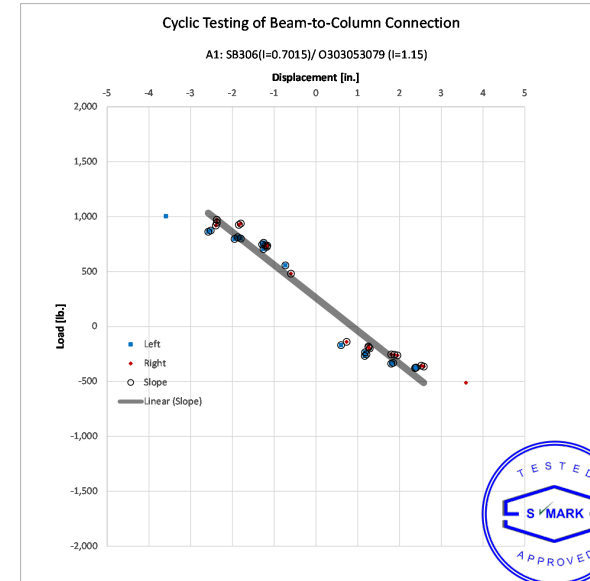


Figure A1-4: Resulting Data for Analysis (Slope = -318 [lb/in], CW; -281 [lb/in], CCW)

Spring Constant, $F = 180$ [k-in/rad]

$M_{\max, \text{cyclic}} = 19.1$ [k-in]

QC: MM 5/14/2025

**Specimen A2:**

O303053079: 3"x3" - 0.09" thk. / SB306: 3"x2 1/2" - 0.059" thk. / 0.136" thick, 3-Pin connector, B-0" Drop
(I_x , column = 1.15 [in⁴]; I_x , beam = 0.70 [in⁴])



Figure A2-1: Specimen Setup (before test)

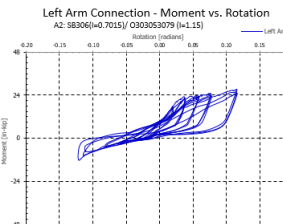


Figure A2-2a: Test Plot (LH)

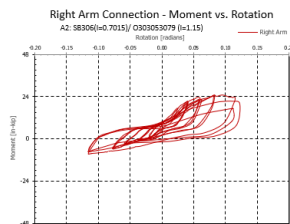


Figure A2-2b: Test Plot (RH)

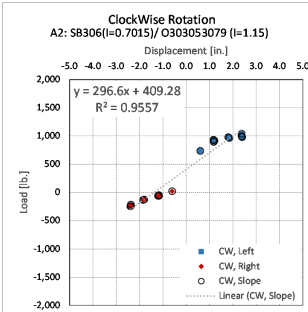


Figure A2-2c: Peak Loads in CW Cycle



Front (left oblique view)



Front (top view)



Front (right oblique view)



Rear (left oblique view)



Rear (top view)



Rear (right oblique view)

Figure A2-3b: Rear Views (after test)

