

The specimen details

Diameter of bolt	d (mm)	20
Diameter of bolt hole	d <sub>0</sub> (mm)	22
End distance	e <sub>1</sub> (mm)	40
Edge distance	e <sub>2</sub> (mm)	30
Pitch distance	p <sub>1</sub> (mm)	60
	p <sub>2</sub> (mm)	N/A
Gauge distance	g (mm)	90
Thickness of end plate	t <sub>p</sub> (mm)	10
Horizontal distance of lever arm	B <sub>L</sub> (mm)	490
Vertical distance of lever arm	D <sub>L</sub> (mm)	51.7

Steel Grade		S275	S355
Dimension of Members		UB305x16 5x40	UC254x25 4x89
Depth of Section	D (mm)	303.4	260.3
Width of Section	B (mm)	165	256.3
Thickness of Web	t (mm)	6	10.3
Thickness of Flange	T (mm)	10.2	17.3
Root Radius	r (mm)	8.9	12.7
Depth between Fillets	d (mm)	265.2	200.3

Nominal Temperature

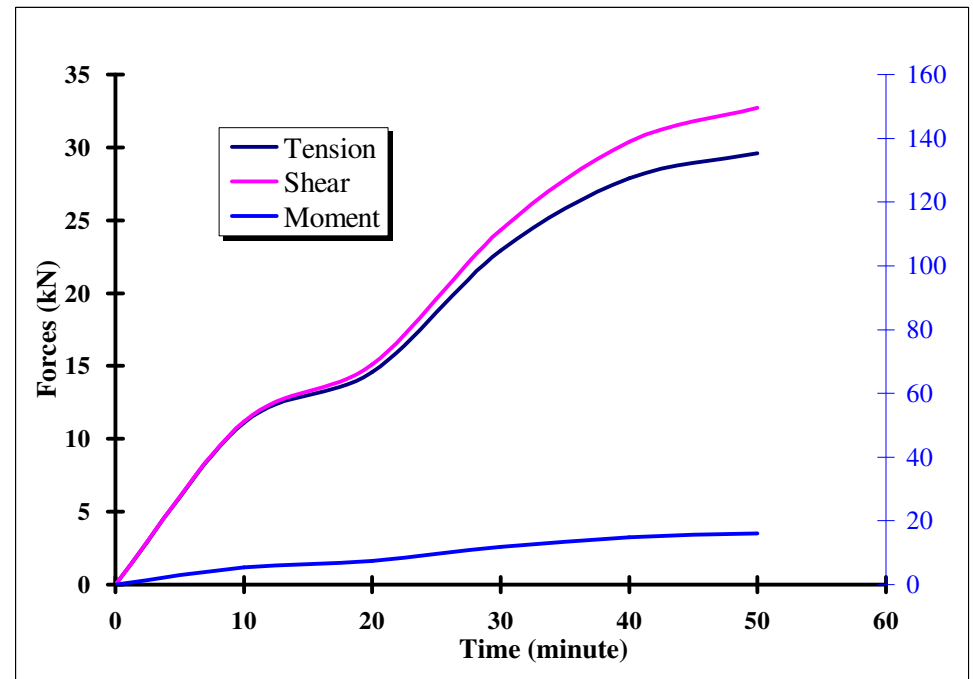
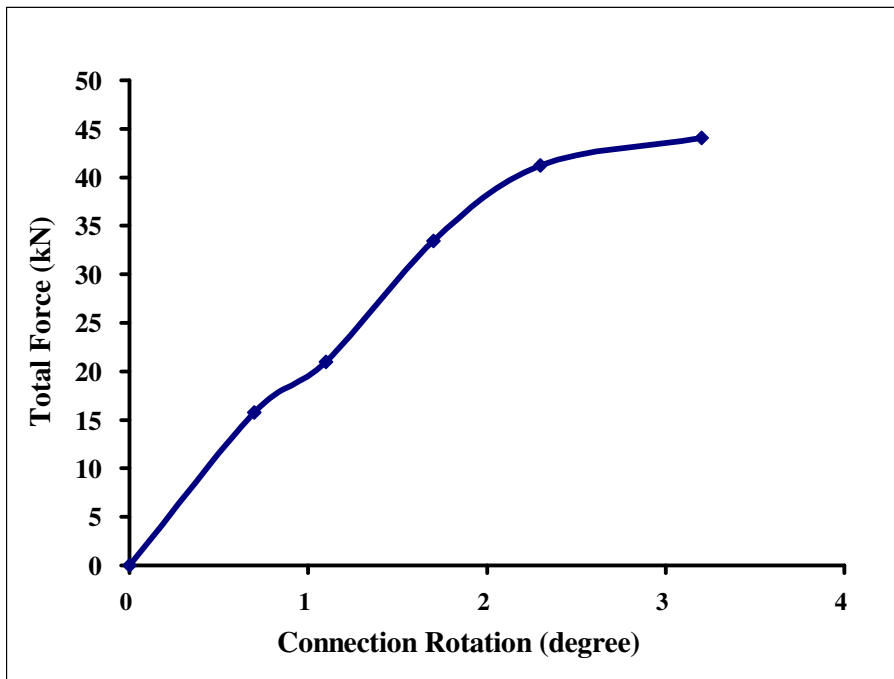
550°C

