

**EVALUATION OF THIRD ORDER MOMENTS CREATED BY  
ACTIVE AND PASSIVE SELF-LIGATING ORTHODONTIC  
BRACKETS – A COMPARATIVE INVITRO STUDY**

**BY**

**KELLY BROOKE, MET, AET, BSc, DDS, BSc (Dent).**

A Thesis

Submitted to the Faculty of Graduate Studies  
In Partial Fulfillment of the Requirements  
For the Degree of

**MASTER OF SCIENCE**

Section of Orthodontics  
Department of Preventive Dental Science  
Faculty of Dentistry  
University of Manitoba  
Winnipeg, Manitoba

**THE UNIVERSITY OF MANITOBA**  
**FACULTY OF GRADUATE STUDIES**  
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**Evaluation of Third Order Moments Created by Active and Passive  
Self-Ligating Orthodontic Brackets –  
A Comparative Invitro Study**

**BY**

**Kelly Brooke**

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University  
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**of**

**MASTER OF SCIENCE**

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## APPENDIX VIII PRIMARY PROJECT RAW DATA

[FORCE measured in (Newtons), MOMENT measured in (g-mm)]

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0	153.625
11	0	153.625
12	0	153.625
13	0	153.625
14	0	153.625
15	0	153.625
16	0	153.625
17	0	153.625
18	0.01	204.625
19	0.01	204.625
20	0.01	204.625
21	0.01	204.625
22	0.01	204.625
23	0.01	204.625

DEGREE	FORCE	MOMENT
24	0.01	204.625
25	0.02	255.625
26	0.02	255.625
27	0.02	255.625
28	0.02	255.625
29	0.02	255.625
30	0.02	255.625
31	0.02	255.625
32	0.02	255.625
33	0.02	255.625
34	0.02	255.625
35	0.02	255.625
36	0.02	255.625
37	0.02	255.625
38	0.02	255.625
39	0.02	255.625
40	0.02	255.625
41	0.02	255.625
42	0.02	255.625
43	0.02	255.625
44	0.02	255.625
45	0.02	255.625

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0	153.625
11	0	153.625
12	0	153.625
13	0	153.625
14	0	153.625
15	0	153.625
16	0	153.625
17	0	153.625
18	0	153.625
19	0	153.625
20	0	153.625
21	0	153.625
22	0	153.625
23	0	153.625

DEGREE	FORCE	MOMENT
24	0	153.625
25	0	153.625
26	0	153.625
27	0	153.625
28	0	153.625
29	0	153.625
30	0	153.625
31	0	153.625
32	0	153.625
33	0	153.625
34	0	153.625
35	0	153.625
36	0	153.625
37	0	153.625
38	0	153.625
39	0	153.625
40	0	153.625
41	0	153.625
42	0.01	204.625
43	0.01	204.625
44	0.01	204.625
45	0.01	204.625

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0.02	255.625
9	0.02	255.625
10	0.03	306.625
11	0.04	357.625
12	0.05	408.625
13	0.07	510.625
14	0.08	561.625
15	0.11	714.625
16	0.11	714.625
17	0.13	816.625
18	0.15	918.625
19	0.15	918.625
20	0.17	1020.63
21	0.2	1173.63
22	0.21	1224.63
23	0.24	1377.63

DEGREE	FORCE	MOMENT
24	0.24	1377.63
25	0.25	1428.63
26	0.27	1530.63
27	0.27	1530.63
28	0.29	1632.63
29	0.28	1581.63
30	0.29	1632.63
31	0.3	1683.63
32	0.31	1734.63
33	0.32	1785.63
34	0.33	1836.63
35	0.32	1785.63
36	0.32	1785.63
37	0.31	1734.63
38	0.32	1785.63
39	0.32	1785.63
40	0.32	1785.63
41	0.32	1785.63
42	0.32	1785.63
43	0.32	1785.63
44	0.32	1785.63
45	0.29	1632.63

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.03	306.625
5	0.04	357.625
6	0.05	408.625
7	0.07	510.625
8	0.11	714.625
9	0.1	663.625
10	0.12	765.625
11	0.14	867.625
12	0.17	1020.63
13	0.17	1020.63
14	0.19	1122.63
15	0.19	1122.63
16	0.2	1173.63
17	0.22	1275.63
18	0.21	1224.63
19	0.24	1377.63
20	0.22	1275.63
21	0.23	1326.63
22	0.23	1326.63
23	0.24	1377.63

DEGREE	FORCE	MOMENT
24	0.25	1428.63
25	0.24	1377.63
26	0.23	1326.63
27	0.21	1224.63
28	0.22	1275.63
29	0.2	1173.63
30	0.2	1173.63
31	0.19	1122.63
32	0.18	1071.63
33	0.18	1071.63
34	0.17	1020.63
35	0.18	1071.63
36	0.15	918.625
37	0.15	918.625
38	0.14	867.625
39	0.15	918.625
40	0.13	816.625
41	0.12	765.625
42	0.11	714.625
43	0.12	765.625
44	0.1	663.625
45	0.1	663.625

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.05	408.625
6	0.08	561.625
7	0.09	612.625
8	0.1	663.625
9	0.1	663.625
10	0.11	714.625
11	0.12	765.625
12	0.13	816.625
13	0.13	816.625
14	0.13	816.625
15	0.12	765.625
16	0.12	765.625
17	0.13	816.625
18	0.13	816.625
19	0.12	765.625
20	0.13	816.625
21	0.13	816.625
22	0.15	918.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.16	969.625
26	0.15	918.625
27	0.15	918.625
28	0.15	918.625
29	0.13	816.625
30	0.14	867.625
31	0.14	867.625
32	0.13	816.625
33	0.12	765.625
34	0.11	714.625
35	0.11	714.625
36	0.11	714.625
37	0.1	663.625
38	0.09	612.625
39	0.08	561.625
40	0.08	561.625
41	0.08	561.625
42	0.07	510.625
43	0.08	561.625
44	0.1	663.625
45	0.1	663.625

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0	153.625
11	0	153.625
12	0	153.625
13	0	153.625
14	0	153.625
15	0	153.625
16	0	153.625
17	0	153.625
18	0	153.625
19	0	153.625
20	0	153.625
21	0.02	255.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.04	357.625
25	0.06	459.625
26	0.07	510.625
27	0.08	561.625
28	0.09	612.625
29	0.09	612.625
30	0.1	663.625
31	0.12	765.625
32	0.14	867.625
33	0.28	1581.625
34	0.34	1887.625
35	0.28	1581.625
36	0.23	1326.625
37	0.18	1071.625
38	0.16	969.625
39	0.17	1020.625
40	0.19	1122.625
41	0.2	1173.625
42	0.22	1275.625
43	0.24	1377.625
44	0.26	1479.625
45	0.3	1683.625



**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.04	357.625
6	0.03	306.625
7	0.04	357.625
8	0.05	408.625
9	0.06	459.625
10	0.06	459.625
11	0.08	561.625
12	0.07	510.625
13	0.08	561.625
14	0.07	510.625
15	0.08	561.625
16	0.08	561.625
17	0.08	561.625
18	0.08	561.625
19	0.07	510.625
20	0.08	561.625
21	0.06	459.625
22	0.07	510.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.06	459.625
25	0.05	408.625
26	0.05	408.625
27	0.05	408.625
28	0.05	408.625
29	0.05	408.625
30	0.05	408.625
31	0.05	408.625
32	0.05	408.625
33	0.04	357.625
34	0.03	306.625
35	0.03	306.625
36	0.03	306.625
37	0.03	306.625
38	0.03	306.625
39	0.03	306.625
40	0.06	459.625
41	0.04	357.625
42	0.06	459.625
43	0.06	459.625
44	0.08	561.625
45	0.1	663.625

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.03	306.625
6	0.03	306.625
7	0.06	459.625
8	0.07	510.625
9	0.08	561.625
10	0.08	561.625
11	0.09	612.625
12	0.11	714.625
13	0.11	714.625
14	0.12	765.625
15	0.12	765.625
16	0.12	765.625
17	0.13	816.625
18	0.14	867.625
19	0.15	918.625
20	0.15	918.625
21	0.15	918.625
22	0.16	969.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.18	1071.625
26	0.19	1122.625
27	0.18	1071.625
28	0.18	1071.625
29	0.18	1071.625
30	0.17	1020.625
31	0.17	1020.625
32	0.18	1071.625
33	0.17	1020.625
34	0.16	969.625
35	0.15	918.625
36	0.17	1020.625
37	0.15	918.625
38	0.14	867.625
39	0.15	918.625
40	0.14	867.625
41	0.15	918.625
42	0.14	867.625
43	0.15	918.625
44	0.14	867.625
45	0.14	867.625

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.04	357.625
5	0.04	357.625
6	0.04	357.625
7	0.06	459.625
8	0.06	459.625
9	0.06	459.625
10	0.06	459.625
11	0.06	459.625
12	0.1	663.625
13	0.12	765.625
14	0.14	867.625
15	0.14	867.625
16	0.14	867.625
17	0.13	816.625
18	0.15	918.625
19	0.16	969.625
20	0.17	1020.625
21	0.18	1071.625
22	0.17	1020.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.2	1173.625
26	0.21	1224.625
27	0.19	1122.625
28	0.19	1122.625
29	0.18	1071.625
30	0.17	1020.625
31	0.17	1020.625
32	0.13	816.625
33	0.11	714.625
34	0.13	816.625
35	0.11	714.625
36	0.11	714.625
37	0.11	714.625
38	0.09	612.625
39	0.09	612.625
40	0.08	561.625
41	0.04	357.625
42	0.03	306.625
43	0.05	408.625
44	0.07	510.625
45	0.08	561.625

**Bracket Type: Damon II**

**Wire Size: 0.016x0.022**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0	153.625
11	0	153.625
12	0	153.625
13	0	153.625
14	0.03	306.625
15	0.03	306.625
16	0.05	408.625
17	0.05	408.625
18	0.05	408.625
19	0.04	357.625
20	0.07	510.625
21	0.09	612.625
22	0.09	612.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.09	612.625
26	0.1	663.625
27	0.13	816.625
28	0.14	867.625
29	0.15	918.625
30	0.15	918.625
31	0.17	1020.625
32	0.18	1071.625
33	0.2	1173.625
34	0.21	1224.625
35	0.23	1326.625
36	0.24	1377.625
37	0.26	1479.625
38	0.28	1581.625
39	0.28	1581.625
40	0.3	1683.625
41	0.31	1734.625
42	0.31	1734.625
43	0.32	1785.625
44	0.34	1887.625
45	0.34	1887.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.05	408.625
6	0.1	663.625
7	0.12	765.625
8	0.13	816.625
9	0.16	969.625
10	0.16	969.625
11	0.19	1122.625
12	0.2	1173.625
13	0.22	1275.625
14	0.22	1275.625
15	0.23	1326.625
16	0.24	1377.625
17	0.24	1377.625
18	0.25	1428.625
19	0.26	1479.625
20	0.28	1581.625
21	0.28	1581.625
22	0.28	1581.625
23	0.29	1632.625

DEGREE	FORCE	MOMENT
24	0.3	1683.625
25	0.31	1734.625
26	0.33	1836.625
27	0.34	1887.625
28	0.34	1887.625
29	0.36	1989.625
30	0.36	1989.625
31	0.38	2091.625
32	0.4	2193.625
33	0.4	2193.625
34	0.41	2244.625
35	0.42	2295.625
36	0.46	2499.625
37	0.5	2703.625
38	0.53	2856.625
39	0.61	3264.625
40	0.62	3315.625
41	0.67	3570.625
42	0.72	3825.625
43	0.76	4029.625
44	0.81	4284.625
45	0.85	4488.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.03	306.625
6	0.07	510.625
7	0.07	510.625
8	0.1	663.625
9	0.14	867.625
10	0.14	867.625
11	0.16	969.625
12	0.18	1071.625
13	0.2	1173.625
14	0.23	1326.625
15	0.25	1428.625
16	0.27	1530.625
17	0.28	1581.625
18	0.29	1632.625
19	0.28	1581.625
20	0.3	1683.625
21	0.31	1734.625
22	0.32	1785.625
23	0.33	1836.625

DEGREE	FORCE	MOMENT
24	0.34	1887.625
25	0.36	1989.625
26	0.37	2040.625
27	0.38	2091.625
28	0.41	2244.625
29	0.43	2346.625
30	0.44	2397.625
31	0.47	2550.625
32	0.47	2550.625
33	0.49	2652.625
34	0.49	2652.625
35	0.5	2703.625
36	0.52	2805.625
37	0.53	2856.625
38	0.56	3009.625
39	0.61	3264.625
40	0.65	3468.625
41	0.69	3672.625
42	0.74	3927.625
43	0.78	4131.625
44	0.83	4386.625
45	0.88	4641.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0.02	255.625
8	0.03	306.625
9	0.05	408.625
10	0.05	408.625
11	0.05	408.625
12	0.05	408.625
13	0.06	459.625
14	0.07	510.625
15	0.07	510.625
16	0.07	510.625
17	0.09	612.625
18	0.09	612.625
19	0.09	612.625
20	0.13	816.625
21	0.14	867.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.17	1020.625
26	0.17	1020.625
27	0.19	1122.625
28	0.2	1173.625
29	0.2	1173.625
30	0.19	1122.625
31	0.19	1122.625
32	0.2	1173.625
33	0.24	1377.625
34	0.27	1530.625
35	0.32	1785.625
36	0.35	1938.625
37	0.36	1989.625
38	0.4	2193.625
39	0.42	2295.625
40	0.46	2499.625
41	0.52	2805.625
42	0.56	3009.625
43	0.64	3417.625
44	0.69	3672.625
45	0.8	4233.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.03	306.625
11	0.05	408.625
12	0.04	357.625
13	0.05	408.625
14	0.05	408.625
15	0.07	510.625
16	0.07	510.625
17	0.08	561.625
18	0.08	561.625
19	0.08	561.625
20	0.08	561.625
21	0.08	561.625
22	0.08	561.625
23	0.08	561.625

DEGREE	FORCE	MOMENT
24	0.08	561.625
25	0.08	561.625
26	0.08	561.625
27	0.08	561.625
28	0.09	612.625
29	0.1	663.625
30	0.12	765.625
31	0.15	918.625
32	0.16	969.625
33	0.19	1122.625
34	0.22	1275.625
35	0.26	1479.625
36	0.29	1632.625
37	0.33	1836.625
38	0.37	2040.625
39	0.4	2193.625
40	0.45	2448.625
41	0.49	2652.625
42	0.52	2805.625
43	0.57	3060.625
44	0.63	3366.625
45	0.67	3570.625



**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.03	306.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.05	408.625
25	0.07	510.625
26	0.08	561.625
27	0.09	612.625
28	0.1	663.625
29	0.13	816.625
30	0.16	969.625
31	0.2	1173.625
32	0.21	1224.625
33	0.24	1377.625
34	0.28	1581.625
35	0.32	1785.625
36	0.36	1989.625
37	0.41	2244.625
38	0.45	2448.625
39	0.5	2703.625
40	0.56	3009.625
41	0.59	3162.625
42	0.62	3315.625
43	0.66	3519.625
44	0.71	3774.625
45	0.74	3927.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.03	306.625
5	0.06	459.625
6	0.08	561.625
7	0.11	714.625
8	0.14	867.625
9	0.16	969.625
10	0.19	1122.625
11	0.23	1326.625
12	0.27	1530.625
13	0.28	1581.625
14	0.31	1734.625
15	0.33	1836.625
16	0.35	1938.625
17	0.37	2040.625
18	0.39	2142.625
19	0.4	2193.625
20	0.42	2295.625
21	0.45	2448.625
22	0.46	2499.625
23	0.48	2601.625

DEGREE	FORCE	MOMENT
24	0.52	2805.625
25	0.53	2856.625
26	0.55	2958.625
27	0.58	3111.625
28	0.6	3213.625
29	0.6	3213.625
30	0.61	3264.625
31	0.62	3315.625
32	0.63	3366.625
33	0.62	3315.625
34	0.61	3264.625
35	0.61	3264.625
36	0.59	3162.625
37	0.58	3111.625
38	0.6	3213.625
39	0.56	3009.625
40	0.56	3009.625
41	0.58	3111.625
42	0.62	3315.625
43	0.68	3621.625
44	0.71	3774.625
45	0.74	3927.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.03	306.625
5	0.04	357.625
6	0.05	408.625
7	0.06	459.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.11	714.625
12	0.12	765.625
13	0.13	816.625
14	0.12	765.625
15	0.13	816.625
16	0.13	816.625
17	0.14	867.625
18	0.16	969.625
19	0.17	1020.625
20	0.18	1071.625
21	0.19	1122.625
22	0.21	1224.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.2	1173.625
25	0.22	1275.625
26	0.22	1275.625
27	0.23	1326.625
28	0.24	1377.625
29	0.24	1377.625
30	0.24	1377.625
31	0.25	1428.625
32	0.24	1377.625
33	0.25	1428.625
34	0.26	1479.625
35	0.28	1581.625
36	0.3	1683.625
37	0.36	1989.625
38	0.39	2142.625
39	0.44	2397.625
40	0.5	2703.625
41	0.53	2856.625
42	0.61	3264.625
43	0.65	3468.625
44	0.7	3723.625
45	0.74	3927.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.02	255.625
14	0.05	408.625
15	0.08	561.625
16	0.11	714.625
17	0.12	765.625
18	0.12	765.625
19	0.16	969.625
20	0.16	969.625
21	0.15	918.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.18	1071.625
26	0.2	1173.625
27	0.2	1173.625
28	0.24	1377.625
29	0.29	1632.625
30	0.34	1887.625
31	0.3	1683.625
32	0.37	2040.625
33	0.41	2244.625
34	0.43	2346.625
35	0.49	2652.625
36	0.54	2907.625
37	0.56	3009.625
38	0.61	3264.625
39	0.64	3417.625
40	0.7	3723.625
41	0.73	3876.625
42	0.79	4182.625
43	0.85	4488.625
44	0.9	4743.625
45	0.92	4845.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0	153.625
11	0	153.625
12	0	153.625
13	0	153.625
14	0	153.625
15	0	153.625
16	0.01	204.625
17	0.01	204.625
18	0.03	306.625
19	0.02	255.625
20	0.04	357.625
21	0.06	459.625
22	0.07	510.625
23	0.09	612.625

DEGREE	FORCE	MOMENT
24	0.1	663.625
25	0.14	867.625
26	0.15	918.625
27	0.19	1122.625
28	0.24	1377.625
29	0.26	1479.625
30	0.3	1683.625
31	0.34	1887.625
32	0.37	2040.625
33	0.42	2295.625
34	0.47	2550.625
35	0.52	2805.625
36	0.57	3060.625
37	0.63	3366.625
38	0.7	3723.625
39	0.72	3825.625
40	0.79	4182.625
41	0.85	4488.625
42	0.88	4641.625
43	0.94	4947.625
44	0.99	5202.625
45	1.05	5508.625