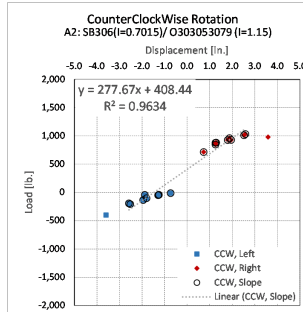


Figure A2-2d: Peak Loads in CCW Cycle

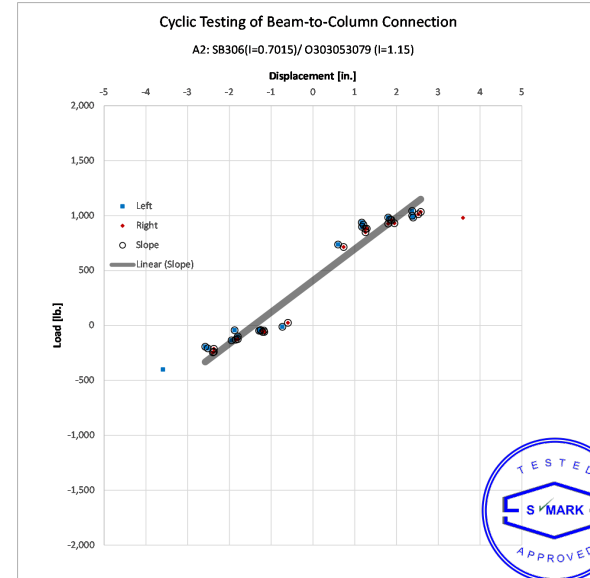


Figure A2-4: Resulting Data for Analysis (Slope = 278 [lb/in], CW; 297 [lb/in], CCW)

Spring Constant, $F = 170$ [k-in/rad]

$M_{\max, \text{cyclic}} = 18.2$ [k-in]

QC: MM 5/14/2025



Specimen B1:

O303053079: 3" x 3" - 0.09" thk. / SB406: 4"x2_1/2" - 0.06" thk. / 0.135" thick, 4-Pin connector, B-0" Drop
(lx, column = 1.15 [in⁴]; lx, beam = 1.57 [in⁴])

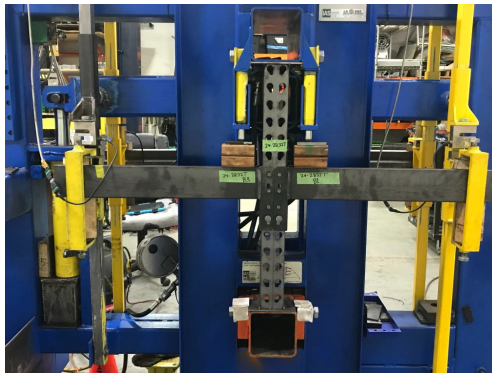


Figure B1-1: Specimen Setup (before test)

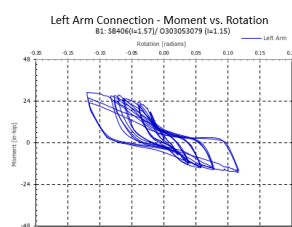


Figure B1-2a: Test Plot (LH)

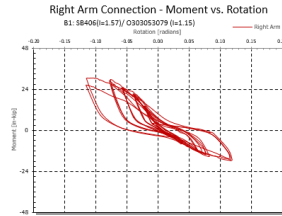


Figure B1-2b: Test Plot (RH)

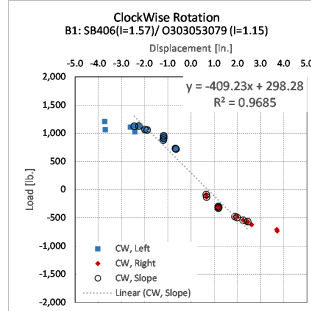


Figure B1-2c: Peak Loads in CW Cycle



Front (left oblique view)



Front (top view)



Front (right oblique view)



Rear (left oblique view)



Rear (top view)



Rear (right oblique view)

Figure B1-3b: Rear Views (after test)