Time (minute)	Thermocouple Average(°C)	Jack Displacement (mm)	Load Angle α(°)	Beam Rotation (°)	Column Rotation (°)	Connection Rotation (°)	Force Rotation (°)	F3 from F1 (kN)	F3 from F2 (kN)	F3 Average (kN)	Tension (kN)	Shear (kN)	Moment (kN*m)
0	550.000	2.939	45	N/A	N/A	0	0	0	0	0	0	0	0
1	550.000	2.940	45.00	N/A	N/A		0.001	2.26	2.97	5.23	3.70	3.70	1.81
2	550.000	2.937	45.00	N/A	N/A		-0.005	2.43	2.97	5.40	3.82	3.82	1.87
3	550.000	2.941	44.98	N/A	N/A		-0.022	2.35	2.74	5.09	3.60	3.60	1.76
4	550.000	2.940	45.00	N/A	N/A		0.001	2.41	2.72	5.12	3.62	3.62	1.78
5	550.000	3.647	44.99	N/A	N/A		-0.008	2.35	4.17	6.52	4.61	4.61	2.26
6	550.000	4.965	45.00	N/A	N/A		0.003	2.93	5.68	8.60	6.08	6.08	2.98
7	550.000	6.422	45.11	N/A	N/A		0.111	3.47	6.99	10.45	7.38	7.41	3.63
8	550.000	7.978	45.16	N/A	N/A		0.159	3.99	8.48	12.46	8.79	8.84	4.33
9	550.000	9.477	45.18	N/A	N/A		0.181	3.93	9.94	13.87	9.78	9.84	4.82
10	550.000	10.974	45.26	N/A	N/A	0.700	0.258	4.61	11.17	15.77	11.10	11.20	5.49
11	550.000	12.412	45.27	N/A	N/A		0.274	4.67	11.96	16.62	11.70	11.81	5.79
12	550.000	13.921	45.28	N/A	N/A		0.276	4.92	12.06	16.98	11.95	12.06	5.91
13	550.000	15.469	45.33	N/A	N/A		0.333	5.01	12.80	17.82	12.52	12.67	6.21
14	550.000	16.915	45.27	N/A	N/A		0.270	5.16	12.71	17.87	12.58	12.70	6.22
15	550.000	18.338	45.58	N/A	N/A		0.580	4.96	12.68	17.64	12.34	12.60	6.17
16	550.000	19.650	45.72	N/A	N/A		0.723	5.36	12.78	18.14	12.66	12.99	6.36
17	550.000	20.908	45.79	N/A	N/A		0.794	5.36	13.18	18.54	12.93	13.29	6.51
18	550.000	22.102	45.85	N/A	N/A		0.853	5.51	13.82	19.33	13.46	13.87	6.79
19	550.000	23.448	45.95	N/A	N/A		0.952	6.04	14.46	20.50	14.25	14.73	7.22
20	550.000	24.840	46.00	N/A	N/A	1.100	1.002	6.33	14.65	20.98	14.57	15.09	7.39
21	550.000	26.275	46.15	N/A	N/A		1.155	6.42	15.68	22.10	15.31	15.94	7.81
22	550.000	27.747	46.23	N/A	N/A		1.230	6.89	16.50	23.40	16.19	16.90	8.28