**Bracket Type: Damon II**

**Wire Size: 0.017x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.01	204.625
16	0.01	204.625
17	0.01	204.625
18	0.01	204.625
19	0.02	255.625
20	0.03	306.625
21	0.02	255.625
22	0.05	408.625
23	0.07	510.625

DEGREE	FORCE	MOMENT
24	0.1	663.625
25	0.11	714.625
26	0.12	765.625
27	0.13	816.625
28	0.14	867.625
29	0.12	765.625
30	0.11	714.625
31	0.11	714.625
32	0.12	765.625
33	0.11	714.625
34	0.12	765.625
35	0.13	816.625
36	0.15	918.625
37	0.17	1020.625
38	0.24	1377.625
39	0.3	1683.625
40	0.32	1785.625
41	0.36	1989.625
42	0.41	2244.625
43	0.45	2448.625
44	0.51	2754.625
45	0.54	2907.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.03	306.625
19	0.06	459.625
20	0.06	459.625
21	0.05	408.625
22	0.05	408.625
23	0.07	510.625

DEGREE	FORCE	MOMENT
24	0.08	561.625
25	0.1	663.625
26	0.14	867.625
27	0.16	969.625
28	0.2	1173.625
29	0.23	1326.625
30	0.29	1632.625
31	0.32	1785.625
32	0.38	2091.625
33	0.41	2244.625
34	0.44	2397.625
35	0.49	2652.625
36	0.49	2652.625
37	0.54	2907.625
38	0.63	3366.625
39	0.68	3621.625
40	0.73	3876.625
41	0.78	4131.625
42	0.84	4437.625
43	0.88	4641.625
44	0.93	4896.625
45	0.99	5202.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.01	204.625
13	0.02	255.625
14	0.01	204.625
15	0.03	306.625
16	0.02	255.625
17	0.05	408.625
18	0.03	306.625
19	0.05	408.625
20	0.05	408.625
21	0.06	459.625
22	0.06	459.625
23	0.07	510.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.13	816.625
26	0.15	918.625
27	0.19	1122.625
28	0.21	1224.625
29	0.23	1326.625
30	0.27	1530.625
31	0.31	1734.625
32	0.36	1989.625
33	0.41	2244.625
34	0.45	2448.625
35	0.49	2652.625
36	0.53	2856.625
37	0.6	3213.625
38	0.64	3417.625
39	0.7	3723.625
40	0.75	3978.625
41	0.78	4131.625
42	0.84	4437.625
43	0.87	4590.625
44	0.93	4896.625
45	0.99	5202.625



**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.06	459.625
8	0.06	459.625
9	0.08	561.625
10	0.08	561.625
11	0.09	612.625
12	0.1	663.625
13	0.1	663.625
14	0.1	663.625
15	0.11	714.625
16	0.13	816.625
17	0.12	765.625
18	0.1	663.625
19	0.11	714.625
20	0.11	714.625
21	0.11	714.625
22	0.12	765.625
23	0.13	816.625

DEGREE	FORCE	MOMENT
24	0.15	918.625
25	0.18	1071.625
26	0.24	1377.625
27	0.31	1734.625
28	0.36	1989.625
29	0.39	2142.625
30	0.45	2448.625
31	0.5	2703.625
32	0.53	2856.625
33	0.59	3162.625
34	0.64	3417.625
35	0.69	3672.625
36	0.74	3927.625
37	0.79	4182.625
38	0.82	4335.625
39	0.87	4590.625
40	0.94	4947.625
41	0.98	5151.625
42	1.03	5406.625
43	1.08	5661.625
44	1.12	5865.625
45	1.16	6069.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.04	357.625
9	0.03	306.625
10	0.03	306.625
11	0.04	357.625
12	0.04	357.625
13	0.05	408.625
14	0.03	306.625
15	0.04	357.625
16	0.04	357.625
17	0.05	408.625
18	0.06	459.625
19	0.07	510.625
20	0.08	561.625
21	0.09	612.625
22	0.09	612.625
23	0.09	612.625

DEGREE	FORCE	MOMENT
24	0.09	612.625
25	0.08	561.625
26	0.1	663.625
27	0.12	765.625
28	0.17	1020.625
29	0.23	1326.625
30	0.27	1530.625
31	0.3	1683.625
32	0.34	1887.625
33	0.4	2193.625
34	0.45	2448.625
35	0.5	2703.625
36	0.56	3009.625
37	0.6	3213.625
38	0.64	3417.625
39	0.7	3723.625
40	0.76	4029.625
41	0.8	4233.625
42	0.85	4488.625
43	0.89	4692.625
44	0.95	4998.625
45	1	5253.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.03	306.625
3	0.03	306.625
4	0.04	357.625
5	0.06	459.625
6	0.08	561.625
7	0.07	510.625
8	0.1	663.625
9	0.09	612.625
10	0.09	612.625
11	0.09	612.625
12	0.09	612.625
13	0.1	663.625
14	0.1	663.625
15	0.11	714.625
16	0.1	663.625
17	0.11	714.625
18	0.13	816.625
19	0.14	867.625
20	0.14	867.625
21	0.16	969.625
22	0.17	1020.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.21	1224.625
25	0.24	1377.625
26	0.25	1428.625
27	0.31	1734.625
28	0.32	1785.625
29	0.37	2040.625
30	0.41	2244.625
31	0.46	2499.625
32	0.55	2958.625
33	0.59	3162.625
34	0.62	3315.625
35	0.65	3468.625
36	0.7	3723.625
37	0.75	3978.625
38	0.8	4233.625
39	0.85	4488.625
40	0.89	4692.625
41	0.94	4947.625
42	0.98	5151.625
43	1.02	5355.625
44	1.06	5559.625
45	1.11	5814.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.05	408.625
3	0.06	459.625
4	0.09	612.625
5	0.15	918.625
6	0.18	1071.625
7	0.2	1173.625
8	0.22	1275.625
9	0.23	1326.625
10	0.24	1377.625
11	0.23	1326.625
12	0.27	1530.625
13	0.28	1581.625
14	0.31	1734.625
15	0.33	1836.625
16	0.35	1938.625
17	0.36	1989.625
18	0.37	2040.625
19	0.38	2091.625
20	0.4	2193.625
21	0.4	2193.625
22	0.43	2346.625
23	0.45	2448.625

DEGREE	FORCE	MOMENT
24	0.45	2448.625
25	0.47	2550.625
26	0.5	2703.625
27	0.5	2703.625
28	0.51	2754.625
29	0.52	2805.625
30	0.53	2856.625
31	0.52	2805.625
32	0.54	2907.625
33	0.54	2907.625
34	0.55	2958.625
35	0.57	3060.625
36	0.59	3162.625
37	0.65	3468.625
38	0.69	3672.625
39	0.75	3978.625
40	0.78	4131.625
41	0.86	4539.625
42	0.88	4641.625
43	0.93	4896.625
44	0.99	5202.625
45	1.02	5355.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.04	357.625
14	0.03	306.625
15	0.03	306.625
16	0.03	306.625
17	0.02	255.625
18	0.03	306.625
19	0.04	357.625
20	0.04	357.625
21	0.04	357.625
22	0.05	408.625
23	0.05	408.625

DEGREE	FORCE	MOMENT
24	0.07	510.625
25	0.09	612.625
26	0.11	714.625
27	0.17	1020.625
28	0.21	1224.625
29	0.26	1479.625
30	0.27	1530.625
31	0.32	1785.625
32	0.34	1887.625
33	0.4	2193.625
34	0.46	2499.625
35	0.5	2703.625
36	0.55	2958.625
37	0.6	3213.625
38	0.64	3417.625
39	0.7	3723.625
40	0.73	3876.625
41	0.7	3723.625
42	0.85	4488.625
43	0.88	4641.625
44	0.94	4947.625
45	1	5253.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.03	306.625
7	0.03	306.625
8	0.04	357.625
9	0.04	357.625
10	0.04	357.625
11	0.05	408.625
12	0.05	408.625
13	0.06	459.625
14	0.08	561.625
15	0.09	612.625
16	0.12	765.625
17	0.14	867.625
18	0.16	969.625
19	0.17	1020.625
20	0.17	1020.625
21	0.18	1071.625
22	0.16	969.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.19	1122.625
26	0.21	1224.625
27	0.24	1377.625
28	0.27	1530.625
29	0.33	1836.625
30	0.37	2040.625
31	0.43	2346.625
32	0.44	2397.625
33	0.5	2703.625
34	0.57	3060.625
35	0.61	3264.625
36	0.66	3519.625
37	0.69	3672.625
38	0.75	3978.625
39	0.81	4284.625
40	0.85	4488.625
41	0.89	4692.625
42	0.94	4947.625
43	0.98	5151.625
44	1.04	5457.625
45	1.06	5559.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.04	357.625
5	0.06	459.625
6	0.07	510.625
7	0.05	408.625
8	0.07	510.625
9	0.08	561.625
10	0.1	663.625
11	0.12	765.625
12	0.17	1020.625
13	0.18	1071.625
14	0.22	1275.625
15	0.25	1428.625
16	0.27	1530.625
17	0.3	1683.625
18	0.29	1632.625
19	0.32	1785.625
20	0.33	1836.625
21	0.34	1887.625
22	0.35	1938.625
23	0.36	1989.625

DEGREE	FORCE	MOMENT
24	0.37	2040.625
25	0.38	2091.625
26	0.37	2040.625
27	0.35	1938.625
28	0.36	1989.625
29	0.35	1938.625
30	0.38	2091.625
31	0.43	2346.625
32	0.47	2550.625
33	0.5	2703.625
34	0.55	2958.625
35	0.61	3264.625
36	0.64	3417.625
37	0.7	3723.625
38	0.75	3978.625
39	0.79	4182.625
40	0.83	4386.625
41	0.88	4641.625
42	0.93	4896.625
43	0.97	5100.625
44	1.02	5355.625
45	1.06	5559.625

**Bracket Type: Damon II**

**Wire Size: 0.018x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.03	306.625
6	0.05	408.625
7	0.06	459.625
8	0.09	612.625
9	0.1	663.625
10	0.13	816.625
11	0.17	1020.625
12	0.18	1071.625
13	0.2	1173.625
14	0.19	1122.625
15	0.21	1224.625
16	0.23	1326.625
17	0.23	1326.625
18	0.25	1428.625
19	0.26	1479.625
20	0.26	1479.625
21	0.26	1479.625
22	0.28	1581.625
23	0.28	1581.625

DEGREE	FORCE	MOMENT
24	0.29	1632.625
25	0.29	1632.625
26	0.28	1581.625
27	0.29	1632.625
28	0.29	1632.625
29	0.32	1785.625
30	0.34	1887.625
31	0.43	2346.625
32	0.44	2397.625
33	0.52	2805.625
34	0.59	3162.625
35	0.64	3417.625
36	0.68	3621.625
37	0.73	3876.625
38	0.78	4131.625
39	0.81	4284.625
40	0.91	4794.625
41	0.95	4998.625
42	1.01	5304.625
43	1.05	5508.625
44	1.1	5763.625
45	1.14	5967.625



**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.03	306.625
2	0.08	561.625
3	0.1	663.625
4	0.14	867.625
5	0.19	1122.625
6	0.23	1326.625
7	0.26	1479.625
8	0.29	1632.625
9	0.31	1734.625
10	0.34	1887.625
11	0.36	1989.625
12	0.38	2091.625
13	0.39	2142.625
14	0.39	2142.625
15	0.41	2244.625
16	0.44	2397.625
17	0.45	2448.625
18	0.48	2601.625
19	0.47	2550.625
20	0.51	2754.625
21	0.53	2856.625
22	0.55	2958.625
23	0.57	3060.625

DEGREE	FORCE	MOMENT
24	0.58	3111.625
25	0.61	3264.625
26	0.64	3417.625
27	0.65	3468.625
28	0.66	3519.625
29	0.68	3621.625
30	0.71	3774.625
31	0.74	3927.625
32	0.75	3978.625
33	0.81	4284.625
34	0.84	4437.625
35	0.89	4692.625
36	0.92	4845.625
37	1.02	5355.625
38	1.07	5610.625
39	1.14	5967.625
40	1.19	6222.625
41	1.24	6477.625
42	1.28	6681.625
43	1.34	6987.625
44	1.39	7242.625
45	1.44	7497.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.03	306.625
2	0.05	408.625
3	0.08	561.625
4	0.09	612.625
5	0.1	663.625
6	0.12	765.625
7	0.15	918.625
8	0.18	1071.625
9	0.2	1173.625
10	0.24	1377.625
11	0.25	1428.625
12	0.27	1530.625
13	0.28	1581.625
14	0.3	1683.625
15	0.33	1836.625
16	0.34	1887.625
17	0.35	1938.625
18	0.37	2040.625
19	0.36	1989.625
20	0.4	2193.625
21	0.43	2346.625
22	0.44	2397.625
23	0.44	2397.625

DEGREE	FORCE	MOMENT
24	0.46	2499.625
25	0.47	2550.625
26	0.48	2601.625
27	0.5	2703.625
28	0.53	2856.625
29	0.63	3366.625
30	0.68	3621.625
31	0.73	3876.625
32	0.79	4182.625
33	0.81	4284.625
34	0.89	4692.625
35	0.94	4947.625
36	0.99	5202.625
37	1.07	5610.625
38	1.11	5814.625
39	1.16	6069.625
40	1.23	6426.625
41	1.27	6630.625
42	1.29	6732.625
43	1.36	7089.625
44	1.42	7395.625
45	1.46	7599.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.04	357.625
8	0.05	408.625
9	0.07	510.625
10	0.06	459.625
11	0.06	459.625
12	0.07	510.625
13	0.07	510.625
14	0.08	561.625
15	0.08	561.625
16	0.09	612.625
17	0.09	612.625
18	0.1	663.625
19	0.12	765.625
20	0.14	867.625
21	0.2	1173.625
22	0.27	1530.625
23	0.27	1530.625

DEGREE	FORCE	MOMENT
24	0.31	1734.625
25	0.38	2091.625
26	0.43	2346.625
27	0.5	2703.625
28	0.56	3009.625
29	0.64	3417.625
30	0.7	3723.625
31	0.77	4080.625
32	0.85	4488.625
33	0.94	4947.625
34	1.01	5304.625
35	1.07	5610.625
36	1.14	5967.625
37	1.23	6426.625
38	1.3	6783.625
39	1.36	7089.625
40	1.41	7344.625
41	1.47	7650.625
42	1.54	8007.625
43	1.6	8313.625
44	1.68	8721.625
45	1.71	8874.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.04	357.625
6	0.07	510.625
7	0.1	663.625
8	0.11	714.625
9	0.11	714.625
10	0.11	714.625
11	0.12	765.625
12	0.13	816.625
13	0.14	867.625
14	0.14	867.625
15	0.15	918.625
16	0.16	969.625
17	0.16	969.625
18	0.15	918.625
19	0.15	918.625
20	0.16	969.625
21	0.17	1020.625
22	0.22	1275.625
23	0.27	1530.625

DEGREE	FORCE	MOMENT
24	0.35	1938.625
25	0.4	2193.625
26	0.43	2346.625
27	0.51	2754.625
28	0.55	2958.625
29	0.62	3315.625
30	0.67	3570.625
31	0.72	3825.625
32	0.77	4080.625
33	0.82	4335.625
34	0.89	4692.625
35	0.93	4896.625
36	0.99	5202.625
37	1.05	5508.625
38	1.11	5814.625
39	1.17	6120.625
40	1.23	6426.625
41	1.27	6630.625
42	1.33	6936.625
43	1.38	7191.625
44	1.42	7395.625
45	1.47	7650.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.05	408.625
6	0.08	561.625
7	0.11	714.625
8	0.16	969.625
9	0.19	1122.625
10	0.22	1275.625
11	0.24	1377.625
12	0.28	1581.625
13	0.31	1734.625
14	0.34	1887.625
15	0.37	2040.625
16	0.39	2142.625
17	0.4	2193.625
18	0.43	2346.625
19	0.43	2346.625
20	0.45	2448.625
21	0.47	2550.625
22	0.49	2652.625
23	0.5	2703.625

DEGREE	FORCE	MOMENT
24	0.51	2754.625
25	0.5	2703.625
26	0.55	2958.625
27	0.53	2856.625
28	0.53	2856.625
29	0.58	3111.625
30	0.65	3468.625
31	0.7	3723.625
32	0.75	3978.625
33	0.81	4284.625
34	0.86	4539.625
35	0.92	4845.625
36	0.99	5202.625
37	1.05	5508.625
38	1.1	5763.625
39	1.16	6069.625
40	1.21	6324.625
41	1.27	6630.625
42	1.32	6885.625
43	1.39	7242.625
44	1.43	7446.625
45	1.5	7803.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.01	204.625
3	0.01	204.625
4	0.03	306.625
5	0.04	357.625
6	0.05	408.625
7	0.07	510.625
8	0.08	561.625
9	0.09	612.625
10	0.1	663.625
11	0.11	714.625
12	0.11	714.625
13	0.12	765.625
14	0.14	867.625
15	0.16	969.625
16	0.17	1020.625
17	0.18	1071.625
18	0.18	1071.625
19	0.19	1122.625
20	0.24	1377.625
21	0.29	1632.625
22	0.35	1938.625
23	0.42	2295.625

DEGREE	FORCE	MOMENT
24	0.45	2448.625
25	0.51	2754.625
26	0.56	3009.625
27	0.63	3366.625
28	0.68	3621.625
29	0.74	3927.625
30	0.79	4182.625
31	0.86	4539.625
32	0.9	4743.625
33	0.98	5151.625
34	1.03	5406.625
35	1.09	5712.625
36	1.14	5967.625
37	1.2	6273.625
38	1.27	6630.625
39	1.3	6783.625
40	1.38	7191.625
41	1.42	7395.625
42	1.46	7599.625
43	1.53	7956.625
44	1.57	8160.625
45	1.64	8517.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.02	255.625
8	0.04	357.625
9	0.08	561.625
10	0.11	714.625
11	0.14	867.625
12	0.17	1020.625
13	0.19	1122.625
14	0.24	1377.625
15	0.28	1581.625
16	0.29	1632.625
17	0.34	1887.625
18	0.36	1989.625
19	0.39	2142.625
20	0.44	2397.625
21	0.51	2754.625
22	0.56	3009.625
23	0.61	3264.625

