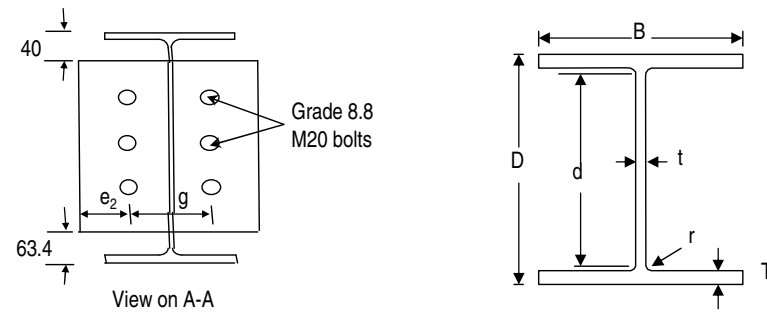


The specimen details



Diameter of bolt	$d$ (mm)	20
Diameter of bolt hole	$d_0$ (mm)	22
End distance	$e_1$ (mm)	40
Edge distance	$e_2$ (mm)	30
Pitch distance	$p_1$ (mm)	60
	$p_2$ (mm)	N/A
Gauge distance	$g$ (mm)	90
Thickness of end plate	$t_p$ (mm)	10
Horizontal distance of lever arm	$B_L$ (mm)	490
Vertical distance of lever arm	$D_L$ (mm)	51.7

Steel Grade	S275	S355	
<b>Dimension of Members</b>	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

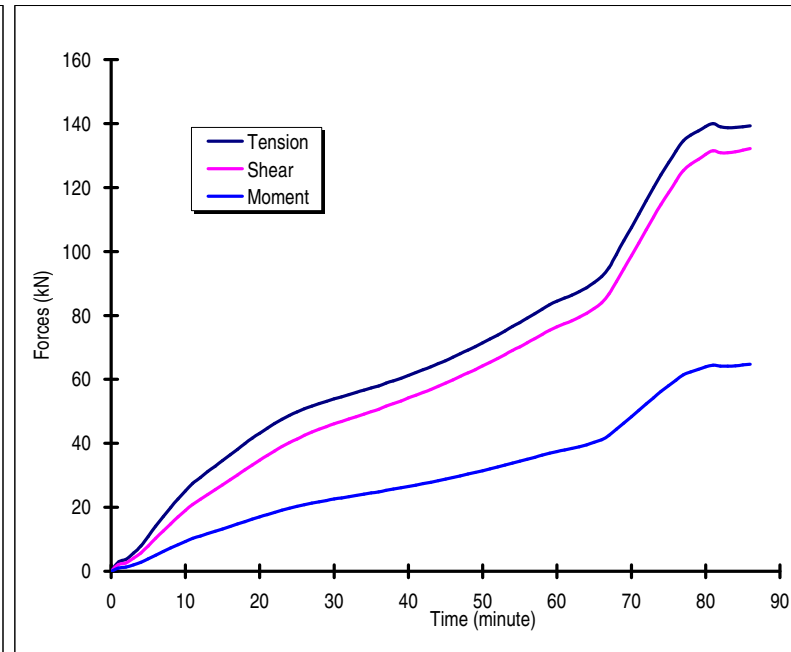
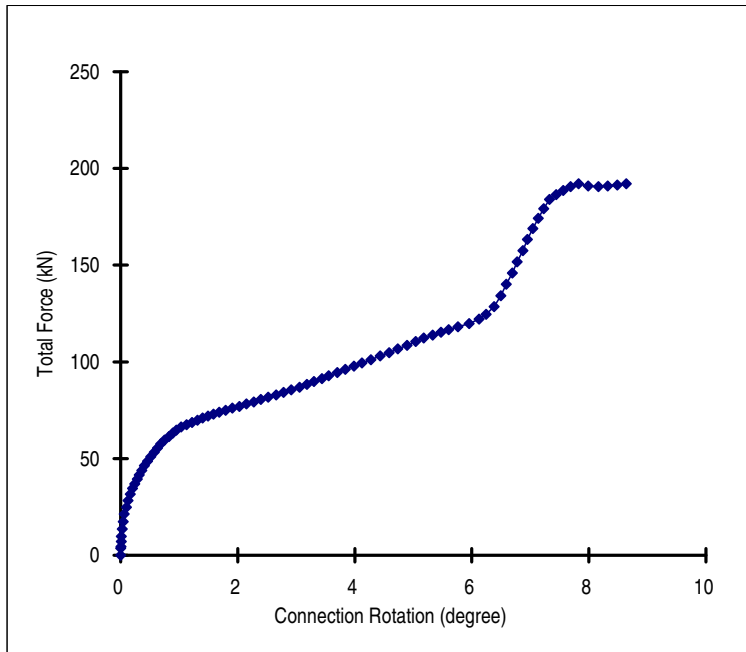
Nominal Temperature