dd mm 2007 Web-cleat Test Result

23	550.000	29.228	46.33	N/A	N/A		1.333	7.57	17.13	24.71	17.06	17.87	8.76
24	550.000	30.718	46.39	N/A	N/A		1.391	8.03	17.82	25.85	17.83	18.72	9.17
25	550.000	32.185	46.52	N/A	N/A		1.518	8.32	18.67	26.99	18.57	19.58	9.60
26	550.000	33.674	46.45	N/A	N/A		1.452	8.73	19.74	28.47	19.62	20.64	10.11
27	550.000	35.131	46.66	N/A	N/A		1.664	9.20	20.33	29.53	20.27	21.48	10.52
28	550.000	36.652	46.65	N/A	N/A		1.654	9.83	20.96	30.79	21.13	22.39	10.97
29	550.000	38.157	46.69	N/A	N/A		1.689	10.37	21.94	32.31	22.16	23.51	11.52
30	550.000	39.639	46.73	N/A	N/A	1.700	1.726	10.85	22.58	33.43	22.92	24.34	11.93
31	550.000	41.137	46.84	N/A	N/A		1.838	11.36	23.46	34.83	23.82	25.40	12.45
32	550.000	42.642	46.92	N/A	N/A		1.915	11.93	24.36	36.29	24.79	26.51	12.99
33	550.000	44.084	47.05	N/A	N/A		2.045	12.33	24.42	36.75	25.04	26.90	13.18
34	550.000	45.453	47.03	N/A	N/A		2.031	12.65	24.99	37.64	25.66	27.54	13.50
35	550.000	46.766	47.03	N/A	N/A		2.033	12.96	25.64	38.60	26.31	28.25	13.84
36	550.000	48.024	47.18	N/A	N/A		2.185	13.13	25.77	38.89	26.43	28.53	13.98
37	550.000	49.193	47.39	N/A	N/A		2.390	13.06	25.61	38.66	26.17	28.46	13.94
38	550.000	50.346	47.24	N/A	N/A		2.235	13.15	25.72	38.87	26.39	28.54	13.98
39	550.000	51.699	47.38	N/A	N/A		2.384	13.63	26.55	40.18	27.21	29.57	14.49
40	550.000	53.052	47.45	N/A	N/A	2.300	2.449	14.12	27.11	41.23	27.88	30.38	14.88
41	550.000	54.285	47.39	N/A	N/A		2.389	13.95	26.58	40.53	27.44	29.83	14.62
42	550.000	55.510	47.42	N/A	N/A		2.422	13.89	27.00	40.90	27.67	30.11	14.76
43	550.000	56.680	47.52	N/A	N/A		2.524	14.15	26.85	41.00	27.69	30.24	14.82
44	550.000	57.953	47.50	N/A	N/A		2.503	14.35	27.36	41.71	28.18	30.75	15.07
45	550.000	59.339	47.59	N/A	N/A		2.589	14.72	27.99	42.71	28.81	31.54	15.45
46	550.000	60.692	47.70	N/A	N/A		2.699	15.28	27.83	43.11	29.01	31.89	15.62
47	550.000	62.109	47.68	N/A	N/A		2.676	15.25	27.99	43.24	29.11	31.97	15.66
48	550.000	63.543	47.75	N/A	N/A		2.746	15.70	28.10	43.80	29.45	32.42	15.89
49	550.000	64.960	47.80	N/A	N/A		2.796	16.07	28.06	44.13	29.65	32.69	16.02
50	550.000	66.449	47.86	N/A	N/A	3.200	2.863	16.16	27.93	44.10	29.58	32.70	16.02
51	550.000	67.955	47.89	N/A	N/A		2.892	15.95	27.96	43.92	29.45	32.58	15.96
52	550.000	69.485	48.03	N/A	N/A		3.029	16.29	27.69	43.98	29.41	32.70	16.02

53	550.000	71.029	47.96	N/A	N/A	2.957	15.82	27.30	43.11	28.87	32.02	15.69
54	550.000	72.543	48.05	N/A	N/A	3.047	16.00	26.90	42.89	28.67	31.90	15.63
55	550.000	73.992	48.04	N/A	N/A	3.042	16.05	26.54	42.59	28.48	31.67	15.52
56	550.000	75.521	48.00	N/A	N/A	3.001	16.14	26.85	42.99	28.76	31.95	15.65
57	550.000	77.035	48.11	N/A	N/A	3.107	16.10	26.43	42.53	28.40	31.66	15.51
58	550.000	78.532	48.24	N/A	N/A	3.238	16.37	26.33	42.70	28.44	31.85	15.61
59	550.000	80.055	48.15	N/A	N/A	3.155	15.54	25.58	41.12	27.43	30.63	15.01
60	550.000	81.552	48.27	N/A	N/A	3.266	16.00	25.48	41.48	27.61	30.95	15.17
61	550.000	83.035	48.21	N/A	N/A	3.207	16.07	25.41	41.48	27.64	30.93	15.15
62	550.000	84.530	48.29	N/A	N/A	3.293	16.16	25.64	41.79	27.81	31.20	15.29
63	550.000	86.004	48.46	N/A	N/A	3.463	15.99	25.25	41.25	27.35	30.88	15.13
64	550.000	87.462	48.40	N/A	N/A	3.403	16.30	25.14	41.44	27.51	30.99	15.19
65	550.000	88.968	48.57	N/A	N/A	3.567	16.50	24.97	41.46	27.44	31.09	15.23



Photographs after Test