DEGREE	FORCE	MOMENT
24	0.67	3570.625
25	0.72	3825.625
26	0.76	4029.625
27	0.81	4284.625
28	0.86	4539.625
29	0.9	4743.625
30	0.97	5100.625
31	1.01	5304.625
32	1.06	5559.625
33	1.12	5865.625
34	1.16	6069.625
35	1.24	6477.625
36	1.25	6528.625
37	1.33	6936.625
38	1.36	7089.625
39	1.45	7548.625
40	1.5	7803.625
41	1.55	8058.625
42	1.59	8262.625
43	1.62	8415.625
44	1.7	8823.625
45	1.74	9027.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.03	306.625
3	0.04	357.625
4	0.07	510.625
5	0.07	510.625
6	0.09	612.625
7	0.11	714.625
8	0.12	765.625
9	0.14	867.625
10	0.13	816.625
11	0.15	918.625
12	0.14	867.625
13	0.16	969.625
14	0.17	1020.625
15	0.2	1173.625
16	0.24	1377.625
17	0.33	1836.625
18	0.37	2040.625
19	0.46	2499.625
20	0.54	2907.625
21	0.6	3213.625
22	0.66	3519.625
23	0.72	3825.625

DEGREE	FORCE	MOMENT
24	0.79	4182.625
25	0.87	4590.625
26	0.92	4845.625
27	0.98	5151.625
28	1.06	5559.625
29	1.13	5916.625
30	1.18	6171.625
31	1.24	6477.625
32	1.32	6885.625
33	1.36	7089.625
34	1.44	7497.625
35	1.49	7752.625
36	1.53	7956.625
37	1.6	8313.625
38	1.66	8619.625
39	1.71	8874.625
40	1.74	9027.625
41	1.8	9333.625
42	1.85	9588.625
43	1.89	9792.625
44	1.94	10047.625
45	1.99	10302.625



**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.03	306.625
7	0.04	357.625
8	0.08	561.625
9	0.1	663.625
10	0.15	918.625
11	0.15	918.625
12	0.18	1071.625
13	0.21	1224.625
14	0.21	1224.625
15	0.23	1326.625
16	0.26	1479.625
17	0.31	1734.625
18	0.31	1734.625
19	0.35	1938.625
20	0.4	2193.625
21	0.44	2397.625
22	0.52	2805.625
23	0.56	3009.625

DEGREE	FORCE	MOMENT
24	0.64	3417.625
25	0.68	3621.625
26	0.69	3672.625
27	0.76	4029.625
28	0.88	4641.625
29	0.96	5049.625
30	0.98	5151.625
31	1.01	5304.625
32	1.09	5712.625
33	1.15	6018.625
34	1.22	6375.625
35	1.28	6681.625
36	1.34	6987.625
37	1.4	7293.625
38	1.47	7650.625
39	1.5	7803.625
40	1.57	8160.625
41	1.59	8262.625
42	1.67	8670.625
43	1.73	8976.625
44	1.76	9129.625
45	1.83	9486.625

**Bracket Type: Damon II**

**Wire Size: 0.019x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.04	357.625
3	0.06	459.625
4	0.11	714.625
5	0.13	816.625
6	0.15	918.625
7	0.19	1122.625
8	0.21	1224.625
9	0.25	1428.625
10	0.26	1479.625
11	0.28	1581.625
12	0.29	1632.625
13	0.31	1734.625
14	0.33	1836.625
15	0.35	1938.625
16	0.36	1989.625
17	0.37	2040.625
18	0.37	2040.625
19	0.38	2091.625
20	0.41	2244.625
21	0.42	2295.625
22	0.43	2346.625
23	0.46	2499.625

DEGREE	FORCE	MOMENT
24	0.53	2856.625
25	0.57	3060.625
26	0.62	3315.625
27	0.7	3723.625
28	0.75	3978.625
29	0.8	4233.625
30	0.86	4539.625
31	0.91	4794.625
32	0.97	5100.625
33	1.03	5406.625
34	1.12	5865.625
35	1.16	6069.625
36	1.23	6426.625
37	1.29	6732.625
38	1.35	7038.625
39	1.4	7293.625
40	1.47	7650.625
41	1.5	7803.625
42	1.56	8109.625
43	1.61	8364.625
44	1.67	8670.625
45	1.74	9027.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.01	204.625
5	0.02	255.625
6	0.04	357.625
7	0.06	459.625
8	0.06	459.625
9	0.07	510.625
10	0.06	459.625
11	0.06	459.625
12	0.07	510.625
13	0.05	408.625
14	0.06	459.625
15	0.06	459.625
16	0.07	510.625
17	0.07	510.625
18	0.08	561.625
19	0.06	459.625
20	0.07	510.625
21	0.06	459.625
22	0.07	510.625
23	0.07	510.625

DEGREE	FORCE	MOMENT
24	0.08	561.625
25	0.08	561.625
26	0.08	561.625
27	0.08	561.625
28	0.08	561.625
29	0.08	561.625
30	0.1	663.625
31	0.09	612.625
32	0.1	663.625
33	0.08	561.625
34	0.09	612.625
35	0.09	612.625
36	0.08	561.625
37	0.09	612.625
38	0.08	561.625
39	0.07	510.625
40	0.09	612.625
41	0.1	663.625
42	0.12	765.625
43	0.13	816.625
44	0.16	969.625
45	0.19	1122.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.01	204.625
5	0.02	255.625
6	0.01	204.625
7	0.02	255.625
8	0.03	306.625
9	0.03	306.625
10	0.04	357.625
11	0.03	306.625
12	0.04	357.625
13	0.05	408.625
14	0.05	408.625
15	0.07	510.625
16	0.06	459.625
17	0.07	510.625
18	0.08	561.625
19	0.07	510.625
20	0.06	459.625
21	0.07	510.625
22	0.06	459.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.06	459.625
25	0.06	459.625
26	0.04	357.625
27	0.05	408.625
28	0.03	306.625
29	0.04	357.625
30	0.04	357.625
31	0.04	357.625
32	0.03	306.625
33	0.02	255.625
34	0.03	306.625
35	0.03	306.625
36	0.03	306.625
37	0.03	306.625
38	0.03	306.625
39	0.03	306.625
40	0.03	306.625
41	0.05	408.625
42	0.07	510.625
43	0.08	561.625
44	0.12	765.625
45	0.13	816.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.03	306.625
6	0.04	357.625
7	0.06	459.625
8	0.07	510.625
9	0.07	510.625
10	0.09	612.625
11	0.09	612.625
12	0.1	663.625
13	0.09	612.625
14	0.13	816.625
15	0.14	867.625
16	0.16	969.625
17	0.19	1122.625
18	0.22	1275.625
19	0.23	1326.625
20	0.26	1479.625
21	0.28	1581.625
22	0.31	1734.625
23	0.33	1836.625

DEGREE	FORCE	MOMENT
24	0.35	1938.625
25	0.37	2040.625
26	0.36	1989.625
27	0.38	2091.625
28	0.4	2193.625
29	0.41	2244.625
30	0.43	2346.625
31	0.44	2397.625
32	0.45	2448.625
33	0.47	2550.625
34	0.5	2703.625
35	0.53	2856.625
36	0.58	3111.625
37	0.59	3162.625
38	0.61	3264.625
39	0.62	3315.625
40	0.63	3366.625
41	0.64	3417.625
42	0.66	3519.625
43	0.67	3570.625
44	0.68	3621.625
45	0.68	3621.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.03	306.625
8	0.03	306.625
9	0.03	306.625
10	0.03	306.625
11	0.03	306.625
12	0.04	357.625
13	0.06	459.625
14	0.04	357.625
15	0.05	408.625
16	0.05	408.625
17	0.07	510.625
18	0.09	612.625
19	0.1	663.625
20	0.11	714.625
21	0.1	663.625
22	0.1	663.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.1	663.625
25	0.11	714.625
26	0.11	714.625
27	0.11	714.625
28	0.11	714.625
29	0.11	714.625
30	0.11	714.625
31	0.1	663.625
32	0.1	663.625
33	0.1	663.625
34	0.1	663.625
35	0.1	663.625
36	0.1	663.625
37	0.1	663.625
38	0.1	663.625
39	0.1	663.625
40	0.09	612.625
41	0.09	612.625
42	0.08	561.625
43	0.1	663.625
44	0.1	663.625
45	0.12	765.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.03	306.625
4	0.04	357.625
5	0.05	408.625
6	0.06	459.625
7	0.07	510.625
8	0.06	459.625
9	0.06	459.625
10	0.08	561.625
11	0.08	561.625
12	0.09	612.625
13	0.08	561.625
14	0.1	663.625
15	0.1	663.625
16	0.11	714.625
17	0.1	663.625
18	0.11	714.625
19	0.11	714.625
20	0.1	663.625
21	0.1	663.625
22	0.1	663.625
23	0.11	714.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.11	714.625
26	0.08	561.625
27	0.08	561.625
28	0.08	561.625
29	0.08	561.625
30	0.08	561.625
31	0.07	510.625
32	0.07	510.625
33	0.07	510.625
34	0.07	510.625
35	0.07	510.625
36	0.07	510.625
37	0.07	510.625
38	0.07	510.625
39	0.07	510.625
40	0.07	510.625
41	0.07	510.625
42	0.11	714.625
43	0.1	663.625
44	0.13	816.625
45	0.14	867.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.03	306.625
5	0.04	357.625
6	0.05	408.625
7	0.04	357.625
8	0.04	357.625
9	0.04	357.625
10	0.05	408.625
11	0.06	459.625
12	0.06	459.625
13	0.07	510.625
14	0.08	561.625
15	0.08	561.625
16	0.07	510.625
17	0.04	357.625
18	0.04	357.625
19	0.05	408.625
20	0.05	408.625
21	0.05	408.625
22	0.05	408.625
23	0.05	408.625

DEGREE	FORCE	MOMENT
24	0.05	408.625
25	0.05	408.625
26	0.05	408.625
27	0.05	408.625
28	0.05	408.625
29	0.05	408.625
30	0.05	408.625
31	0.05	408.625
32	0.05	408.625
33	0.05	408.625
34	0.05	408.625
35	0.07	510.625
36	0.09	612.625
37	0.09	612.625
38	0.1	663.625
39	0.11	714.625
40	0.12	765.625
41	0.14	867.625
42	0.15	918.625
43	0.19	1122.625
44	0.21	1224.625
45	0.24	1377.625



**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.03	306.625
4	0.03	306.625
5	0.04	357.625
6	0.06	459.625
7	0.07	510.625
8	0.09	612.625
9	0.11	714.625
10	0.12	765.625
11	0.14	867.625
12	0.15	918.625
13	0.18	1071.625
14	0.18	1071.625
15	0.2	1173.625
16	0.22	1275.625
17	0.21	1224.625
18	0.22	1275.625
19	0.22	1275.625
20	0.24	1377.625
21	0.25	1428.625
22	0.26	1479.625
23	0.26	1479.625

DEGREE	FORCE	MOMENT
24	0.26	1479.625
25	0.28	1581.625
26	0.27	1530.625
27	0.27	1530.625
28	0.28	1581.625
29	0.28	1581.625
30	0.3	1683.625
31	0.3	1683.625
32	0.3	1683.625
33	0.3	1683.625
34	0.3	1683.625
35	0.3	1683.625
36	0.3	1683.625
37	0.31	1734.625
38	0.31	1734.625
39	0.32	1785.625
40	0.32	1785.625
41	0.34	1887.625
42	0.33	1836.625
43	0.34	1887.625
44	0.34	1887.625
45	0.34	1887.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.08	561.625
4	0.08	561.625
5	0.1	663.625
6	0.13	816.625
7	0.15	918.625
8	0.16	969.625
9	0.18	1071.625
10	0.2	1173.625
11	0.21	1224.625
12	0.22	1275.625
13	0.24	1377.625
14	0.23	1326.625
15	0.25	1428.625
16	0.26	1479.625
17	0.25	1428.625
18	0.27	1530.625
19	0.27	1530.625
20	0.28	1581.625
21	0.28	1581.625
22	0.28	1581.625
23	0.3	1683.625

DEGREE	FORCE	MOMENT
24	0.31	1734.625
25	0.33	1836.625
26	0.34	1887.625
27	0.35	1938.625
28	0.36	1989.625
29	0.38	2091.625
30	0.38	2091.625
31	0.39	2142.625
32	0.41	2244.625
33	0.42	2295.625
34	0.42	2295.625
35	0.42	2295.625
36	0.42	2295.625
37	0.42	2295.625
38	0.42	2295.625
39	0.42	2295.625
40	0.41	2244.625
41	0.4	2193.625
42	0.4	2193.625
43	0.4	2193.625
44	0.4	2193.625
45	0.43	2346.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.04	357.625
5	0.06	459.625
6	0.06	459.625
7	0.07	510.625
8	0.08	561.625
9	0.08	561.625
10	0.09	612.625
11	0.1	663.625
12	0.09	612.625
13	0.1	663.625
14	0.1	663.625
15	0.1	663.625
16	0.11	714.625
17	0.11	714.625
18	0.12	765.625
19	0.13	816.625
20	0.14	867.625
21	0.14	867.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.16	969.625
26	0.16	969.625
27	0.17	1020.625
28	0.17	1020.625
29	0.17	1020.625
30	0.17	1020.625
31	0.18	1071.625
32	0.18	1071.625
33	0.18	1071.625
34	0.18	1071.625
35	0.18	1071.625
36	0.18	1071.625
37	0.19	1122.625
38	0.19	1122.625
39	0.19	1122.625
40	0.19	1122.625
41	0.19	1122.625
42	0.19	1122.625
43	0.19	1122.625
44	0.2	1173.625
45	0.2	1173.625

**Bracket Type: In-Ovation**

**Wire Size: 0.016x0.022**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.05	408.625
12	0.04	357.625
13	0.03	306.625
14	0.03	306.625
15	0.03	306.625
16	0.04	357.625
17	0.04	357.625
18	0.04	357.625
19	0.04	357.625
20	0.04	357.625
21	0.04	357.625
22	0.04	357.625
23	0.04	357.625

DEGREE	FORCE	MOMENT
24	0.04	357.625
25	0.05	408.625
26	0.07	510.625
27	0.08	561.625
28	0.08	561.625
29	0.08	561.625
30	0.08	561.625
31	0.08	561.625
32	0.09	612.625
33	0.09	612.625
34	0.1	663.625
35	0.09	612.625
36	0.09	612.625
37	0.09	612.625
38	0.08	561.625
39	0.08	561.625
40	0.08	561.625
41	0.08	561.625
42	0.08	561.625
43	0.08	561.625
44	0.08	561.625
45	0.09	612.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.04	357.625
12	0.04	357.625
13	0.04	357.625
14	0.06	459.625
15	0.07	510.625
16	0.07	510.625
17	0.12	765.625
18	0.12	765.625
19	0.13	816.625
20	0.14	867.625
21	0.15	918.625
22	0.17	1020.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.22	1275.625
26	0.21	1224.625
27	0.21	1224.625
28	0.22	1275.625
29	0.22	1275.625
30	0.23	1326.625
31	0.21	1224.625
32	0.21	1224.625
33	0.23	1326.625
34	0.25	1428.625
35	0.31	1734.625
36	0.36	1989.625
37	0.41	2244.625
38	0.45	2448.625
39	0.49	2652.625
40	0.54	2907.625
41	0.58	3111.625
42	0.65	3468.625
43	0.68	3621.625
44	0.74	3927.625
45	0.77	4080.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.03	306.625
6	0.04	357.625
7	0.05	408.625
8	0.06	459.625
9	0.07	510.625
10	0.08	561.625
11	0.08	561.625
12	0.09	612.625
13	0.09	612.625
14	0.09	612.625
15	0.09	612.625
16	0.1	663.625
17	0.1	663.625
18	0.1	663.625
19	0.1	663.625
20	0.11	714.625
21	0.11	714.625
22	0.11	714.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.17	1020.625
26	0.21	1224.625
27	0.24	1377.625
28	0.31	1734.625
29	0.32	1785.625
30	0.36	1989.625
31	0.4	2193.625
32	0.43	2346.625
33	0.49	2652.625
34	0.53	2856.625
35	0.57	3060.625
36	0.62	3315.625
37	0.66	3519.625
38	0.73	3876.625
39	0.79	4182.625
40	0.83	4386.625
41	0.87	4590.625
42	0.94	4947.625
43	1.03	5406.625
44	1.06	5559.625
45	1.09	5712.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.03	306.625
3	0.03	306.625
4	0.04	357.625
5	0.05	408.625
6	0.06	459.625
7	0.07	510.625
8	0.08	561.625
9	0.09	612.625
10	0.1	663.625
11	0.11	714.625
12	0.12	765.625
13	0.13	816.625
14	0.12	765.625
15	0.14	867.625
16	0.14	867.625
17	0.14	867.625
18	0.15	918.625
19	0.15	918.625
20	0.15	918.625
21	0.15	918.625
22	0.16	969.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.17	1020.625
26	0.17	1020.625
27	0.2	1173.625
28	0.25	1428.625
29	0.28	1581.625
30	0.33	1836.625
31	0.39	2142.625
32	0.42	2295.625
33	0.46	2499.625
34	0.49	2652.625
35	0.55	2958.625
36	0.6	3213.625
37	0.63	3366.625
38	0.7	3723.625
39	0.75	3978.625
40	0.78	4131.625
41	0.81	4284.625
42	0.86	4539.625
43	0.91	4794.625
44	0.93	4896.625
45	0.97	5100.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.03	306.625
4	0.03	306.625
5	0.03	306.625
6	0.04	357.625
7	0.04	357.625
8	0.04	357.625
9	0.05	408.625
10	0.05	408.625
11	0.06	459.625
12	0.06	459.625
13	0.07	510.625
14	0.06	459.625
15	0.07	510.625
16	0.07	510.625
17	0.08	561.625
18	0.08	561.625
19	0.08	561.625
20	0.08	561.625
21	0.08	561.625
22	0.08	561.625
23	0.08	561.625

DEGREE	FORCE	MOMENT
24	0.08	561.625
25	0.1	663.625
26	0.09	612.625
27	0.09	612.625
28	0.11	714.625
29	0.13	816.625
30	0.18	1071.625
31	0.22	1275.625
32	0.23	1326.625
33	0.24	1377.625
34	0.32	1785.625
35	0.35	1938.625
36	0.39	2142.625
37	0.42	2295.625
38	0.45	2448.625
39	0.5	2703.625
40	0.54	2907.625
41	0.58	3111.625
42	0.63	3366.625
43	0.66	3519.625
44	0.71	3774.625
45	0.75	3978.625