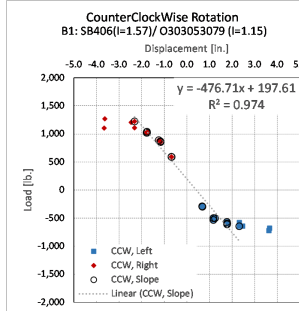


Figure B1-2d: Peak Loads in CCW Cycle

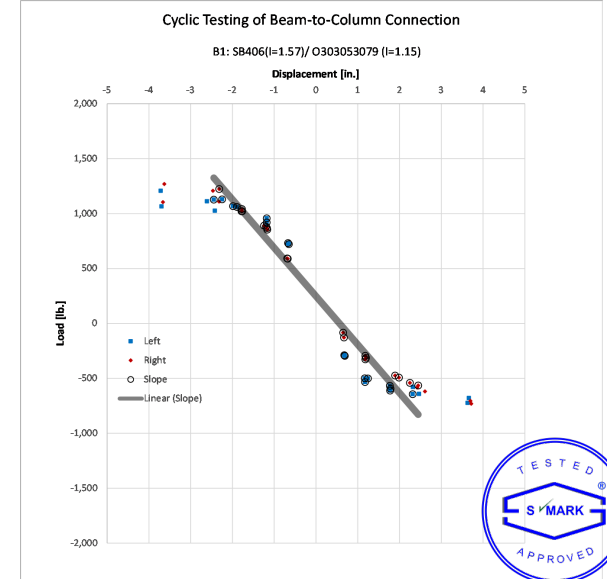


Figure B1-4: Resulting Data for Analysis (Slope = -477 [lb/in], CW; -409 [lb/in], CCW)

Spring Constant, $F = 260$ [k-in/rad]

$M_{\max, \text{cyclic}} = 23.6$ [k-in]

QC: MM 5/14/2025

Specimen B2:

O303053079: 3" x 3" - 0.09" thk. / SB406: 4"x2_1/2" - 0.06" thk. / 0.135" thick, 4-Pin connector, B-0" Drop
(lx, column = 1.15 [in⁴]; lx, beam = 1.57 [in⁴])



Figure B2-1: Specimen Setup (before test)

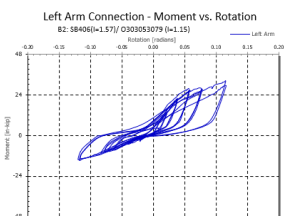


Figure B2-2a: Test Plot (LH)

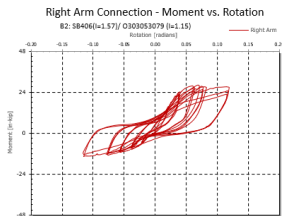


Figure B2-2b: Test Plot (RH)

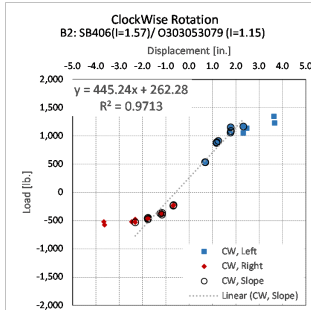


Figure B2-2c: Peak Loads in CW Cycle



Front (left oblique view)



Front (top view)



Front (right oblique view)



Rear (left oblique view)



Rear (top view)



Rear (right oblique view)

Figure B2-3b: Rear Views (after test)

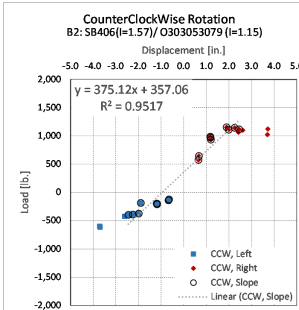


Figure B2-2d: Peak Loads in CCW Cycle

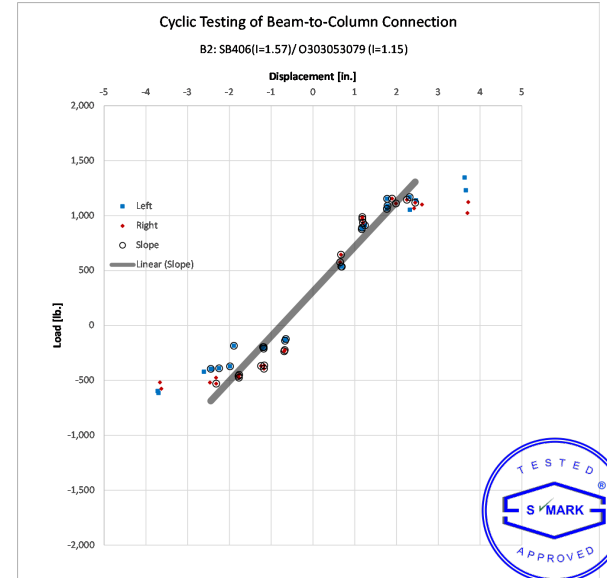


Figure B2-4: Resulting Data for Analysis (Slope = 375 [lb/in], CW; 445 [lb/in], CCW)