20°C

Time (minute)	Jack Displacement (mm)	Load Angle $\alpha$ (°)	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	0	35			0	0			0	0	0	0
1	0.495	35.18	N/A	N/A	0.000	0.177	N/A	N/A	3.59	2.93	2.07	1.01
2	1.772	35.30	N/A	N/A	0.005	0.300	N/A	N/A	4.55	3.71	2.63	1.29
3	3.247	35.55	N/A	N/A	0.010	0.547	N/A	N/A	7.04	5.73	4.09	2.01
4	4.542	35.76	N/A	N/A	0.012	0.755	N/A	N/A	9.72	7.89	5.68	2.78
5	6.037	36.00	N/A	N/A	0.026	0.997	N/A	N/A	13.52	10.94	7.95	3.89
6	7.492	36.24	N/A	N/A	0.044	1.241	N/A	N/A	17.43	14.06	10.31	5.05
7	9.100	36.47	N/A	N/A	0.062	1.473	N/A	N/A	21.26	17.10	12.64	6.19
8	10.532	36.70	N/A	N/A	0.096	1.702	N/A	N/A	24.85	19.92	14.85	7.28
9	11.974	36.94	N/A	N/A	0.125	1.942	N/A	N/A	28.33	22.64	17.03	8.34
10	13.544	37.14	N/A	N/A	0.164	2.139	N/A	N/A	31.57	25.17	19.06	9.34
11	15.034	37.32	N/A	N/A	0.202	2.317	N/A	N/A	34.57	27.49	20.96	10.27
12	16.460	37.52	N/A	N/A	0.242	2.521	N/A	N/A	36.92	29.28	22.49	11.02
13	17.844	37.65	N/A	N/A	0.282	2.647	N/A	N/A	39.39	31.18	24.06	11.79
14	19.229	37.80	N/A	N/A	0.315	2.804	N/A	N/A	41.56	32.83	25.47	12.48
15	20.631	37.99	N/A	N/A	0.360	2.986	N/A	N/A	43.91	34.61	27.02	13.24
16	22.247	38.17	N/A	N/A	0.407	3.169	N/A	N/A	46.29	36.40	28.61	14.02
17	23.696	38.34	N/A	N/A	0.461	3.339	N/A	N/A	48.60	38.12	30.15	14.77
18	25.193	38.49	N/A	N/A	0.515	3.490	N/A	N/A	50.95	39.88	31.71	15.54
19	26.567	38.65	N/A	N/A	0.573	3.650	N/A	N/A	53.25	41.59	33.26	16.30
20	28.091	38.83	N/A	N/A	0.627	3.826	N/A	N/A	55.40	43.16	34.73	17.02
21	29.568	39.01	N/A	N/A	0.682	4.015	N/A	N/A	57.54	44.71	36.22	17.75
22	31.044	39.20	N/A	N/A	0.749	4.201	N/A	N/A	59.60	46.19	37.67	18.46
23	32.509	39.37	N/A	N/A	0.827	4.371	N/A	N/A	61.45	47.50	38.98	19.10
24	34.080	39.54	N/A	N/A	0.890	4.543	N/A	N/A	63.19	48.73	40.23	19.71
25	35.576	39.73	N/A	N/A	0.953	4.726	N/A	N/A	64.74	49.79	41.38	20.27
26	37.110	39.93	N/A	N/A	1.032	4.929	N/A	N/A	66.27	50.82	42.53	20.84
27	38.622	40.10	N/A	N/A	1.124	5.097	N/A	N/A	67.55	51.67	43.51	21.32
28	40.055	40.24	N/A	N/A	1.220	5.237	N/A	N/A	68.72	52.46	44.39	21.75
29	41.600	40.38	N/A	N/A	1.312	5.383	N/A	N/A	69.78	53.15	45.21	22.15
30	43.142	40.52	N/A	N/A	1.402	5.518	N/A	N/A	70.93	53.92	46.08	22.58
31	44.677	40.64	N/A	N/A	1.493	5.644	N/A	N/A	71.92	54.57	46.84	22.95
32	46.228	40.76	N/A	N/A	1.584	5.765	N/A	N/A	72.96	55.26	47.64	23.34