**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.03	306.625
3	0.04	357.625
4	0.04	357.625
5	0.05	408.625
6	0.06	459.625
7	0.06	459.625
8	0.06	459.625
9	0.07	510.625
10	0.07	510.625
11	0.07	510.625
12	0.07	510.625
13	0.06	459.625
14	0.06	459.625
15	0.06	459.625
16	0.08	561.625
17	0.09	612.625
18	0.08	561.625
19	0.11	714.625
20	0.12	765.625
21	0.12	765.625
22	0.14	867.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.13	816.625
25	0.12	765.625
26	0.14	867.625
27	0.16	969.625
28	0.18	1071.625
29	0.24	1377.625
30	0.26	1479.625
31	0.3	1683.625
32	0.35	1938.625
33	0.38	2091.625
34	0.42	2295.625
35	0.47	2550.625
36	0.51	2754.625
37	0.57	3060.625
38	0.61	3264.625
39	0.66	3519.625
40	0.72	3825.625
41	0.75	3978.625
42	0.78	4131.625
43	0.83	4386.625
44	0.87	4590.625
45	0.94	4947.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.03	306.625
3	0.04	357.625
4	0.05	408.625
5	0.05	408.625
6	0.07	510.625
7	0.07	510.625
8	0.07	510.625
9	0.07	510.625
10	0.08	561.625
11	0.09	612.625
12	0.08	561.625
13	0.07	510.625
14	0.1	663.625
15	0.08	561.625
16	0.08	561.625
17	0.09	612.625
18	0.1	663.625
19	0.09	612.625
20	0.09	612.625
21	0.1	663.625
22	0.1	663.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.1	663.625
25	0.12	765.625
26	0.14	867.625
27	0.16	969.625
28	0.2	1173.625
29	0.22	1275.625
30	0.24	1377.625
31	0.29	1632.625
32	0.33	1836.625
33	0.39	2142.625
34	0.43	2346.625
35	0.47	2550.625
36	0.52	2805.625
37	0.56	3009.625
38	0.61	3264.625
39	0.65	3468.625
40	0.7	3723.625
41	0.76	4029.625
42	0.78	4131.625
43	0.85	4488.625
44	0.91	4794.625
45	0.95	4998.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.03	306.625
4	0.03	306.625
5	0.04	357.625
6	0.06	459.625
7	0.06	459.625
8	0.07	510.625
9	0.09	612.625
10	0.09	612.625
11	0.1	663.625
12	0.1	663.625
13	0.1	663.625
14	0.11	714.625
15	0.12	765.625
16	0.12	765.625
17	0.11	714.625
18	0.11	714.625
19	0.13	816.625
20	0.12	765.625
21	0.13	816.625
22	0.12	765.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.12	765.625
25	0.14	867.625
26	0.17	1020.625
27	0.21	1224.625
28	0.25	1428.625
29	0.29	1632.625
30	0.33	1836.625
31	0.36	1989.625
32	0.4	2193.625
33	0.43	2346.625
34	0.46	2499.625
35	0.51	2754.625
36	0.55	2958.625
37	0.6	3213.625
38	0.66	3519.625
39	0.7	3723.625
40	0.8	4233.625
41	0.85	4488.625
42	0.91	4794.625
43	0.93	4896.625
44	1	5253.625
45	1.06	5559.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.04	357.625
9	0.05	408.625
10	0.06	459.625
11	0.07	510.625
12	0.08	561.625
13	0.11	714.625
14	0.14	867.625
15	0.17	1020.625
16	0.18	1071.625
17	0.2	1173.625
18	0.22	1275.625
19	0.24	1377.625
20	0.24	1377.625
21	0.23	1326.625
22	0.24	1377.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.25	1428.625
25	0.26	1479.625
26	0.27	1530.625
27	0.28	1581.625
28	0.29	1632.625
29	0.31	1734.625
30	0.32	1785.625
31	0.33	1836.625
32	0.34	1887.625
33	0.35	1938.625
34	0.37	2040.625
35	0.39	2142.625
36	0.4	2193.625
37	0.45	2448.625
38	0.5	2703.625
39	0.54	2907.625
40	0.61	3264.625
41	0.64	3417.625
42	0.7	3723.625
43	0.76	4029.625
44	0.8	4233.625
45	0.86	4539.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.01	204.625
9	0.03	306.625
10	0.03	306.625
11	0.04	357.625
12	0.05	408.625
13	0.05	408.625
14	0.05	408.625
15	0.06	459.625
16	0.06	459.625
17	0.08	561.625
18	0.09	612.625
19	0.09	612.625
20	0.09	612.625
21	0.09	612.625
22	0.09	612.625
23	0.09	612.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.12	765.625
26	0.14	867.625
27	0.18	1071.625
28	0.19	1122.625
29	0.23	1326.625
30	0.27	1530.625
31	0.31	1734.625
32	0.34	1887.625
33	0.37	2040.625
34	0.41	2244.625
35	0.45	2448.625
36	0.5	2703.625
37	0.52	2805.625
38	0.57	3060.625
39	0.64	3417.625
40	0.67	3570.625
41	0.71	3774.625
42	0.75	3978.625
43	0.79	4182.625
44	0.83	4386.625
45	0.89	4692.625

**Bracket Type: In-Ovation**

**Wire Size: 0.017x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.03	306.625
5	0.05	408.625
6	0.07	510.625
7	0.07	510.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.13	816.625
12	0.13	816.625
13	0.13	816.625
14	0.14	867.625
15	0.16	969.625
16	0.16	969.625
17	0.17	1020.625
18	0.19	1122.625
19	0.19	1122.625
20	0.19	1122.625
21	0.19	1122.625
22	0.2	1173.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.22	1275.625
26	0.22	1275.625
27	0.25	1428.625
28	0.28	1581.625
29	0.31	1734.625
30	0.37	2040.625
31	0.42	2295.625
32	0.47	2550.625
33	0.53	2856.625
34	0.61	3264.625
35	0.65	3468.625
36	0.72	3825.625
37	0.77	4080.625
38	0.82	4335.625
39	0.88	4641.625
40	0.93	4896.625
41	0.98	5151.625
42	1.02	5355.625
43	1.09	5712.625
44	1.13	5916.625
45	1.17	6120.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.04	357.625
12	0.05	408.625
13	0.05	408.625
14	0.05	408.625
15	0.05	408.625
16	0.05	408.625
17	0.05	408.625
18	0.05	408.625
19	0.05	408.625
20	0.07	510.625
21	0.08	561.625
22	0.09	612.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.18	1071.625
26	0.22	1275.625
27	0.26	1479.625
28	0.27	1530.625
29	0.32	1785.625
30	0.37	2040.625
31	0.44	2397.625
32	0.48	2601.625
33	0.52	2805.625
34	0.57	3060.625
35	0.63	3366.625
36	0.68	3621.625
37	0.75	3978.625
38	0.79	4182.625
39	0.84	4437.625
40	0.93	4896.625
41	0.94	4947.625
42	0.98	5151.625
43	1.04	5457.625
44	1.07	5610.625
45	1.12	5865.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.05	408.625
8	0.06	459.625
9	0.07	510.625
10	0.08	561.625
11	0.09	612.625
12	0.1	663.625
13	0.11	714.625
14	0.12	765.625
15	0.14	867.625
16	0.13	816.625
17	0.15	918.625
18	0.15	918.625
19	0.16	969.625
20	0.15	918.625
21	0.18	1071.625
22	0.18	1071.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.21	1224.625
25	0.21	1224.625
26	0.22	1275.625
27	0.25	1428.625
28	0.27	1530.625
29	0.3	1683.625
30	0.34	1887.625
31	0.37	2040.625
32	0.42	2295.625
33	0.47	2550.625
34	0.51	2754.625
35	0.56	3009.625
36	0.61	3264.625
37	0.67	3570.625
38	0.73	3876.625
39	0.77	4080.625
40	0.82	4335.625
41	0.88	4641.625
42	0.92	4845.625
43	0.96	5049.625
44	1.02	5355.625
45	1.05	5508.625



**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.03	306.625
3	0.02	255.625
4	0.04	357.625
5	0.05	408.625
6	0.05	408.625
7	0.07	510.625
8	0.07	510.625
9	0.07	510.625
10	0.08	561.625
11	0.08	561.625
12	0.09	612.625
13	0.09	612.625
14	0.1	663.625
15	0.1	663.625
16	0.1	663.625
17	0.1	663.625
18	0.11	714.625
19	0.12	765.625
20	0.12	765.625
21	0.12	765.625
22	0.14	867.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.16	969.625
26	0.16	969.625
27	0.19	1122.625
28	0.21	1224.625
29	0.26	1479.625
30	0.3	1683.625
31	0.36	1989.625
32	0.4	2193.625
33	0.44	2397.625
34	0.48	2601.625
35	0.55	2958.625
36	0.58	3111.625
37	0.63	3366.625
38	0.68	3621.625
39	0.73	3876.625
40	0.77	4080.625
41	0.82	4335.625
42	0.87	4590.625
43	0.9	4743.625
44	0.95	4998.625
45	0.99	5202.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.03	306.625
7	0.04	357.625
8	0.04	357.625
9	0.05	408.625
10	0.05	408.625
11	0.06	459.625
12	0.07	510.625
13	0.07	510.625
14	0.08	561.625
15	0.08	561.625
16	0.09	612.625
17	0.09	612.625
18	0.09	612.625
19	0.09	612.625
20	0.1	663.625
21	0.1	663.625
22	0.1	663.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.14	867.625
26	0.19	1122.625
27	0.23	1326.625
28	0.27	1530.625
29	0.3	1683.625
30	0.35	1938.625
31	0.38	2091.625
32	0.43	2346.625
33	0.49	2652.625
34	0.54	2907.625
35	0.6	3213.625
36	0.63	3366.625
37	0.71	3774.625
38	0.74	3927.625
39	0.78	4131.625
40	0.84	4437.625
41	0.9	4743.625
42	0.93	4896.625
43	1.02	5355.625
44	1.04	5457.625
45	1.06	5559.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.03	306.625
3	0.04	357.625
4	0.03	306.625
5	0.05	408.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.05	408.625
12	0.06	459.625
13	0.05	408.625
14	0.05	408.625
15	0.06	459.625
16	0.05	408.625
17	0.07	510.625
18	0.09	612.625
19	0.1	663.625
20	0.13	816.625
21	0.16	969.625
22	0.19	1122.625
23	0.23	1326.625

DEGREE	FORCE	MOMENT
24	0.3	1683.625
25	0.32	1785.625
26	0.38	2091.625
27	0.43	2346.625
28	0.46	2499.625
29	0.54	2907.625
30	0.58	3111.625
31	0.64	3417.625
32	0.7	3723.625
33	0.74	3927.625
34	0.78	4131.625
35	0.83	4386.625
36	0.9	4743.625
37	0.92	4845.625
38	0.98	5151.625
39	1.01	5304.625
40	1.07	5610.625
41	1.12	5865.625
42	1.15	6018.625
43	1.2	6273.625
44	1.26	6579.625
45	1.3	6783.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.04	357.625
8	0.04	357.625
9	0.04	357.625
10	0.05	408.625
11	0.06	459.625
12	0.06	459.625
13	0.07	510.625
14	0.08	561.625
15	0.08	561.625
16	0.08	561.625
17	0.08	561.625
18	0.08	561.625
19	0.08	561.625
20	0.12	765.625
21	0.13	816.625
22	0.16	969.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.27	1530.625
26	0.33	1836.625
27	0.37	2040.625
28	0.44	2397.625
29	0.5	2703.625
30	0.55	2958.625
31	0.63	3366.625
32	0.66	3519.625
33	0.7	3723.625
34	0.72	3825.625
35	0.82	4335.625
36	0.88	4641.625
37	0.93	4896.625
38	0.99	5202.625
39	1.03	5406.625
40	1.08	5661.625
41	1.14	5967.625
42	1.19	6222.625
43	1.24	6477.625
44	1.25	6528.625
45	1.32	6885.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.03	306.625
10	0.03	306.625
11	0.04	357.625
12	0.04	357.625
13	0.05	408.625
14	0.06	459.625
15	0.08	561.625
16	0.08	561.625
17	0.08	561.625
18	0.09	612.625
19	0.1	663.625
20	0.12	765.625
21	0.15	918.625
22	0.18	1071.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.27	1530.625
25	0.31	1734.625
26	0.37	2040.625
27	0.44	2397.625
28	0.45	2448.625
29	0.5	2703.625
30	0.56	3009.625
31	0.6	3213.625
32	0.64	3417.625
33	0.7	3723.625
34	0.74	3927.625
35	0.78	4131.625
36	0.84	4437.625
37	0.88	4641.625
38	0.93	4896.625
39	0.96	5049.625
40	1.01	5304.625
41	1.05	5508.625
42	1.1	5763.625
43	1.13	5916.625
44	1.18	6171.625
45	1.21	6324.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.03	306.625
7	0.06	459.625
8	0.06	459.625
9	0.08	561.625
10	0.11	714.625
11	0.12	765.625
12	0.14	867.625
13	0.16	969.625
14	0.19	1122.625
15	0.2	1173.625
16	0.21	1224.625
17	0.23	1326.625
18	0.24	1377.625
19	0.26	1479.625
20	0.27	1530.625
21	0.27	1530.625
22	0.28	1581.625
23	0.3	1683.625

DEGREE	FORCE	MOMENT
24	0.3	1683.625
25	0.31	1734.625
26	0.32	1785.625
27	0.34	1887.625
28	0.38	2091.625
29	0.44	2397.625
30	0.49	2652.625
31	0.53	2856.625
32	0.58	3111.625
33	0.61	3264.625
34	0.67	3570.625
35	0.72	3825.625
36	0.78	4131.625
37	0.84	4437.625
38	0.87	4590.625
39	0.95	4998.625
40	1.03	5406.625
41	1.06	5559.625
42	1.1	5763.625
43	1.14	5967.625
44	1.21	6324.625
45	1.25	6528.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.03	306.625
4	0.05	408.625
5	0.06	459.625
6	0.08	561.625
7	0.1	663.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.13	816.625
12	0.13	816.625
13	0.13	816.625
14	0.14	867.625
15	0.15	918.625
16	0.21	1224.625
17	0.25	1428.625
18	0.31	1734.625
19	0.35	1938.625
20	0.41	2244.625
21	0.46	2499.625
22	0.5	2703.625
23	0.53	2856.625

DEGREE	FORCE	MOMENT
24	0.63	3366.625
25	0.66	3519.625
26	0.7	3723.625
27	0.74	3927.625
28	0.79	4182.625
29	0.84	4437.625
30	0.88	4641.625
31	0.92	4845.625
32	0.98	5151.625
33	1.02	5355.625
34	1.08	5661.625
35	1.11	5814.625
36	1.17	6120.625
37	1.23	6426.625
38	1.29	6732.625
39	1.31	6834.625
40	1.37	7140.625
41	1.39	7242.625
42	1.44	7497.625
43	1.5	7803.625
44	1.55	8058.625
45	1.57	8160.625

**Bracket Type: In-Ovation**

**Wire Size: 0.018x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.05	408.625
12	0.07	510.625
13	0.08	561.625
14	0.12	765.625
15	0.18	1071.625
16	0.22	1275.625
17	0.27	1530.625
18	0.33	1836.625
19	0.38	2091.625
20	0.42	2295.625
21	0.48	2601.625
22	0.55	2958.625
23	0.59	3162.625

DEGREE	FORCE	MOMENT
24	0.63	3366.625
25	0.69	3672.625
26	0.74	3927.625
27	0.8	4233.625
28	0.84	4437.625
29	0.9	4743.625
30	0.95	4998.625
31	1	5253.625
32	1.05	5508.625
33	1.09	5712.625
34	1.12	5865.625
35	1.18	6171.625
36	1.23	6426.625
37	1.28	6681.625
38	1.3	6783.625
39	1.35	7038.625
40	1.39	7242.625
41	1.43	7446.625
42	1.48	7701.625
43	1.52	7905.625
44	1.55	8058.625
45	1.58	8211.625



**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.04	357.625
10	0.04	357.625
11	0.08	561.625
12	0.1	663.625
13	0.14	867.625
14	0.22	1275.625
15	0.23	1326.625
16	0.27	1530.625
17	0.33	1836.625
18	0.39	2142.625
19	0.44	2397.625
20	0.47	2550.625
21	0.51	2754.625
22	0.58	3111.625
23	0.63	3366.625

DEGREE	FORCE	MOMENT
24	0.68	3621.625
25	0.72	3825.625
26	0.78	4131.625
27	0.84	4437.625
28	0.88	4641.625
29	0.93	4896.625
30	0.99	5202.625
31	1.04	5457.625
32	1.1	5763.625
33	1.15	6018.625
34	1.2	6273.625
35	1.25	6528.625
36	1.32	6885.625
37	1.37	7140.625
38	1.44	7497.625
39	1.48	7701.625
40	1.55	8058.625
41	1.6	8313.625
42	1.64	8517.625
43	1.69	8772.625
44	1.73	8976.625
45	1.79	9282.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.03	306.625
3	0.05	408.625
4	0.07	510.625
5	0.07	510.625
6	0.09	612.625
7	0.1	663.625
8	0.1	663.625
9	0.11	714.625
10	0.12	765.625
11	0.14	867.625
12	0.15	918.625
13	0.17	1020.625
14	0.21	1224.625
15	0.25	1428.625
16	0.3	1683.625
17	0.36	1989.625
18	0.41	2244.625
19	0.45	2448.625
20	0.53	2856.625
21	0.58	3111.625
22	0.64	3417.625
23	0.71	3774.625

DEGREE	FORCE	MOMENT
24	0.77	4080.625
25	0.84	4437.625
26	0.9	4743.625
27	0.97	5100.625
28	1.03	5406.625
29	1.09	5712.625
30	1.16	6069.625
31	1.22	6375.625
32	1.28	6681.625
33	1.36	7089.625
34	1.41	7344.625
35	1.47	7650.625
36	1.53	7956.625
37	1.59	8262.625
38	1.65	8568.625
39	1.71	8874.625
40	1.76	9129.625
41	1.82	9435.625
42	1.87	9690.625
43	1.93	9996.625
44	1.97	10200.625
45	2.02	10455.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.05	408.625
8	0.07	510.625
9	0.11	714.625
10	0.16	969.625
11	0.18	1071.625
12	0.23	1326.625
13	0.26	1479.625
14	0.35	1938.625
15	0.38	2091.625
16	0.41	2244.625
17	0.45	2448.625
18	0.52	2805.625
19	0.56	3009.625
20	0.6	3213.625
21	0.65	3468.625
22	0.69	3672.625
23	0.78	4131.625

DEGREE	FORCE	MOMENT
24	0.8	4233.625
25	0.88	4641.625
26	0.9	4743.625
27	0.97	5100.625
28	1.03	5406.625
29	1.1	5763.625
30	1.18	6171.625
31	1.21	6324.625
32	1.3	6783.625
33	1.35	7038.625
34	1.42	7395.625
35	1.48	7701.625
36	1.56	8109.625
37	1.6	8313.625
38	1.65	8568.625
39	1.7	8823.625
40	1.76	9129.625
41	1.8	9333.625
42	1.87	9690.625
43	1.91	9894.625
44	1.94	10047.625
45	2.01	10404.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.04	357.625
8	0.06	459.625
9	0.1	663.625
10	0.15	918.625
11	0.2	1173.625
12	0.26	1479.625
13	0.3	1683.625
14	0.34	1887.625
15	0.4	2193.625
16	0.44	2397.625
17	0.49	2652.625
18	0.56	3009.625
19	0.61	3264.625
20	0.63	3366.625
21	0.68	3621.625
22	0.72	3825.625
23	0.78	4131.625