Spring Constant, $F = 240$ [k-in/rad]

$M_{\max, \text{cyclic}} = 22.2$ [k-in]

QC: MM 5/14/2025

Specimen C1:

O303053079: 3" x 3" - 0.09" thk. / SB506: 5"x2.5"0.06" thk. / 0.136" thick, 3-Pin connector, B-0" Drop
(lx, column = 1.15 [in⁴]; lx, beam = 2.57 [in⁴])



Figure C1-1: Specimen Setup (before test)

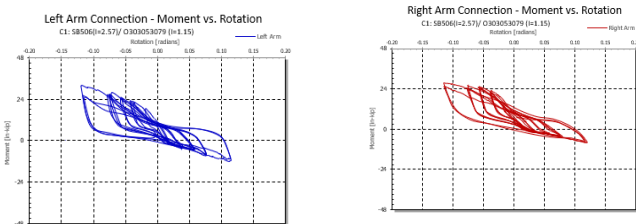


Figure C1-2a: Test Plot (LH)

Figure C1-2b: Test Plot (RH)

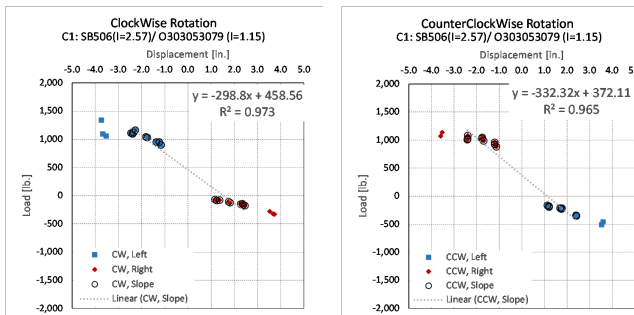


Figure C1-2c: Peak Loads in CW Cycle

Figure C1-2d: Peak Loads in CCW Cycle

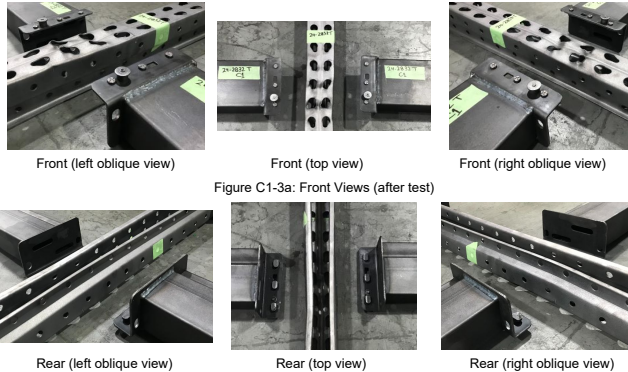


Figure C1-3a: Front Views (after test)

Figure C1-3b: Rear Views (after test)

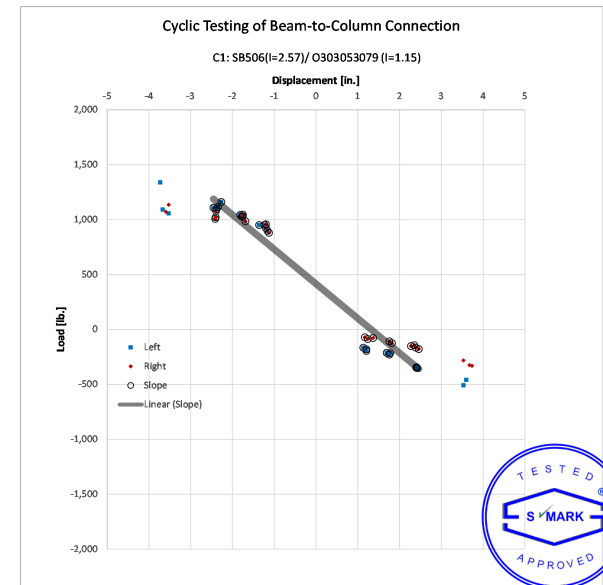


Figure C1-4: Resulting Data for Analysis (Slope = -332 [lb/in], CW; -299 [lb/in], CCW)