33	47.753	40.87	N/A	N/A	1.686	5.874	N/A	N/A	73.92	55.90	48.37	23.70
34	49.276	40.97	N/A	N/A	1.794	5.970	N/A	N/A	74.96	56.60	49.15	24.08
35	50.802	41.07	N/A	N/A	1.908	6.072	N/A	N/A	76.04	57.33	49.96	24.48
36	52.354	41.16	N/A	N/A	2.030	6.159	N/A	N/A	77.00	57.97	50.68	24.83
37	53.841	41.26	N/A	N/A	2.148	6.255	N/A	N/A	78.26	58.84	51.61	25.29
38	55.416	41.35	N/A	N/A	2.273	6.346	N/A	N/A	79.33	59.55	52.40	25.68
39	56.871	41.43	N/A	N/A	2.396	6.430	N/A	N/A	80.50	60.36	53.27	26.10
40	58.474	41.51	N/A	N/A	2.521	6.511	N/A	N/A	81.79	61.25	54.21	26.56
41	60.000	41.51	N/A	N/A	2.658	6.511	N/A	N/A	82.97	62.13	54.99	26.95
42	61.577	41.57	N/A	N/A	2.784	6.575	N/A	N/A	84.26	63.03	55.91	27.40
43	63.084	41.64	N/A	N/A	2.915	6.637	N/A	N/A	85.57	63.95	56.85	27.86
44	64.714	41.68	N/A	N/A	3.057	6.684	N/A	N/A	86.90	64.90	57.79	28.32
45	66.274	41.74	N/A	N/A	3.182	6.745	N/A	N/A	88.30	65.88	58.79	28.81
46	67.808	41.80	N/A	N/A	3.301	6.798	N/A	N/A	89.82	66.96	59.87	29.34
47	69.459	41.83	N/A	N/A	3.436	6.827	N/A	N/A	91.35	68.07	60.92	29.85
48	70.916	41.88	N/A	N/A	3.556	6.884	N/A	N/A	92.88	69.15	62.01	30.38
49	72.465	41.90	N/A	N/A	3.703	6.904	N/A	N/A	94.40	70.26	63.05	30.89
50	73.891	41.94	N/A	N/A	3.838	6.945	N/A	N/A	96.07	71.45	64.21	31.46
51	75.317	41.97	N/A	N/A	3.984	6.975	N/A	N/A	97.75	72.67	65.38	32.04
52	76.834	41.99	N/A	N/A	4.124	6.993	N/A	N/A	99.41	73.88	66.51	32.59
53	78.338	42.02	N/A	N/A	4.273	7.022	N/A	N/A	101.16	75.15	67.72	33.18
54	79.942	42.05	N/A	N/A	4.435	7.045	N/A	N/A	103.03	76.51	69.00	33.81
55	81.569	42.06	N/A	N/A	4.586	7.064	N/A	N/A	104.77	77.78	70.19	34.39
56	83.119	42.08	N/A	N/A	4.735	7.075	N/A	N/A	106.69	79.19	71.49	35.03
57	84.700	42.09	N/A	N/A	4.893	7.086	N/A	N/A	108.58	80.58	72.78	35.66
58	86.286	42.11	N/A	N/A	5.041	7.109	N/A	N/A	110.49	81.97	74.09	36.30
59	87.793	42.12	N/A	N/A	5.179	7.117	N/A	N/A	112.39	83.37	75.38	36.93
60	89.317	42.15	N/A	N/A	5.332	7.148	N/A	N/A	113.86	84.42	76.40	37.44
61	90.912	42.19	N/A	N/A	5.473	7.191	N/A	N/A	115.28	85.41	77.43	37.94
62	92.427	42.22	N/A	N/A	5.607	7.215	N/A	N/A	116.65	86.39	78.38	38.41
63	93.949	42.25	N/A	N/A	5.760	7.249	N/A	N/A	118.17	87.48	79.45	38.93
64	95.381	42.29	N/A	N/A	5.954	7.287	N/A	N/A	119.87	88.68	80.65	39.52
65	96.875	42.32	N/A	N/A	6.122	7.322	N/A	N/A	122.08	90.26	82.19	40.28
66	98.478	42.34	N/A	N/A	6.245	7.344	N/A	N/A	124.63	92.11	83.95	41.13
67	100.015	42.39	N/A	N/A	6.378	7.387	N/A	N/A	128.63	95.01	86.71	42.49
68	101.443	42.43	N/A	N/A	6.496	7.432	N/A	N/A	134.24	99.08	90.57	44.38
69	102.950	42.47	N/A	N/A	6.590	7.474	N/A	N/A	140.10	103.34	94.60	46.36
70	104.201	42.54	N/A	N/A	6.692	7.538	N/A	N/A	145.89	107.49	98.63	48.33
71	105.644	42.60	N/A	N/A	6.777	7.597	N/A	N/A	151.69	111.66	102.67	50.31
72	107.224	42.66	N/A	N/A	6.874	7.655	N/A	N/A	157.58	115.89	106.77	52.32