DEGREE	FORCE	MOMENT
24	0.83	4386.625
25	0.87	4590.625
26	0.93	4896.625
27	0.98	5151.625
28	1.02	5355.625
29	1.09	5712.625
30	1.15	6018.625
31	1.19	6222.625
32	1.27	6630.625
33	1.3	6783.625
34	1.34	6987.625
35	1.41	7344.625
36	1.47	7650.625
37	1.56	8109.625
38	1.59	8262.625
39	1.64	8517.625
40	1.72	8925.625
41	1.75	9078.625
42	1.83	9486.625
43	1.86	9639.625
44	1.92	9945.625
45	1.97	10200.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.04	357.625
8	0.05	408.625
9	0.05	408.625
10	0.05	408.625
11	0.08	561.625
12	0.08	561.625
13	0.09	612.625
14	0.14	867.625
15	0.23	1326.625
16	0.27	1530.625
17	0.31	1734.625
18	0.37	2040.625
19	0.42	2295.625
20	0.47	2550.625
21	0.51	2754.625
22	0.55	2958.625
23	0.63	3366.625

DEGREE	FORCE	MOMENT
24	0.67	3570.625
25	0.71	3774.625
26	0.76	4029.625
27	0.81	4284.625
28	0.85	4488.625
29	0.91	4794.625
30	0.99	5202.625
31	1.04	5457.625
32	1.09	5712.625
33	1.13	5916.625
34	1.21	6324.625
35	1.28	6681.625
36	1.33	6936.625
37	1.39	7242.625
38	1.47	7650.625
39	1.51	7854.625
40	1.56	8109.625
41	1.64	8517.625
42	1.68	8721.625
43	1.74	9027.625
44	1.79	9282.625
45	1.83	9486.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.04	357.625
7	0.04	357.625
8	0.05	408.625
9	0.05	408.625
10	0.12	765.625
11	0.12	765.625
12	0.12	765.625
13	0.13	816.625
14	0.18	1071.625
15	0.22	1275.625
16	0.26	1479.625
17	0.31	1734.625
18	0.37	2040.625
19	0.44	2397.625
20	0.49	2652.625
21	0.56	3009.625
22	0.61	3264.625
23	0.64	3417.625

DEGREE	FORCE	MOMENT
24	0.69	3672.625
25	0.76	4029.625
26	0.82	4335.625
27	0.88	4641.625
28	0.95	4998.625
29	1.02	5355.625
30	1.07	5610.625
31	1.13	5916.625
32	1.2	6273.625
33	1.25	6528.625
34	1.32	6885.625
35	1.38	7191.625
36	1.44	7497.625
37	1.51	7854.625
38	1.56	8109.625
39	1.62	8415.625
40	1.68	8721.625
41	1.74	9027.625
42	1.8	9333.625
43	1.84	9537.625
44	1.88	9741.625
45	1.94	10047.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.02	255.625
10	0.05	408.625
11	0.11	714.625
12	0.15	918.625
13	0.22	1275.625
14	0.26	1479.625
15	0.33	1836.625
16	0.36	1989.625
17	0.41	2244.625
18	0.46	2499.625
19	0.52	2805.625
20	0.55	2958.625
21	0.59	3162.625
22	0.66	3519.625
23	0.71	3774.625

DEGREE	FORCE	MOMENT
24	0.76	4029.625
25	0.8	4233.625
26	0.88	4641.625
27	0.92	4845.625
28	0.96	5049.625
29	1.01	5304.625
30	1.06	5559.625
31	1.1	5763.625
32	1.17	6120.625
33	1.22	6375.625
34	1.26	6579.625
35	1.31	6834.625
36	1.37	7140.625
37	1.43	7446.625
38	1.47	7650.625
39	1.54	8007.625
40	1.6	8313.625
41	1.64	8517.625
42	1.69	8772.625
43	1.75	9078.625
44	1.78	9231.625
45	1.83	9486.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.04	357.625
4	0.04	357.625
5	0.05	408.625
6	0.06	459.625
7	0.07	510.625
8	0.07	510.625
9	0.07	510.625
10	0.11	714.625
11	0.12	765.625
12	0.18	1071.625
13	0.23	1326.625
14	0.26	1479.625
15	0.3	1683.625
16	0.33	1836.625
17	0.41	2244.625
18	0.45	2448.625
19	0.48	2601.625
20	0.53	2856.625
21	0.67	3570.625
22	0.65	3468.625
23	0.7	3723.625

DEGREE	FORCE	MOMENT
24	0.75	3978.625
25	0.82	4335.625
26	0.87	4590.625
27	0.92	4845.625
28	0.95	4998.625
29	1.01	5304.625
30	1.08	5661.625
31	1.11	5814.625
32	1.17	6120.625
33	1.23	6426.625
34	1.29	6732.625
35	1.34	6987.625
36	1.41	7344.625
37	1.46	7599.625
38	1.51	7854.625
39	1.58	8211.625
40	1.63	8466.625
41	1.68	8721.625
42	1.73	8976.625
43	1.77	9180.625
44	1.82	9435.625
45	1.87	9690.625



**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.04	357.625
10	0.05	408.625
11	0.06	459.625
12	0.09	612.625
13	0.07	510.625
14	0.06	459.625
15	0.09	612.625
16	0.15	918.625
17	0.19	1122.625
18	0.32	1785.625
19	0.34	1887.625
20	0.38	2091.625
21	0.42	2295.625
22	0.46	2499.625
23	0.51	2754.625

DEGREE	FORCE	MOMENT
24	0.56	3009.625
25	0.61	3264.625
26	0.66	3519.625
27	0.72	3825.625
28	0.78	4131.625
29	0.85	4488.625
30	0.94	4947.625
31	1.02	5355.625
32	1.1	5763.625
33	1.23	6426.625
34	1.32	6885.625
35	1.43	7446.625
36	1.51	7854.625
37	1.56	8109.625
38	1.6	8313.625
39	1.65	8568.625
40	1.65	8568.625
41	1.73	8976.625
42	1.8	9333.625
43	1.84	9537.625
44	1.89	9792.625
45	1.93	9996.625

**Bracket Type: In-Ovation**

**Wire Size: 0.019x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.04	357.625
15	0.05	408.625
16	0.09	612.625
17	0.16	969.625
18	0.23	1326.625
19	0.24	1377.625
20	0.29	1632.625
21	0.33	1836.625
22	0.38	2091.625
23	0.44	2397.625

DEGREE	FORCE	MOMENT
24	0.48	2601.625
25	0.52	2805.625
26	0.58	3111.625
27	0.63	3366.625
28	0.69	3672.625
29	0.73	3876.625
30	0.79	4182.625
31	0.85	4488.625
32	0.93	4896.625
33	0.97	5100.625
34	1.02	5355.625
35	1.09	5712.625
36	1.15	6018.625
37	1.2	6273.625
38	1.25	6528.625
39	1.31	6834.625
40	1.37	7140.625
41	1.41	7344.625
42	1.49	7752.625
43	1.54	8007.625
44	1.6	8313.625
45	1.63	8466.625

**Bracket Type: Speed**

**Wire Size: 0.016x0.022**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.03	306.625
4	0.05	408.625
5	0.07	510.625
6	0.07	510.625
7	0.07	510.625
8	0.08	561.625
9	0.09	612.625
10	0.09	612.625
11	0.1	663.625
12	0.1	663.625
13	0.12	765.625
14	0.12	765.625
15	0.12	765.625
16	0.13	816.625
17	0.14	867.625
18	0.14	867.625
19	0.15	918.625
20	0.16	969.625
21	0.19	1122.625
22	0.21	1224.625
23	0.23	1326.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.25	1428.625
26	0.26	1479.625
27	0.28	1581.625
28	0.29	1632.625
29	0.29	1632.625
30	0.29	1632.625
31	0.23	1326.625
32	0.24	1377.625
33	0.26	1479.625
34	0.28	1581.625
35	0.3	1683.625
36	0.31	1734.625
37	0.32	1785.625
38	0.31	1734.625
39	0.33	1836.625
40	0.33	1836.625
41	0.36	1989.625
42	0.37	2040.625
43	0.39	2142.625
44	0.41	2244.625
45	0.44	2397.625

**Bracket Type: Speed**  
**Wire Size: 0.016x0.022**  
**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.04	357.625
3	0.05	408.625
4	0.08	561.625
5	0.1	663.625
6	0.11	714.625
7	0.14	867.625
8	0.16	969.625
9	0.16	969.625
10	0.18	1071.625
11	0.19	1122.625
12	0.21	1224.625
13	0.21	1224.625
14	0.23	1326.625
15	0.24	1377.625
16	0.24	1377.625
17	0.25	1428.625
18	0.27	1530.625
19	0.26	1479.625
20	0.28	1581.625
21	0.28	1581.625
22	0.27	1530.625
23	0.28	1581.625

DEGREE	FORCE	MOMENT
24	0.3	1683.625
25	0.3	1683.625
26	0.3	1683.625
27	0.31	1734.625
28	0.32	1785.625
29	0.33	1836.625
30	0.31	1734.625
31	0.33	1836.625
32	0.34	1887.625
33	0.36	1989.625
34	0.37	2040.625
35	0.37	2040.625
36	0.38	2091.625
37	0.38	2091.625
38	0.41	2244.625
39	0.43	2346.625
40	0.43	2346.625
41	0.44	2397.625
42	0.46	2499.625
43	0.47	2550.625
44	0.48	2601.625
45	0.49	2652.625

**Bracket Type: Speed**  
**Wire Size: 0.016x0.022**  
**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.04	357.625
5	0.05	408.625
6	0.08	561.625
7	0.09	612.625
8	0.11	714.625
9	0.13	816.625
10	0.14	867.625
11	0.16	969.625
12	0.17	1020.625
13	0.17	1020.625
14	0.18	1071.625
15	0.2	1173.625
16	0.2	1173.625
17	0.22	1275.625
18	0.23	1326.625
19	0.24	1377.625
20	0.25	1428.625
21	0.26	1479.625
22	0.26	1479.625
23	0.25	1428.625

DEGREE	FORCE	MOMENT
24	0.27	1530.625
25	0.26	1479.625
26	0.28	1581.625
27	0.29	1632.625
28	0.29	1632.625
29	0.27	1530.625
30	0.29	1632.625
31	0.28	1581.625
32	0.27	1530.625
33	0.27	1530.625
34	0.24	1377.625
35	0.25	1428.625
36	0.28	1581.625
37	0.29	1632.625
38	0.32	1785.625
39	0.33	1836.625
40	0.36	1989.625
41	0.39	2142.625
42	0.41	2244.625
43	0.43	2346.625
44	0.45	2448.625
45	0.46	2499.625

**Bracket Type: Speed**

**Wire Size: 0.016x0.022**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.03	306.625
7	0.06	459.625
8	0.06	459.625
9	0.06	459.625
10	0.08	561.625
11	0.1	663.625
12	0.1	663.625
13	0.12	765.625
14	0.12	765.625
15	0.14	867.625
16	0.15	918.625
17	0.15	918.625
18	0.17	1020.625
19	0.18	1071.625
20	0.18	1071.625
21	0.19	1122.625
22	0.19	1122.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.2	1173.625
26	0.22	1275.625
27	0.21	1224.625
28	0.22	1275.625
29	0.2	1173.625
30	0.21	1224.625
31	0.21	1224.625
32	0.22	1275.625
33	0.23	1326.625
34	0.23	1326.625
35	0.23	1326.625
36	0.24	1377.625
37	0.25	1428.625
38	0.25	1428.625
39	0.25	1428.625
40	0.27	1530.625
41	0.27	1530.625
42	0.28	1581.625
43	0.29	1632.625
44	0.29	1632.625
45	0.29	1632.625

**Bracket Type: Speed**

**Wire Size: 0.016x0.022**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.03	306.625
4	0.04	357.625
5	0.05	408.625
6	0.08	561.625
7	0.1	663.625
8	0.13	816.625
9	0.13	816.625
10	0.14	867.625
11	0.16	969.625
12	0.18	1071.625
13	0.19	1122.625
14	0.21	1224.625
15	0.22	1275.625
16	0.23	1326.625
17	0.25	1428.625
18	0.27	1530.625
19	0.28	1581.625
20	0.29	1632.625
21	0.31	1734.625
22	0.31	1734.625
23	0.32	1785.625

DEGREE	FORCE	MOMENT
24	0.33	1836.625
25	0.35	1938.625
26	0.36	1989.625
27	0.36	1989.625
28	0.37	2040.625
29	0.38	2091.625
30	0.4	2193.625
31	0.41	2244.625
32	0.42	2295.625
33	0.42	2295.625
34	0.45	2448.625
35	0.45	2448.625
36	0.45	2448.625
37	0.48	2601.625
38	0.48	2601.625
39	0.49	2652.625
40	0.49	2652.625
41	0.51	2754.625
42	0.53	2856.625
43	0.52	2805.625
44	0.53	2856.625
45	0.55	2958.625

**Bracket Type: Speed**

**Wire Size: 0.016x0.022**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.03	306.625
5	0.05	408.625
6	0.06	459.625
7	0.06	459.625
8	0.09	612.625
9	0.1	663.625
10	0.1	663.625
11	0.11	714.625
12	0.1	663.625
13	0.12	765.625
14	0.13	816.625
15	0.12	765.625
16	0.12	765.625
17	0.13	816.625
18	0.15	918.625
19	0.16	969.625
20	0.15	918.625
21	0.16	969.625
22	0.15	918.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.17	1020.625
26	0.16	969.625
27	0.17	1020.625
28	0.17	1020.625
29	0.17	1020.625
30	0.18	1071.625
31	0.18	1071.625
32	0.19	1122.625
33	0.19	1122.625
34	0.21	1224.625
35	0.22	1275.625
36	0.22	1275.625
37	0.25	1428.625
38	0.27	1530.625
39	0.29	1632.625
40	0.29	1632.625
41	0.29	1632.625
42	0.28	1581.625
43	0.3	1683.625
44	0.3	1683.625
45	0.33	1836.625



**Bracket Type: Speed**  
**Wire Size: 0.016x0.022**  
**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.03	306.625
8	0.04	357.625
9	0.03	306.625
10	0.02	255.625
11	0.03	306.625
12	0.04	357.625
13	0.05	408.625
14	0.05	408.625
15	0.05	408.625
16	0.04	357.625
17	0.05	408.625
18	0.05	408.625
19	0.05	408.625
20	0.05	408.625
21	0.05	408.625
22	0.05	408.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.07	510.625
25	0.07	510.625
26	0.09	612.625
27	0.11	714.625
28	0.14	867.625
29	0.16	969.625
30	0.17	1020.625
31	0.2	1173.625
32	0.21	1224.625
33	0.21	1224.625
34	0.2	1173.625
35	0.22	1275.625
36	0.23	1326.625
37	0.23	1326.625
38	0.22	1275.625
39	0.22	1275.625
40	0.22	1275.625
41	0.21	1224.625
42	0.21	1224.625
43	0.2	1173.625
44	0.23	1326.625
45	0.25	1428.625

**Bracket Type: Speed**

**Wire Size: 0.016x0.022**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.03	306.625
4	0.03	306.625
5	0.04	357.625
6	0.03	306.625
7	0.05	408.625
8	0.04	357.625
9	0.04	357.625
10	0.05	408.625
11	0.04	357.625
12	0.05	408.625
13	0.06	459.625
14	0.05	408.625
15	0.06	459.625
16	0.06	459.625
17	0.06	459.625
18	0.07	510.625
19	0.07	510.625
20	0.07	510.625
21	0.06	459.625
22	0.06	459.625
23	0.07	510.625

DEGREE	FORCE	MOMENT
24	0.07	510.625
25	0.07	510.625
26	0.08	561.625
27	0.08	561.625
28	0.1	663.625
29	0.11	714.625
30	0.11	714.625
31	0.12	765.625
32	0.12	765.625
33	0.14	867.625
34	0.14	867.625
35	0.14	867.625
36	0.13	816.625
37	0.14	867.625
38	0.13	816.625
39	0.16	969.625
40	0.17	1020.625
41	0.2	1173.625
42	0.21	1224.625
43	0.23	1326.625
44	0.25	1428.625
45	0.25	1428.625

**Bracket Type: Speed**  
**Wire Size: 0.016x0.022**  
**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.03	306.625
5	0.06	459.625
6	0.06	459.625
7	0.07	510.625
8	0.07	510.625
9	0.09	612.625
10	0.09	612.625
11	0.09	612.625
12	0.11	714.625
13	0.1	663.625
14	0.1	663.625
15	0.11	714.625
16	0.11	714.625
17	0.12	765.625
18	0.14	867.625
19	0.11	714.625
20	0.13	816.625
21	0.15	918.625
22	0.15	918.625
23	0.14	867.625

DEGREE	FORCE	MOMENT
24	0.15	918.625
25	0.14	867.625
26	0.15	918.625
27	0.15	918.625
28	0.15	918.625
29	0.16	969.625
30	0.16	969.625
31	0.17	1020.625
32	0.18	1071.625
33	0.18	1071.625
34	0.2	1173.625
35	0.21	1224.625
36	0.21	1224.625
37	0.24	1377.625
38	0.25	1428.625
39	0.26	1479.625
40	0.26	1479.625
41	0.27	1530.625
42	0.27	1530.625
43	0.29	1632.625
44	0.3	1683.625
45	0.31	1734.625

**Bracket Type: Speed**  
**Wire Size: 0.016x0.022**  
**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.03	306.625
5	0.04	357.625
6	0.06	459.625
7	0.07	510.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.1	663.625
12	0.13	816.625
13	0.13	816.625
14	0.15	918.625
15	0.14	867.625
16	0.15	918.625
17	0.16	969.625
18	0.16	969.625
19	0.16	969.625
20	0.17	1020.625
21	0.16	969.625
22	0.17	1020.625
23	0.17	1020.625