Spring Constant, $F = 190$ [k-in/rad]

$M_{\max, \text{cyclic}} = 20.0$ [k-in]

QC: MM 5/14/2025

Specimen C2:

O303053079: 3" x 3" - 0.09" thk. / SB506: 5"x2.5"0.06" thk. / 0.136" thick, 3-Pin connector, B-0" Drop
(lx, column = 1.15 [in⁴]; lx, beam = 2.57 [in⁴])



Figure C2-1: Specimen Setup (before test)

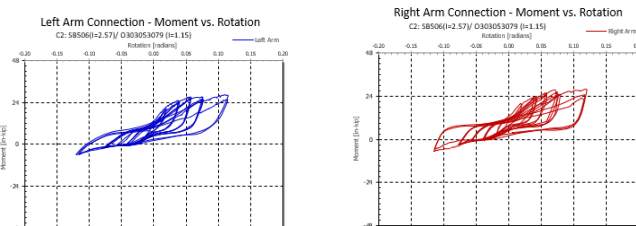


Figure C2-2a: Test Plot (LH)

Figure C2-2b: Test Plot (RH)

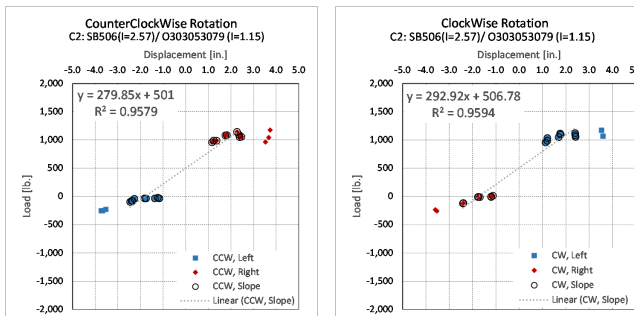


Figure C2-2c: Peak Loads in CW Cycle

Figure C2-2d: Peak Loads in CCW Cycle

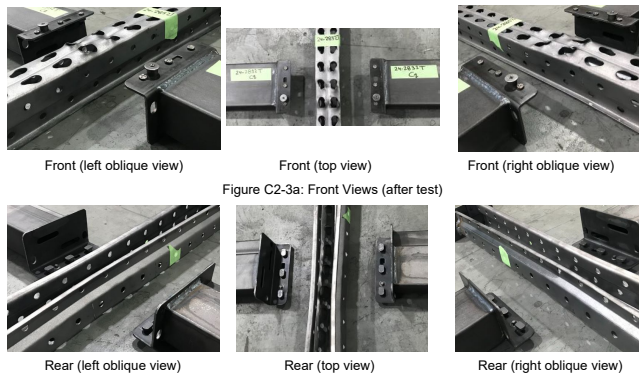


Figure C2-3a: Front Views (after test)

Figure C2-3b: Rear Views (after test)

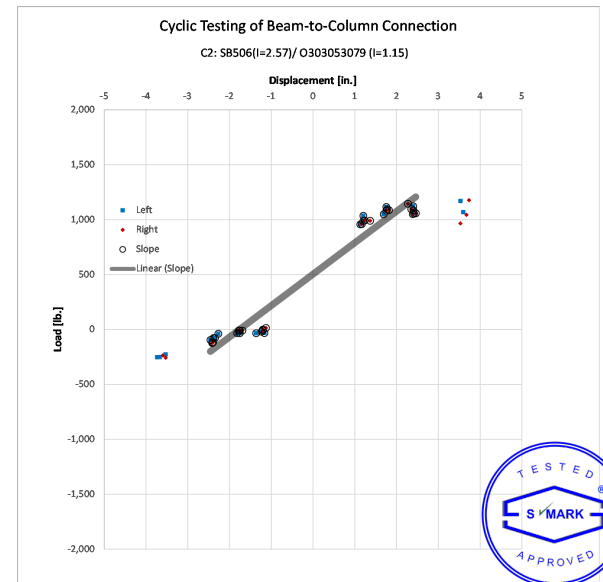


Figure C2-4: Resulting Data for Analysis (Slope = 280 [lb/in], CW; 293 [lb/in], CCW)