73	108.473	42.72	N/A	N/A	6.952	7.718	N/A	N/A	163.26	119.95	110.75	54.27
74	110.084	42.77	N/A	N/A	7.040	7.771	N/A	N/A	168.91	123.99	114.70	56.20
75	111.446	42.83	N/A	N/A	7.135	7.834	N/A	N/A	174.18	127.73	118.42	58.03
76	112.866	42.88	N/A	N/A	7.230	7.884	N/A	N/A	179.24	131.33	121.97	59.77
77	114.188	42.94	N/A	N/A	7.327	7.944	N/A	N/A	183.91	134.63	125.30	61.40
78	115.679	43.01	N/A	N/A	7.441	8.012	N/A	N/A	186.55	136.41	127.25	62.35
79	117.154	43.08	N/A	N/A	7.562	8.076	N/A	N/A	188.56	137.73	128.78	63.10
80	118.590	43.14	N/A	N/A	7.688	8.143	N/A	N/A	190.68	139.13	130.39	63.89
81	120.104	43.21	N/A	N/A	7.824	8.210	N/A	N/A	192.05	139.98	131.49	64.43
82	121.676	43.28	N/A	N/A	7.989	8.279	N/A	N/A	190.98	139.04	130.93	64.15
83	123.142	43.33	N/A	N/A	8.163	8.334	N/A	N/A	190.66	138.68	130.84	64.11
84	124.734	43.39	N/A	N/A	8.323	8.387	N/A	N/A	190.91	138.74	131.14	64.26
85	126.273	43.44	N/A	N/A	8.483	8.443	N/A	N/A	191.45	139.00	131.64	64.51
86	127.668	43.49	N/A	N/A	8.638	8.488	N/A	N/A	192.04	139.32	132.16	64.76
87	129.994	43.10	N/A	N/A	9.242	8.097	N/A	N/A	131.77	96.22	90.03	44.12



Photographs after Test