DEGREE	FORCE	MOMENT
24	0.18	1071.625
25	0.19	1122.625
26	0.19	1122.625
27	0.18	1071.625
28	0.18	1071.625
29	0.18	1071.625
30	0.18	1071.625
31	0.19	1122.625
32	0.19	1122.625
33	0.19	1122.625
34	0.21	1224.625
35	0.21	1224.625
36	0.23	1326.625
37	0.24	1377.625
38	0.25	1428.625
39	0.26	1479.625
40	0.28	1581.625
41	0.3	1683.625
42	0.3	1683.625
43	0.33	1836.625
44	0.34	1887.625
45	0.35	1938.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.04	357.625
7	0.06	459.625
8	0.06	459.625
9	0.08	561.625
10	0.08	561.625
11	0.11	714.625
12	0.1	663.625
13	0.11	714.625
14	0.14	867.625
15	0.14	867.625
16	0.15	918.625
17	0.16	969.625
18	0.15	918.625
19	0.18	1071.625
20	0.17	1020.625
21	0.19	1122.625
22	0.19	1122.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.22	1275.625
26	0.23	1326.625
27	0.22	1275.625
28	0.24	1377.625
29	0.24	1377.625
30	0.25	1428.625
31	0.26	1479.625
32	0.28	1581.625
33	0.3	1683.625
34	0.32	1785.625
35	0.37	2040.625
36	0.39	2142.625
37	0.4	2193.625
38	0.44	2397.625
39	0.45	2448.625
40	0.49	2652.625
41	0.51	2754.625
42	0.52	2805.625
43	0.56	3009.625
44	0.59	3162.625
45	0.61	3264.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.03	306.625
4	0.05	408.625
5	0.06	459.625
6	0.08	561.625
7	0.1	663.625
8	0.09	612.625
9	0.11	714.625
10	0.12	765.625
11	0.12	765.625
12	0.13	816.625
13	0.16	969.625
14	0.15	918.625
15	0.15	918.625
16	0.17	1020.625
17	0.19	1122.625
18	0.2	1173.625
19	0.2	1173.625
20	0.21	1224.625
21	0.22	1275.625
22	0.22	1275.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.26	1479.625
26	0.28	1581.625
27	0.26	1479.625
28	0.27	1530.625
29	0.28	1581.625
30	0.3	1683.625
31	0.32	1785.625
32	0.33	1836.625
33	0.36	1989.625
34	0.37	2040.625
35	0.39	2142.625
36	0.44	2397.625
37	0.45	2448.625
38	0.49	2652.625
39	0.52	2805.625
40	0.56	3009.625
41	0.6	3213.625
42	0.63	3366.625
43	0.65	3468.625
44	0.7	3723.625
45	0.72	3825.625

**Bracket Type: Speed**  
**Wire Size: 0.017x0.025**  
**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.05	408.625
4	0.07	510.625
5	0.09	612.625
6	0.11	714.625
7	0.14	867.625
8	0.19	1122.625
9	0.19	1122.625
10	0.22	1275.625
11	0.24	1377.625
12	0.27	1530.625
13	0.27	1530.625
14	0.29	1632.625
15	0.3	1683.625
16	0.31	1734.625
17	0.33	1836.625
18	0.33	1836.625
19	0.33	1836.625
20	0.35	1938.625
21	0.39	2142.625
22	0.44	2397.625
23	0.47	2550.625

DEGREE	FORCE	MOMENT
24	0.48	2601.625
25	0.49	2652.625
26	0.49	2652.625
27	0.49	2652.625
28	0.49	2652.625
29	0.5	2703.625
30	0.5	2703.625
31	0.49	2652.625
32	0.5	2703.625
33	0.51	2754.625
34	0.52	2805.625
35	0.52	2805.625
36	0.55	2958.625
37	0.54	2907.625
38	0.58	3111.625
39	0.59	3162.625
40	0.6	3213.625
41	0.62	3315.625
42	0.68	3621.625
43	0.72	3825.625
44	0.73	3876.625
45	0.74	3927.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.03	306.625
3	0.05	408.625
4	0.06	459.625
5	0.08	561.625
6	0.09	612.625
7	0.1	663.625
8	0.11	714.625
9	0.11	714.625
10	0.12	765.625
11	0.13	816.625
12	0.13	816.625
13	0.14	867.625
14	0.14	867.625
15	0.14	867.625
16	0.16	969.625
17	0.15	918.625
18	0.15	918.625
19	0.17	1020.625
20	0.18	1071.625
21	0.2	1173.625
22	0.2	1173.625
23	0.22	1275.625

DEGREE	FORCE	MOMENT
24	0.23	1326.625
25	0.24	1377.625
26	0.24	1377.625
27	0.26	1479.625
28	0.27	1530.625
29	0.29	1632.625
30	0.3	1683.625
31	0.32	1785.625
32	0.33	1836.625
33	0.34	1887.625
34	0.37	2040.625
35	0.37	2040.625
36	0.4	2193.625
37	0.43	2346.625
38	0.44	2397.625
39	0.47	2550.625
40	0.51	2754.625
41	0.55	2958.625
42	0.56	3009.625
43	0.59	3162.625
44	0.61	3264.625
45	0.63	3366.625



**Bracket Type: Speed**  
**Wire Size: 0.017x0.025**  
**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.03	306.625
4	0.05	408.625
5	0.05	408.625
6	0.05	408.625
7	0.07	510.625
8	0.08	561.625
9	0.09	612.625
10	0.1	663.625
11	0.11	714.625
12	0.11	714.625
13	0.12	765.625
14	0.12	765.625
15	0.13	816.625
16	0.14	867.625
17	0.15	918.625
18	0.16	969.625
19	0.17	1020.625
20	0.18	1071.625
21	0.18	1071.625
22	0.18	1071.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.2	1173.625
26	0.2	1173.625
27	0.2	1173.625
28	0.19	1122.625
29	0.21	1224.625
30	0.21	1224.625
31	0.25	1428.625
32	0.27	1530.625
33	0.3	1683.625
34	0.31	1734.625
35	0.31	1734.625
36	0.32	1785.625
37	0.32	1785.625
38	0.36	1989.625
39	0.35	1938.625
40	0.4	2193.625
41	0.42	2295.625
42	0.43	2346.625
43	0.48	2601.625
44	0.49	2652.625
45	0.51	2754.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.02	255.625
3	0.02	255.625
4	0.05	408.625
5	0.05	408.625
6	0.09	612.625
7	0.09	612.625
8	0.1	663.625
9	0.11	714.625
10	0.12	765.625
11	0.13	816.625
12	0.14	867.625
13	0.14	867.625
14	0.14	867.625
15	0.16	969.625
16	0.17	1020.625
17	0.16	969.625
18	0.17	1020.625
19	0.16	969.625
20	0.18	1071.625
21	0.19	1122.625
22	0.18	1071.625
23	0.22	1275.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.25	1428.625
26	0.26	1479.625
27	0.29	1632.625
28	0.29	1632.625
29	0.3	1683.625
30	0.31	1734.625
31	0.32	1785.625
32	0.32	1785.625
33	0.33	1836.625
34	0.33	1836.625
35	0.34	1887.625
36	0.35	1938.625
37	0.35	1938.625
38	0.35	1938.625
39	0.36	1989.625
40	0.36	1989.625
41	0.38	2091.625
42	0.38	2091.625
43	0.4	2193.625
44	0.42	2295.625
45	0.45	2448.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.03	306.625
4	0.04	357.625
5	0.04	357.625
6	0.06	459.625
7	0.07	510.625
8	0.09	612.625
9	0.09	612.625
10	0.11	714.625
11	0.13	816.625
12	0.15	918.625
13	0.15	918.625
14	0.16	969.625
15	0.18	1071.625
16	0.18	1071.625
17	0.2	1173.625
18	0.2	1173.625
19	0.2	1173.625
20	0.21	1224.625
21	0.24	1377.625
22	0.27	1530.625
23	0.28	1581.625

DEGREE	FORCE	MOMENT
24	0.3	1683.625
25	0.33	1836.625
26	0.35	1938.625
27	0.35	1938.625
28	0.38	2091.625
29	0.37	2040.625
30	0.4	2193.625
31	0.41	2244.625
32	0.44	2397.625
33	0.46	2499.625
34	0.46	2499.625
35	0.5	2703.625
36	0.54	2907.625
37	0.54	2907.625
38	0.57	3060.625
39	0.59	3162.625
40	0.61	3264.625
41	0.64	3417.625
42	0.65	3468.625
43	0.66	3519.625
44	0.68	3621.625
45	0.71	3774.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.05	408.625
4	0.07	510.625
5	0.07	510.625
6	0.09	612.625
7	0.09	612.625
8	0.1	663.625
9	0.11	714.625
10	0.1	663.625
11	0.1	663.625
12	0.11	714.625
13	0.1	663.625
14	0.11	714.625
15	0.12	765.625
16	0.13	816.625
17	0.13	816.625
18	0.14	867.625
19	0.16	969.625
20	0.17	1020.625
21	0.16	969.625
22	0.19	1122.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.21	1224.625
25	0.23	1326.625
26	0.24	1377.625
27	0.25	1428.625
28	0.27	1530.625
29	0.28	1581.625
30	0.29	1632.625
31	0.31	1734.625
32	0.33	1836.625
33	0.34	1887.625
34	0.36	1989.625
35	0.37	2040.625
36	0.37	2040.625
37	0.36	1989.625
38	0.37	2040.625
39	0.37	2040.625
40	0.38	2091.625
41	0.39	2142.625
42	0.42	2295.625
43	0.43	2346.625
44	0.45	2448.625
45	0.48	2601.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.03	306.625
4	0.03	306.625
5	0.05	408.625
6	0.05	408.625
7	0.07	510.625
8	0.07	510.625
9	0.08	561.625
10	0.08	561.625
11	0.09	612.625
12	0.09	612.625
13	0.07	510.625
14	0.08	561.625
15	0.07	510.625
16	0.07	510.625
17	0.07	510.625
18	0.06	459.625
19	0.06	459.625
20	0.08	561.625
21	0.08	561.625
22	0.08	561.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.12	765.625
26	0.13	816.625
27	0.14	867.625
28	0.14	867.625
29	0.16	969.625
30	0.17	1020.625
31	0.18	1071.625
32	0.2	1173.625
33	0.24	1377.625
34	0.25	1428.625
35	0.27	1530.625
36	0.31	1734.625
37	0.33	1836.625
38	0.38	2091.625
39	0.4	2193.625
40	0.41	2244.625
41	0.42	2295.625
42	0.48	2601.625
43	0.48	2601.625
44	0.5	2703.625
45	0.53	2856.625

**Bracket Type: Speed**

**Wire Size: 0.017x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.04	357.625
6	0.06	459.625
7	0.07	510.625
8	0.08	561.625
9	0.08	561.625
10	0.11	714.625
11	0.11	714.625
12	0.12	765.625
13	0.13	816.625
14	0.13	816.625
15	0.14	867.625
16	0.15	918.625
17	0.16	969.625
18	0.16	969.625
19	0.14	867.625
20	0.15	918.625
21	0.15	918.625
22	0.18	1071.625
23	0.2	1173.625

DEGREE	FORCE	MOMENT
24	0.21	1224.625
25	0.23	1326.625
26	0.25	1428.625
27	0.27	1530.625
28	0.29	1632.625
29	0.31	1734.625
30	0.32	1785.625
31	0.33	1836.625
32	0.35	1938.625
33	0.35	1938.625
34	0.38	2091.625
35	0.39	2142.625
36	0.4	2193.625
37	0.42	2295.625
38	0.43	2346.625
39	0.46	2499.625
40	0.47	2550.625
41	0.48	2601.625
42	0.5	2703.625
43	0.5	2703.625
44	0.57	3060.625
45	0.51	2754.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.03	306.625
7	0.04	357.625
8	0.04	357.625
9	0.07	510.625
10	0.07	510.625
11	0.08	561.625
12	0.1	663.625
13	0.11	714.625
14	0.1	663.625
15	0.12	765.625
16	0.13	816.625
17	0.14	867.625
18	0.15	918.625
19	0.15	918.625
20	0.14	867.625
21	0.16	969.625
22	0.16	969.625
23	0.17	1020.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.19	1122.625
26	0.19	1122.625
27	0.19	1122.625
28	0.2	1173.625
29	0.2	1173.625
30	0.18	1071.625
31	0.18	1071.625
32	0.19	1122.625
33	0.19	1122.625
34	0.19	1122.625
35	0.19	1122.625
36	0.19	1122.625
37	0.24	1377.625
38	0.26	1479.625
39	0.3	1683.625
40	0.32	1785.625
41	0.36	1989.625
42	0.39	2142.625
43	0.41	2244.625
44	0.44	2397.625
45	0.45	2448.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.03	306.625
3	0.04	357.625
4	0.05	408.625
5	0.07	510.625
6	0.08	561.625
7	0.1	663.625
8	0.11	714.625
9	0.12	765.625
10	0.14	867.625
11	0.15	918.625
12	0.16	969.625
13	0.17	1020.625
14	0.18	1071.625
15	0.18	1071.625
16	0.19	1122.625
17	0.21	1224.625
18	0.22	1275.625
19	0.24	1377.625
20	0.26	1479.625
21	0.26	1479.625
22	0.28	1581.625
23	0.29	1632.625

DEGREE	FORCE	MOMENT
24	0.31	1734.625
25	0.31	1734.625
26	0.3	1683.625
27	0.29	1632.625
28	0.28	1581.625
29	0.27	1530.625
30	0.26	1479.625
31	0.26	1479.625
32	0.25	1428.625
33	0.24	1377.625
34	0.24	1377.625
35	0.25	1428.625
36	0.3	1683.625
37	0.31	1734.625
38	0.32	1785.625
39	0.35	1938.625
40	0.36	1989.625
41	0.38	2091.625
42	0.39	2142.625
43	0.41	2244.625
44	0.42	2295.625
45	0.41	2244.625



**Bracket Type: Speed**  
**Wire Size: 0.018x0.025**  
**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.04	357.625
5	0.08	561.625
6	0.08	561.625
7	0.08	561.625
8	0.1	663.625
9	0.11	714.625
10	0.13	816.625
11	0.13	816.625
12	0.14	867.625
13	0.15	918.625
14	0.15	918.625
15	0.15	918.625
16	0.18	1071.625
17	0.19	1122.625
18	0.21	1224.625
19	0.22	1275.625
20	0.22	1275.625
21	0.23	1326.625
22	0.24	1377.625
23	0.27	1530.625

DEGREE	FORCE	MOMENT
24	0.28	1581.625
25	0.29	1632.625
26	0.3	1683.625
27	0.31	1734.625
28	0.32	1785.625
29	0.34	1887.625
30	0.34	1887.625
31	0.37	2040.625
32	0.37	2040.625
33	0.38	2091.625
34	0.39	2142.625
35	0.42	2295.625
36	0.44	2397.625
37	0.45	2448.625
38	0.47	2550.625
39	0.51	2754.625
40	0.52	2805.625
41	0.58	3111.625
42	0.59	3162.625
43	0.6	3213.625
44	0.63	3366.625
45	0.68	3621.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.03	306.625
6	0.04	357.625
7	0.05	408.625
8	0.06	459.625
9	0.06	459.625
10	0.05	408.625
11	0.08	561.625
12	0.09	612.625
13	0.09	612.625
14	0.11	714.625
15	0.12	765.625
16	0.11	714.625
17	0.13	816.625
18	0.13	816.625
19	0.14	867.625
20	0.15	918.625
21	0.17	1020.625
22	0.18	1071.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.22	1275.625
26	0.22	1275.625
27	0.23	1326.625
28	0.24	1377.625
29	0.25	1428.625
30	0.27	1530.625
31	0.29	1632.625
32	0.29	1632.625
33	0.32	1785.625
34	0.33	1836.625
35	0.34	1887.625
36	0.36	1989.625
37	0.37	2040.625
38	0.41	2244.625
39	0.42	2295.625
40	0.46	2499.625
41	0.47	2550.625
42	0.5	2703.625
43	0.52	2805.625
44	0.53	2856.625
45	0.56	3009.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.03	306.625
6	0.04	357.625
7	0.07	510.625
8	0.07	510.625
9	0.07	510.625
10	0.09	612.625
11	0.08	561.625
12	0.09	612.625
13	0.09	612.625
14	0.12	765.625
15	0.12	765.625
16	0.15	918.625
17	0.17	1020.625
18	0.19	1122.625
19	0.2	1173.625
20	0.23	1326.625
21	0.27	1530.625
22	0.29	1632.625
23	0.34	1887.625

DEGREE	FORCE	MOMENT
24	0.37	2040.625
25	0.41	2244.625
26	0.44	2397.625
27	0.48	2601.625
28	0.5	2703.625
29	0.55	2958.625
30	0.56	3009.625
31	0.6	3213.625
32	0.64	3417.625
33	0.67	3570.625
34	0.69	3672.625
35	0.7	3723.625
36	0.73	3876.625
37	0.74	3927.625
38	0.77	4080.625
39	0.79	4182.625
40	0.83	4386.625
41	0.84	4437.625
42	0.85	4488.625
43	0.89	4692.625
44	0.91	4794.625
45	0.94	4947.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.04	357.625
5	0.04	357.625
6	0.07	510.625
7	0.08	561.625
8	0.07	510.625
9	0.09	612.625
10	0.07	510.625
11	0.08	561.625
12	0.1	663.625
13	0.11	714.625
14	0.1	663.625
15	0.12	765.625
16	0.13	816.625
17	0.13	816.625
18	0.15	918.625
19	0.16	969.625
20	0.19	1122.625
21	0.2	1173.625
22	0.21	1224.625
23	0.23	1326.625

DEGREE	FORCE	MOMENT
24	0.25	1428.625
25	0.25	1428.625
26	0.29	1632.625
27	0.31	1734.625
28	0.31	1734.625
29	0.32	1785.625
30	0.34	1887.625
31	0.34	1887.625
32	0.33	1836.625
33	0.35	1938.625
34	0.37	2040.625
35	0.38	2091.625
36	0.39	2142.625
37	0.4	2193.625
38	0.42	2295.625
39	0.42	2295.625
40	0.43	2346.625
41	0.46	2499.625
42	0.49	2652.625
43	0.5	2703.625
44	0.53	2856.625
45	0.55	2958.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.02	255.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.02	255.625
13	0.01	204.625
14	0.02	255.625
15	0.02	255.625
16	0.03	306.625
17	0.05	408.625
18	0.06	459.625
19	0.04	357.625
20	0.08	561.625
21	0.08	561.625
22	0.09	612.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.12	765.625
26	0.13	816.625
27	0.15	918.625
28	0.16	969.625
29	0.17	1020.625
30	0.19	1122.625
31	0.21	1224.625
32	0.23	1326.625
33	0.24	1377.625
34	0.27	1530.625
35	0.3	1683.625
36	0.31	1734.625
37	0.34	1887.625
38	0.37	2040.625
39	0.42	2295.625
40	0.46	2499.625
41	0.48	2601.625
42	0.51	2754.625
43	0.52	2805.625
44	0.55	2958.625
45	0.57	3060.625