Spring Constant, $F = 170$ [k-in/rad]

$M_{\max, \text{cyclic}} = 17.3$ [k-in]

QC: MM 5/14/2025

Specimen D1:

O303053079: 3" x 3" - 0.09" thk. / SB606: 6"x2.5"-0.06" thk. / 0.137" thick, 4-Pin connector, B-0" Drop
(l_x, column = 1.15 [in⁴]; l_x, beam = 4.11 [in⁴])

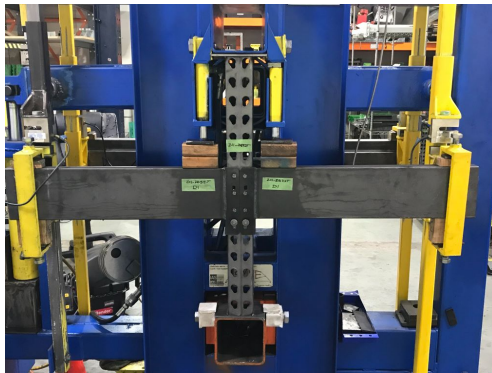


Figure D1-1: Specimen Setup (before test)

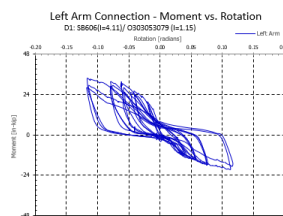


Figure D1-2a: Test Plot (LH)

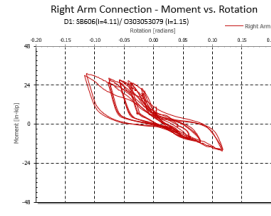


Figure D1-2b: Test Plot (RH)

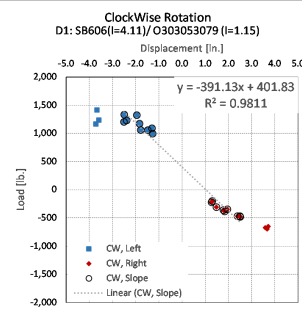


Figure D1-2c: Peak Loads in CW Cycle



Front (left oblique view)



Front (top view)



Front (right oblique view)



Rear (left oblique view)



Rear (top view)



Rear (right oblique view)

Figure D1-3b: Rear Views (after test)

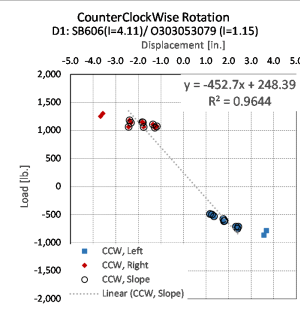


Figure D1-2d: Peak Loads in CCW Cycle

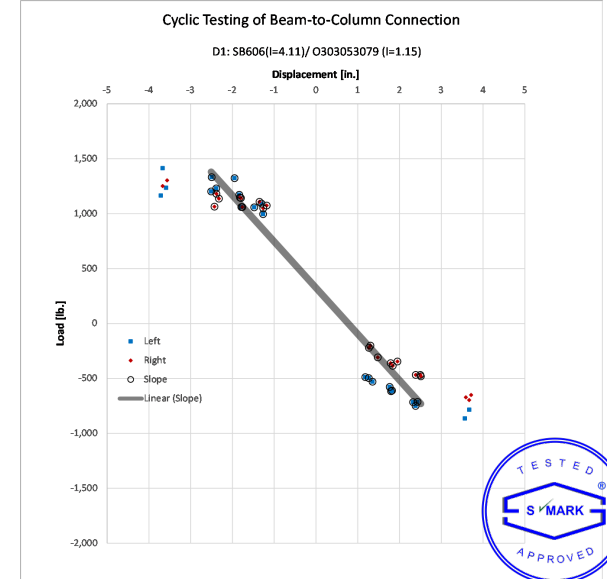


Figure D1-4: Resulting Data for Analysis (Slope = -453 [lb/in], CW; -391 [lb/in], CCW)