**Bracket Type: Speed**  
**Wire Size: 0.018x0.025**  
**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.03	306.625
4	0.02	255.625
5	0.04	357.625
6	0.05	408.625
7	0.05	408.625
8	0.04	357.625
9	0.05	408.625
10	0.07	510.625
11	0.06	459.625
12	0.08	561.625
13	0.09	612.625
14	0.08	561.625
15	0.08	561.625
16	0.09	612.625
17	0.09	612.625
18	0.11	714.625
19	0.12	765.625
20	0.12	765.625
21	0.14	867.625
22	0.16	969.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.21	1224.625
26	0.23	1326.625
27	0.24	1377.625
28	0.27	1530.625
29	0.27	1530.625
30	0.3	1683.625
31	0.31	1734.625
32	0.32	1785.625
33	0.33	1836.625
34	0.34	1887.625
35	0.36	1989.625
36	0.37	2040.625
37	0.4	2193.625
38	0.4	2193.625
39	0.41	2244.625
40	0.42	2295.625
41	0.43	2346.625
42	0.43	2346.625
43	0.45	2448.625
44	0.46	2499.625
45	0.48	2601.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.02	255.625
7	0.04	357.625
8	0.06	459.625
9	0.07	510.625
10	0.09	612.625
11	0.09	612.625
12	0.09	612.625
13	0.09	612.625
14	0.11	714.625
15	0.11	714.625
16	0.12	765.625
17	0.12	765.625
18	0.13	816.625
19	0.15	918.625
20	0.13	816.625
21	0.15	918.625
22	0.13	816.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.15	918.625
25	0.17	1020.625
26	0.19	1122.625
27	0.19	1122.625
28	0.21	1224.625
29	0.22	1275.625
30	0.22	1275.625
31	0.23	1326.625
32	0.23	1326.625
33	0.25	1428.625
34	0.28	1581.625
35	0.3	1683.625
36	0.32	1785.625
37	0.35	1938.625
38	0.37	2040.625
39	0.41	2244.625
40	0.45	2448.625
41	0.49	2652.625
42	0.5	2703.625
43	0.54	2907.625
44	0.58	3111.625
45	0.62	3315.625

**Bracket Type: Speed**

**Wire Size: 0.018x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.04	357.625
4	0.05	408.625
5	0.07	510.625
6	0.07	510.625
7	0.08	561.625
8	0.11	714.625
9	0.12	765.625
10	0.14	867.625
11	0.15	918.625
12	0.16	969.625
13	0.17	1020.625
14	0.18	1071.625
15	0.16	969.625
16	0.19	1122.625
17	0.19	1122.625
18	0.19	1122.625
19	0.19	1122.625
20	0.21	1224.625
21	0.21	1224.625
22	0.21	1224.625
23	0.2	1173.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.22	1275.625
26	0.22	1275.625
27	0.23	1326.625
28	0.24	1377.625
29	0.25	1428.625
30	0.26	1479.625
31	0.25	1428.625
32	0.25	1428.625
33	0.27	1530.625
34	0.31	1734.625
35	0.34	1887.625
36	0.37	2040.625
37	0.41	2244.625
38	0.45	2448.625
39	0.49	2652.625
40	0.52	2805.625
41	0.52	2805.625
42	0.49	2652.625
43	0.5	2703.625
44	0.51	2754.625
45	0.52	2805.625



**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.03	306.625
3	0.04	357.625
4	0.05	408.625
5	0.06	459.625
6	0.07	510.625
7	0.08	561.625
8	0.08	561.625
9	0.08	561.625
10	0.09	612.625
11	0.09	612.625
12	0.08	561.625
13	0.09	612.625
14	0.09	612.625
15	0.1	663.625
16	0.1	663.625
17	0.12	765.625
18	0.12	765.625
19	0.13	816.625
20	0.14	867.625
21	0.15	918.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.18	1071.625
25	0.2	1173.625
26	0.23	1326.625
27	0.24	1377.625
28	0.28	1581.625
29	0.29	1632.625
30	0.31	1734.625
31	0.34	1887.625
32	0.37	2040.625
33	0.38	2091.625
34	0.4	2193.625
35	0.42	2295.625
36	0.44	2397.625
37	0.46	2499.625
38	0.48	2601.625
39	0.5	2703.625
40	0.5	2703.625
41	0.51	2754.625
42	0.48	2601.625
43	0.46	2499.625
44	0.44	2397.625
45	0.43	2346.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.03	306.625
4	0.04	357.625
5	0.04	357.625
6	0.06	459.625
7	0.07	510.625
8	0.09	612.625
9	0.1	663.625
10	0.12	765.625
11	0.14	867.625
12	0.15	918.625
13	0.15	918.625
14	0.16	969.625
15	0.17	1020.625
16	0.18	1071.625
17	0.19	1122.625
18	0.21	1224.625
19	0.22	1275.625
20	0.24	1377.625
21	0.26	1479.625
22	0.28	1581.625
23	0.29	1632.625

DEGREE	FORCE	MOMENT
24	0.32	1785.625
25	0.35	1938.625
26	0.39	2142.625
27	0.44	2397.625
28	0.47	2550.625
29	0.52	2805.625
30	0.54	2907.625
31	0.57	3060.625
32	0.6	3213.625
33	0.62	3315.625
34	0.65	3468.625
35	0.66	3519.625
36	0.69	3672.625
37	0.7	3723.625
38	0.72	3825.625
39	0.74	3927.625
40	0.77	4080.625
41	0.79	4182.625
42	0.82	4335.625
43	0.82	4335.625
44	0.83	4386.625
45	0.85	4488.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.06	459.625
6	0.09	612.625
7	0.09	612.625
8	0.14	867.625
9	0.16	969.625
10	0.16	969.625
11	0.19	1122.625
12	0.2	1173.625
13	0.2	1173.625
14	0.22	1275.625
15	0.23	1326.625
16	0.24	1377.625
17	0.25	1428.625
18	0.25	1428.625
19	0.26	1479.625
20	0.25	1428.625
21	0.25	1428.625
22	0.27	1530.625
23	0.28	1581.625

DEGREE	FORCE	MOMENT
24	0.27	1530.625
25	0.27	1530.625
26	0.31	1734.625
27	0.33	1836.625
28	0.34	1887.625
29	0.36	1989.625
30	0.38	2091.625
31	0.39	2142.625
32	0.4	2193.625
33	0.4	2193.625
34	0.42	2295.625
35	0.43	2346.625
36	0.46	2499.625
37	0.48	2601.625
38	0.48	2601.625
39	0.51	2754.625
40	0.52	2805.625
41	0.53	2856.625
42	0.56	3009.625
43	0.58	3111.625
44	0.59	3162.625
45	0.6	3213.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.06	459.625
5	0.05	408.625
6	0.08	561.625
7	0.07	510.625
8	0.05	408.625
9	0.03	306.625
10	0.04	357.625
11	0.04	357.625
12	0.04	357.625
13	0.06	459.625
14	0.09	612.625
15	0.14	867.625
16	0.16	969.625
17	0.24	1377.625
18	0.3	1683.625
19	0.33	1836.625
20	0.34	1887.625
21	0.41	2244.625
22	0.44	2397.625
23	0.45	2448.625

DEGREE	FORCE	MOMENT
24	0.48	2601.625
25	0.48	2601.625
26	0.48	2601.625
27	0.49	2652.625
28	0.48	2601.625
29	0.49	2652.625
30	0.5	2703.625
31	0.48	2601.625
32	0.45	2448.625
33	0.49	2652.625
34	0.53	2856.625
35	0.57	3060.625
36	0.61	3264.625
37	0.66	3519.625
38	0.69	3672.625
39	0.74	3927.625
40	0.76	4029.625
41	0.81	4284.625
42	0.84	4437.625
43	0.86	4539.625
44	0.87	4590.625
45	0.9	4743.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.06	459.625
6	0.07	510.625
7	0.12	765.625
8	0.14	867.625
9	0.16	969.625
10	0.18	1071.625
11	0.19	1122.625
12	0.2	1173.625
13	0.21	1224.625
14	0.23	1326.625
15	0.23	1326.625
16	0.26	1479.625
17	0.29	1632.625
18	0.34	1887.625
19	0.38	2091.625
20	0.44	2397.625
21	0.46	2499.625
22	0.51	2754.625
23	0.54	2907.625

DEGREE	FORCE	MOMENT
24	0.56	3009.625
25	0.57	3060.625
26	0.54	2907.625
27	0.53	2856.625
28	0.53	2856.625
29	0.58	3111.625
30	0.62	3315.625
31	0.64	3417.625
32	0.66	3519.625
33	0.7	3723.625
34	0.74	3927.625
35	0.78	4131.625
36	0.8	4233.625
37	0.83	4386.625
38	0.85	4488.625
39	0.9	4743.625
40	0.94	4947.625
41	0.96	5049.625
42	1.01	5304.625
43	1.04	5457.625
44	1.06	5559.625
45	1.06	5559.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.04	357.625
6	0.05	408.625
7	0.06	459.625
8	0.11	714.625
9	0.13	816.625
10	0.15	918.625
11	0.17	1020.625
12	0.18	1071.625
13	0.19	1122.625
14	0.2	1173.625
15	0.2	1173.625
16	0.22	1275.625
17	0.22	1275.625
18	0.22	1275.625
19	0.23	1326.625
20	0.23	1326.625
21	0.24	1377.625
22	0.24	1377.625
23	0.25	1428.625

DEGREE	FORCE	MOMENT
24	0.28	1581.625
25	0.28	1581.625
26	0.31	1734.625
27	0.34	1887.625
28	0.35	1938.625
29	0.39	2142.625
30	0.41	2244.625
31	0.41	2244.625
32	0.42	2295.625
33	0.43	2346.625
34	0.44	2397.625
35	0.44	2397.625
36	0.42	2295.625
37	0.44	2397.625
38	0.44	2397.625
39	0.45	2448.625
40	0.49	2652.625
41	0.51	2754.625
42	0.53	2856.625
43	0.58	3111.625
44	0.61	3264.625
45	0.63	3366.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.02	255.625
9	0.03	306.625
10	0.04	357.625
11	0.04	357.625
12	0.04	357.625
13	0.07	510.625
14	0.06	459.625
15	0.05	408.625
16	0.07	510.625
17	0.07	510.625
18	0.09	612.625
19	0.09	612.625
20	0.11	714.625
21	0.13	816.625
22	0.16	969.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.27	1530.625
26	0.31	1734.625
27	0.31	1734.625
28	0.34	1887.625
29	0.36	1989.625
30	0.37	2040.625
31	0.38	2091.625
32	0.38	2091.625
33	0.39	2142.625
34	0.4	2193.625
35	0.42	2295.625
36	0.43	2346.625
37	0.42	2295.625
38	0.41	2244.625
39	0.42	2295.625
40	0.4	2193.625
41	0.42	2295.625
42	0.44	2397.625
43	0.47	2550.625
44	0.49	2652.625
45	0.51	2754.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.02	255.625
4	0.02	255.625
5	0.05	408.625
6	0.05	408.625
7	0.05	408.625
8	0.07	510.625
9	0.09	612.625
10	0.08	561.625
11	0.09	612.625
12	0.1	663.625
13	0.1	663.625
14	0.12	765.625
15	0.13	816.625
16	0.13	816.625
17	0.12	765.625
18	0.13	816.625
19	0.14	867.625
20	0.14	867.625
21	0.17	1020.625
22	0.17	1020.625
23	0.2	1173.625

DEGREE	FORCE	MOMENT
24	0.23	1326.625
25	0.25	1428.625
26	0.28	1581.625
27	0.32	1785.625
28	0.34	1887.625
29	0.38	2091.625
30	0.39	2142.625
31	0.43	2346.625
32	0.45	2448.625
33	0.46	2499.625
34	0.48	2601.625
35	0.5	2703.625
36	0.5	2703.625
37	0.51	2754.625
38	0.56	3009.625
39	0.56	3009.625
40	0.57	3060.625
41	0.58	3111.625
42	0.58	3111.625
43	0.64	3417.625
44	0.65	3468.625
45	0.66	3519.625



**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.03	306.625
4	0.07	510.625
5	0.09	612.625
6	0.11	714.625
7	0.15	918.625
8	0.16	969.625
9	0.18	1071.625
10	0.19	1122.625
11	0.19	1122.625
12	0.18	1071.625
13	0.18	1071.625
14	0.23	1326.625
15	0.27	1530.625
16	0.3	1683.625
17	0.35	1938.625
18	0.39	2142.625
19	0.45	2448.625
20	0.49	2652.625
21	0.53	2856.625
22	0.58	3111.625
23	0.61	3264.625

DEGREE	FORCE	MOMENT
24	0.65	3468.625
25	0.69	3672.625
26	0.71	3774.625
27	0.73	3876.625
28	0.77	4080.625
29	0.8	4233.625
30	0.82	4335.625
31	0.84	4437.625
32	0.87	4590.625
33	0.9	4743.625
34	0.91	4794.625
35	0.94	4947.625
36	0.95	4998.625
37	0.97	5100.625
38	0.99	5202.625
39	0.99	5202.625
40	0.98	5151.625
41	0.96	5049.625
42	0.84	4437.625
43	0.86	4539.625
44	0.85	4488.625
45	0.82	4335.625

**Bracket Type: Speed**

**Wire Size: 0.019x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.03	306.625
5	0.05	408.625
6	0.07	510.625
7	0.09	612.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.11	714.625
12	0.12	765.625
13	0.12	765.625
14	0.15	918.625
15	0.16	969.625
16	0.17	1020.625
17	0.17	1020.625
18	0.18	1071.625
19	0.24	1377.625
20	0.31	1734.625
21	0.33	1836.625
22	0.37	2040.625
23	0.41	2244.625

DEGREE	FORCE	MOMENT
24	0.44	2397.625
25	0.49	2652.625
26	0.52	2805.625
27	0.55	2958.625
28	0.55	2958.625
29	0.57	3060.625
30	0.6	3213.625
31	0.6	3213.625
32	0.63	3366.625
33	0.65	3468.625
34	0.66	3519.625
35	0.67	3570.625
36	0.64	3417.625
37	0.65	3468.625
38	0.64	3417.625
39	0.64	3417.625
40	0.63	3366.625
41	0.62	3315.625
42	0.61	3264.625
43	0.58	3111.625
44	0.58	3111.625
45	0.58	3111.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.03	306.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.02	255.625
22	0.02	255.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.02	255.625
25	0.02	255.625
26	0.02	255.625
27	0.02	255.625
28	0.02	255.625
29	0.02	255.625
30	0.02	255.625
31	0.02	255.625
32	0.02	255.625
33	0.02	255.625
34	0.02	255.625
35	0.03	306.625
36	0.03	306.625
37	0.03	306.625
38	0.03	306.625
39	0.03	306.625
40	0.03	306.625
41	0.03	306.625
42	0.03	306.625
43	0.03	306.625
44	0.03	306.625
45	0.04	357.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.02	255.625
10	0.04	357.625
11	0.03	306.625
12	0.04	357.625
13	0.05	408.625
14	0.06	459.625
15	0.06	459.625
16	0.06	459.625
17	0.06	459.625
18	0.06	459.625
19	0.08	561.625
20	0.08	561.625
21	0.08	561.625
22	0.08	561.625
23	0.09	612.625

DEGREE	FORCE	MOMENT
24	0.08	561.625
25	0.09	612.625
26	0.08	561.625
27	0.09	612.625
28	0.09	612.625
29	0.08	561.625
30	0.07	510.625
31	0.07	510.625
32	0.07	510.625
33	0.07	510.625
34	0.1	663.625
35	0.09	612.625
36	0.08	561.625
37	0.08	561.625
38	0.08	561.625
39	0.08	561.625
40	0.09	612.625
41	0.1	663.625
42	0.1	663.625
43	0.11	714.625
44	0.13	816.625
45	0.14	867.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.04	357.625
7	0.06	459.625
8	0.08	561.625
9	0.07	510.625
10	0.09	612.625
11	0.07	510.625
12	0.09	612.625
13	0.08	561.625
14	0.08	561.625
15	0.09	612.625
16	0.1	663.625
17	0.09	612.625
18	0.1	663.625
19	0.12	765.625
20	0.13	816.625
21	0.11	714.625
22	0.11	714.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.12	765.625
25	0.12	765.625
26	0.12	765.625
27	0.13	816.625
28	0.13	816.625
29	0.13	816.625
30	0.12	765.625
31	0.14	867.625
32	0.14	867.625
33	0.14	867.625
34	0.12	765.625
35	0.12	765.625
36	0.13	816.625
37	0.12	765.625
38	0.12	765.625
39	0.12	765.625
40	0.12	765.625
41	0.12	765.625
42	0.12	765.625
43	0.12	765.625
44	0.12	765.625
45	0.12	765.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.03	306.625
15	0.03	306.625
16	0.05	408.625
17	0.05	408.625
18	0.07	510.625
19	0.06	459.625
20	0.06	459.625
21	0.07	510.625
22	0.07	510.625
23	0.07	510.625

DEGREE	FORCE	MOMENT
24	0.07	510.625
25	0.09	612.625
26	0.08	561.625
27	0.08	561.625
28	0.08	561.625
29	0.08	561.625
30	0.09	612.625
31	0.09	612.625
32	0.09	612.625
33	0.09	612.625
34	0.09	612.625
35	0.1	663.625
36	0.1	663.625
37	0.1	663.625
38	0.1	663.625
39	0.1	663.625
40	0.1	663.625
41	0.11	714.625
42	0.11	714.625
43	0.11	714.625
44	0.11	714.625
45	0.13	816.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.04	357.625
12	0.04	357.625
13	0.04	357.625
14	0.04	357.625
15	0.04	357.625
16	0.04	357.625
17	0.04	357.625
18	0.04	357.625
19	0.04	357.625
20	0.04	357.625
21	0.04	357.625
22	0.04	357.625
23	0.04	357.625

DEGREE	FORCE	MOMENT
24	0.04	357.625
25	0.04	357.625
26	0.04	357.625
27	0.04	357.625
28	0.04	357.625
29	0.04	357.625
30	0.04	357.625
31	0.04	357.625
32	0.04	357.625
33	0.04	357.625
34	0.04	357.625
35	0.05	408.625
36	0.04	357.625
37	0.04	357.625
38	0.05	408.625
39	0.07	510.625
40	0.07	510.625
41	0.08	561.625
42	0.1	663.625
43	0.1	663.625
44	0.12	765.625
45	0.13	816.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.03	306.625
5	0.06	459.625
6	0.07	510.625
7	0.09	612.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.11	714.625
12	0.11	714.625
13	0.14	867.625
14	0.15	918.625
15	0.16	969.625
16	0.16	969.625
17	0.18	1071.625
18	0.19	1122.625
19	0.22	1275.625
20	0.23	1326.625
21	0.23	1326.625
22	0.24	1377.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.26	1479.625
25	0.28	1581.625
26	0.29	1632.625
27	0.33	1836.625
28	0.32	1785.625
29	0.34	1887.625
30	0.35	1938.625
31	0.36	1989.625
32	0.38	2091.625
33	0.4	2193.625
34	0.41	2244.625
35	0.43	2346.625
36	0.44	2397.625
37	0.44	2397.625
38	0.46	2499.625
39	0.45	2448.625
40	0.44	2397.625
41	0.46	2499.625
42	0.46	2499.625
43	0.48	2601.625
44	0.48	2601.625
45	0.49	2652.625



**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.03	306.625
14	0.03	306.625
15	0.06	459.625
16	0.07	510.625
17	0.07	510.625
18	0.07	510.625
19	0.08	561.625
20	0.09	612.625
21	0.11	714.625
22	0.11	714.625
23	0.11	714.625