Spring Constant, $F = 250$ [k-in/rad]

$M_{\max, \text{cyclic}} = 23.6$ [k-in]

QC: MM 5/14/2025

Specimen D2:

O303053079: 3" x 3" - 0.09" thk. / SB606: 6"x2.5"-0.06" thk. / 0.137" thick, 4-Pin connector, B-0" Drop
(l_x, column = 1.15 [in⁴]; l_x, beam = 4.11 [in⁴])



Figure D2-1: Specimen Setup (before test)

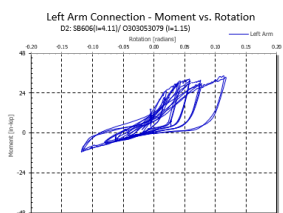


Figure D2-2a: Test Plot (LH)

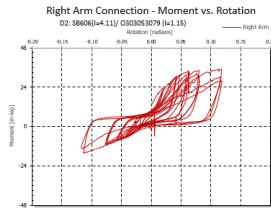


Figure D2-2b: Test Plot (RH)

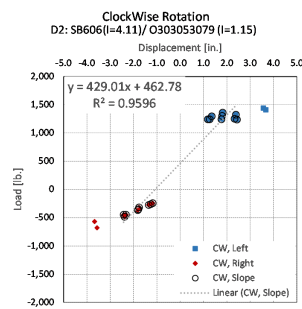
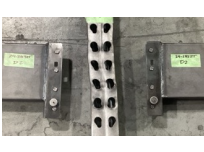


Figure D2-2c: Peak Loads in CW Cycle



Front (left oblique view)



Front (top view)



Front (right oblique view)



Rear (left oblique view)



Rear (top view)



Rear (right oblique view)

Figure D2-3b: Rear Views (after test)

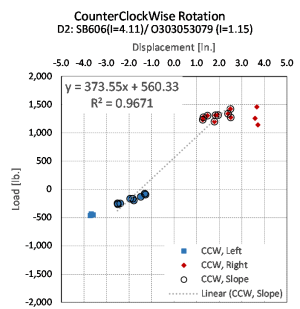


Figure D2-2d: Peak Loads in CCW Cycle

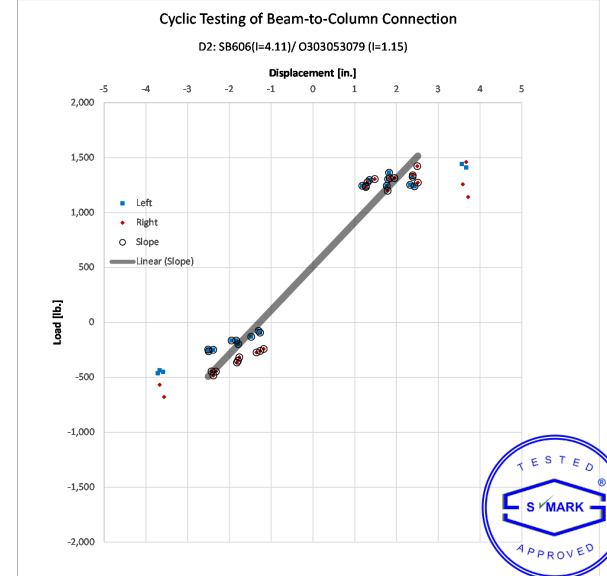


Figure D2-4: Resulting Data for Analysis (Slope = 374 [lb/in], CW; 429 [lb/in], CCW)

Spring Constant, $F = 240$ [k-in/rad]

$M_{\max, \text{cyclic}} = 22.2$ [k-in]

QC: MM 5/14/2025