DEGREE	FORCE	MOMENT
24	0.12	765.625
25	0.13	816.625
26	0.14	867.625
27	0.15	918.625
28	0.16	969.625
29	0.16	969.625
30	0.18	1071.625
31	0.19	1122.625
32	0.2	1173.625
33	0.22	1275.625
34	0.25	1428.625
35	0.25	1428.625
36	0.28	1581.625
37	0.29	1632.625
38	0.3	1683.625
39	0.3	1683.625
40	0.31	1734.625
41	0.33	1836.625
42	0.34	1887.625
43	0.35	1938.625
44	0.35	1938.625
45	0.35	1938.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.03	306.625
8	0.05	408.625
9	0.05	408.625
10	0.06	459.625
11	0.08	561.625
12	0.1	663.625
13	0.11	714.625
14	0.12	765.625
15	0.14	867.625
16	0.13	816.625
17	0.13	816.625
18	0.13	816.625
19	0.13	816.625
20	0.16	969.625
21	0.17	1020.625
22	0.17	1020.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.18	1071.625
25	0.2	1173.625
26	0.18	1071.625
27	0.17	1020.625
28	0.18	1071.625
29	0.18	1071.625
30	0.19	1122.625
31	0.2	1173.625
32	0.19	1122.625
33	0.2	1173.625
34	0.19	1122.625
35	0.19	1122.625
36	0.2	1173.625
37	0.2	1173.625
38	0.21	1224.625
39	0.21	1224.625
40	0.21	1224.625
41	0.21	1224.625
42	0.22	1275.625
43	0.23	1326.625
44	0.23	1326.625
45	0.24	1377.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.04	357.625
13	0.04	357.625
14	0.04	357.625
15	0.05	408.625
16	0.06	459.625
17	0.06	459.625
18	0.07	510.625
19	0.07	510.625
20	0.08	561.625
21	0.1	663.625
22	0.11	714.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.12	765.625
25	0.14	867.625
26	0.15	918.625
27	0.16	969.625
28	0.15	918.625
29	0.16	969.625
30	0.18	1071.625
31	0.19	1122.625
32	0.2	1173.625
33	0.21	1224.625
34	0.2	1173.625
35	0.22	1275.625
36	0.23	1326.625
37	0.26	1479.625
38	0.26	1479.625
39	0.28	1581.625
40	0.27	1530.625
41	0.28	1581.625
42	0.29	1632.625
43	0.27	1530.625
44	0.27	1530.625
45	0.28	1581.625

**Bracket Type: Time**

**Wire Size: 0.016x0.022**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.04	357.625
13	0.04	357.625
14	0.04	357.625
15	0.06	459.625
16	0.07	510.625
17	0.07	510.625
18	0.07	510.625
19	0.07	510.625
20	0.08	561.625
21	0.08	561.625
22	0.08	561.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.1	663.625
25	0.11	714.625
26	0.1	663.625
27	0.11	714.625
28	0.12	765.625
29	0.12	765.625
30	0.12	765.625
31	0.13	816.625
32	0.14	867.625
33	0.14	867.625
34	0.16	969.625
35	0.17	1020.625
36	0.18	1071.625
37	0.19	1122.625
38	0.19	1122.625
39	0.21	1224.625
40	0.22	1275.625
41	0.24	1377.625
42	0.23	1326.625
43	0.25	1428.625
44	0.24	1377.625
45	0.25	1428.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.03	306.625
17	0.04	357.625
18	0.04	357.625
19	0.07	510.625
20	0.07	510.625
21	0.07	510.625
22	0.08	561.625
23	0.08	561.625

DEGREE	FORCE	MOMENT
24	0.08	561.625
25	0.09	612.625
26	0.12	765.625
27	0.13	816.625
28	0.16	969.625
29	0.19	1122.625
30	0.2	1173.625
31	0.23	1326.625
32	0.25	1428.625
33	0.28	1581.625
34	0.3	1683.625
35	0.33	1836.625
36	0.39	2142.625
37	0.41	2244.625
38	0.45	2448.625
39	0.49	2652.625
40	0.52	2805.625
41	0.57	3060.625
42	0.6	3213.625
43	0.64	3417.625
44	0.69	3672.625
45	0.72	3825.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.01	204.625
16	0.01	204.625
17	0.01	204.625
18	0.01	204.625
19	0.01	204.625
20	0.01	204.625
21	0.01	204.625
22	0.01	204.625
23	0.01	204.625

DEGREE	FORCE	MOMENT
24	0.01	204.625
25	0.02	255.625
26	0.04	357.625
27	0.06	459.625
28	0.07	510.625
29	0.11	714.625
30	0.12	765.625
31	0.11	714.625
32	0.12	765.625
33	0.13	816.625
34	0.14	867.625
35	0.14	867.625
36	0.15	918.625
37	0.18	1071.625
38	0.19	1122.625
39	0.23	1326.625
40	0.27	1530.625
41	0.28	1581.625
42	0.33	1836.625
43	0.36	1989.625
44	0.39	2142.625
45	0.45	2448.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.04	357.625
5	0.04	357.625
6	0.05	408.625
7	0.06	459.625
8	0.07	510.625
9	0.07	510.625
10	0.08	561.625
11	0.1	663.625
12	0.09	612.625
13	0.1	663.625
14	0.1	663.625
15	0.12	765.625
16	0.14	867.625
17	0.14	867.625
18	0.15	918.625
19	0.15	918.625
20	0.16	969.625
21	0.17	1020.625
22	0.17	1020.625
23	0.17	1020.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.18	1071.625
26	0.19	1122.625
27	0.2	1173.625
28	0.2	1173.625
29	0.2	1173.625
30	0.21	1224.625
31	0.23	1326.625
32	0.23	1326.625
33	0.26	1479.625
34	0.25	1428.625
35	0.27	1530.625
36	0.27	1530.625
37	0.3	1683.625
38	0.3	1683.625
39	0.32	1785.625
40	0.32	1785.625
41	0.35	1938.625
42	0.37	2040.625
43	0.39	2142.625
44	0.43	2346.625
45	0.49	2652.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.02	255.625
14	0.03	306.625
15	0.03	306.625
16	0.03	306.625
17	0.03	306.625
18	0.03	306.625
19	0.03	306.625
20	0.03	306.625
21	0.03	306.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.04	357.625
26	0.06	459.625
27	0.08	561.625
28	0.1	663.625
29	0.11	714.625
30	0.15	918.625
31	0.18	1071.625
32	0.23	1326.625
33	0.25	1428.625
34	0.29	1632.625
35	0.34	1887.625
36	0.37	2040.625
37	0.4	2193.625
38	0.45	2448.625
39	0.49	2652.625
40	0.53	2856.625
41	0.58	3111.625
42	0.61	3264.625
43	0.67	3570.625
44	0.7	3723.625
45	0.75	3978.625



**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.03	306.625
9	0.03	306.625
10	0.04	357.625
11	0.04	357.625
12	0.04	357.625
13	0.05	408.625
14	0.05	408.625
15	0.04	357.625
16	0.04	357.625
17	0.04	357.625
18	0.04	357.625
19	0.04	357.625
20	0.04	357.625
21	0.04	357.625
22	0.04	357.625
23	0.04	357.625

DEGREE	FORCE	MOMENT
24	0.04	357.625
25	0.04	357.625
26	0.05	408.625
27	0.07	510.625
28	0.09	612.625
29	0.1	663.625
30	0.12	765.625
31	0.15	918.625
32	0.17	1020.625
33	0.19	1122.625
34	0.23	1326.625
35	0.28	1581.625
36	0.32	1785.625
37	0.35	1938.625
38	0.39	2142.625
39	0.39	2142.625
40	0.44	2397.625
41	0.54	2907.625
42	0.52	2805.625
43	0.59	3162.625
44	0.64	3417.625
45	0.68	3621.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.05	408.625
5	0.06	459.625
6	0.07	510.625
7	0.08	561.625
8	0.08	561.625
9	0.1	663.625
10	0.11	714.625
11	0.11	714.625
12	0.12	765.625
13	0.12	765.625
14	0.13	816.625
15	0.13	816.625
16	0.13	816.625
17	0.13	816.625
18	0.13	816.625
19	0.13	816.625
20	0.13	816.625
21	0.13	816.625
22	0.13	816.625
23	0.13	816.625

DEGREE	FORCE	MOMENT
24	0.13	816.625
25	0.13	816.625
26	0.13	816.625
27	0.13	816.625
28	0.14	867.625
29	0.15	918.625
30	0.16	969.625
31	0.17	1020.625
32	0.17	1020.625
33	0.2	1173.625
34	0.21	1224.625
35	0.25	1428.625
36	0.28	1581.625
37	0.31	1734.625
38	0.35	1938.625
39	0.37	2040.625
40	0.42	2295.625
41	0.46	2499.625
42	0.5	2703.625
43	0.53	2856.625
44	0.59	3162.625
45	0.66	3519.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.03	306.625
10	0.03	306.625
11	0.04	357.625
12	0.05	408.625
13	0.05	408.625
14	0.05	408.625
15	0.06	459.625
16	0.06	459.625
17	0.07	510.625
18	0.07	510.625
19	0.07	510.625
20	0.07	510.625
21	0.07	510.625
22	0.07	510.625
23	0.08	561.625

DEGREE	FORCE	MOMENT
24	0.09	612.625
25	0.09	612.625
26	0.09	612.625
27	0.09	612.625
28	0.09	612.625
29	0.09	612.625
30	0.11	714.625
31	0.1	663.625
32	0.12	765.625
33	0.13	816.625
34	0.14	867.625
35	0.17	1020.625
36	0.18	1071.625
37	0.21	1224.625
38	0.25	1428.625
39	0.26	1479.625
40	0.3	1683.625
41	0.35	1938.625
42	0.38	2091.625
43	0.43	2346.625
44	0.46	2499.625
45	0.5	2703.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.04	357.625
6	0.03	306.625
7	0.04	357.625
8	0.04	357.625
9	0.03	306.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.03	306.625
14	0.03	306.625
15	0.03	306.625
16	0.03	306.625
17	0.03	306.625
18	0.03	306.625
19	0.03	306.625
20	0.03	306.625
21	0.03	306.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.03	306.625
26	0.03	306.625
27	0.03	306.625
28	0.03	306.625
29	0.06	459.625
30	0.1	663.625
31	0.12	765.625
32	0.15	918.625
33	0.17	1020.625
34	0.18	1071.625
35	0.23	1326.625
36	0.24	1377.625
37	0.26	1479.625
38	0.27	1530.625
39	0.31	1734.625
40	0.33	1836.625
41	0.38	2091.625
42	0.42	2295.625
43	0.43	2346.625
44	0.47	2550.625
45	0.52	2805.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.02	255.625
22	0.02	255.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.02	255.625
25	0.03	306.625
26	0.06	459.625
27	0.07	510.625
28	0.08	561.625
29	0.09	612.625
30	0.11	714.625
31	0.12	765.625
32	0.14	867.625
33	0.15	918.625
34	0.18	1071.625
35	0.21	1224.625
36	0.24	1377.625
37	0.27	1530.625
38	0.28	1581.625
39	0.35	1938.625
40	0.37	2040.625
41	0.43	2346.625
42	0.49	2652.625
43	0.52	2805.625
44	0.56	3009.625
45	0.59	3162.625

**Bracket Type: Time**

**Wire Size: 0.017x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.02	255.625
22	0.02	255.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.02	255.625
25	0.02	255.625
26	0.02	255.625
27	0.03	306.625
28	0.05	408.625
29	0.05	408.625
30	0.09	612.625
31	0.1	663.625
32	0.13	816.625
33	0.15	918.625
34	0.17	1020.625
35	0.21	1224.625
36	0.26	1479.625
37	0.29	1632.625
38	0.32	1785.625
39	0.36	1989.625
40	0.4	2193.625
41	0.47	2550.625
42	0.5	2703.625
43	0.54	2907.625
44	0.57	3060.625
45	0.62	3315.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.03	306.625
4	0.03	306.625
5	0.04	357.625
6	0.05	408.625
7	0.06	459.625
8	0.08	561.625
9	0.07	510.625
10	0.08	561.625
11	0.06	459.625
12	0.05	408.625
13	0.06	459.625
14	0.05	408.625
15	0.05	408.625
16	0.05	408.625
17	0.06	459.625
18	0.06	459.625
19	0.06	459.625
20	0.09	612.625
21	0.09	612.625
22	0.14	867.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.28	1581.625
26	0.3	1683.625
27	0.38	2091.625
28	0.42	2295.625
29	0.46	2499.625
30	0.51	2754.625
31	0.55	2958.625
32	0.65	3468.625
33	0.71	3774.625
34	0.76	4029.625
35	0.82	4335.625
36	0.88	4641.625
37	0.91	4794.625
38	0.96	5049.625
39	0.97	5100.625
40	1.05	5508.625
41	1.07	5610.625
42	1.12	5865.625
43	1.15	6018.625
44	1.17	6120.625
45	1.25	6528.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.03	306.625
20	0.05	408.625
21	0.1	663.625
22	0.16	969.625
23	0.22	1275.625

DEGREE	FORCE	MOMENT
24	0.27	1530.625
25	0.32	1785.625
26	0.36	1989.625
27	0.42	2295.625
28	0.47	2550.625
29	0.54	2907.625
30	0.57	3060.625
31	0.63	3366.625
32	0.65	3468.625
33	0.69	3672.625
34	0.73	3876.625
35	0.75	3978.625
36	0.79	4182.625
37	0.85	4488.625
38	0.89	4692.625
39	0.96	5049.625
40	1	5253.625
41	1.01	5304.625
42	1.03	5406.625
43	1.07	5610.625
44	1.13	5916.625
45	1.21	6324.625



**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.02	255.625
13	0.03	306.625
14	0.03	306.625
15	0.04	357.625
16	0.06	459.625
17	0.06	459.625
18	0.07	510.625
19	0.08	561.625
20	0.1	663.625
21	0.14	867.625
22	0.17	1020.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.29	1632.625
26	0.31	1734.625
27	0.39	2142.625
28	0.44	2397.625
29	0.49	2652.625
30	0.52	2805.625
31	0.54	2907.625
32	0.59	3162.625
33	0.61	3264.625
34	0.67	3570.625
35	0.71	3774.625
36	0.76	4029.625
37	0.82	4335.625
38	0.86	4539.625
39	0.88	4641.625
40	0.91	4794.625
41	0.97	5100.625
42	1.02	5355.625
43	1.06	5559.625
44	1.08	5661.625
45	1.12	5865.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.04	357.625
9	0.04	357.625
10	0.04	357.625
11	0.04	357.625
12	0.04	357.625
13	0.04	357.625
14	0.04	357.625
15	0.05	408.625
16	0.06	459.625
17	0.06	459.625
18	0.07	510.625
19	0.08	561.625
20	0.08	561.625
21	0.11	714.625
22	0.12	765.625
23	0.14	867.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.22	1275.625
26	0.27	1530.625
27	0.33	1836.625
28	0.39	2142.625
29	0.44	2397.625
30	0.47	2550.625
31	0.53	2856.625
32	0.59	3162.625
33	0.61	3264.625
34	0.68	3621.625
35	0.74	3927.625
36	0.78	4131.625
37	0.83	4386.625
38	0.88	4641.625
39	0.91	4794.625
40	0.96	5049.625
41	1.01	5304.625
42	1.05	5508.625
43	1.09	5712.625
44	1.14	5967.625
45	1.18	6171.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.03	306.625
5	0.03	306.625
6	0.04	357.625
7	0.04	357.625
8	0.04	357.625
9	0.04	357.625
10	0.04	357.625
11	0.05	408.625
12	0.07	510.625
13	0.07	510.625
14	0.06	459.625
15	0.07	510.625
16	0.07	510.625
17	0.08	561.625
18	0.16	969.625
19	0.17	1020.625
20	0.23	1326.625
21	0.3	1683.625
22	0.36	1989.625
23	0.43	2346.625

DEGREE	FORCE	MOMENT
24	0.49	2652.625
25	0.52	2805.625
26	0.53	2856.625
27	0.55	2958.625
28	0.58	3111.625
29	0.61	3264.625
30	0.65	3468.625
31	0.68	3621.625
32	0.72	3825.625
33	0.76	4029.625
34	0.81	4284.625
35	0.88	4641.625
36	0.95	4998.625
37	1.01	5304.625
38	1.04	5457.625
39	1.1	5763.625
40	1.18	6171.625
41	1.26	6579.625
42	1.33	6936.625
43	1.36	7089.625
44	1.4	7293.625
45	1.44	7497.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.03	306.625
16	0.03	306.625
17	0.03	306.625
18	0.03	306.625
19	0.03	306.625
20	0.03	306.625
21	0.04	357.625
22	0.08	561.625
23	0.11	714.625

DEGREE	FORCE	MOMENT
24	0.12	765.625
25	0.17	1020.625
26	0.19	1122.625
27	0.24	1377.625
28	0.32	1785.625
29	0.33	1836.625
30	0.4	2193.625
31	0.43	2346.625
32	0.49	2652.625
33	0.53	2856.625
34	0.57	3060.625
35	0.63	3366.625
36	0.69	3672.625
37	0.75	3978.625
38	0.82	4335.625
39	0.88	4641.625
40	0.92	4845.625
41	0.95	4998.625
42	1.02	5355.625
43	1.07	5610.625
44	1.1	5763.625
45	1.16	6069.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.03	306.625
20	0.06	459.625
21	0.07	510.625
22	0.1	663.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.22	1275.625
26	0.28	1581.625
27	0.29	1632.625
28	0.33	1836.625
29	0.38	2091.625
30	0.44	2397.625
31	0.48	2601.625
32	0.53	2856.625
33	0.56	3009.625
34	0.61	3264.625
35	0.63	3366.625
36	0.69	3672.625
37	0.75	3978.625
38	0.78	4131.625
39	0.83	4386.625
40	0.87	4590.625
41	0.95	4998.625
42	0.98	5151.625
43	1	5253.625
44	1.04	5457.625
45	1.11	5814.625

**Bracket Type: Time**  
**Wire Size: 0.018x0.025**  
**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.01	204.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.03	306.625
20	0.03	306.625
21	0.04	357.625
22	0.04	357.625
23	0.04	357.625

DEGREE	FORCE	MOMENT
24	0.07	510.625
25	0.06	459.625
26	0.1	663.625
27	0.13	816.625
28	0.18	1071.625
29	0.23	1326.625
30	0.28	1581.625
31	0.31	1734.625
32	0.39	2142.625
33	0.42	2295.625
34	0.52	2805.625
35	0.58	3111.625
36	0.6	3213.625
37	0.65	3468.625
38	0.7	3723.625
39	0.75	3978.625
40	0.78	4131.625
41	0.85	4488.625
42	0.88	4641.625
43	0.91	4794.625
44	0.96	5049.625
45	1.01	5304.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.02	255.625
13	0.04	357.625
14	0.04	357.625
15	0.04	357.625
16	0.05	408.625
17	0.06	459.625
18	0.06	459.625
19	0.06	459.625
20	0.06	459.625
21	0.07	510.625
22	0.1	663.625
23	0.11	714.625

DEGREE	FORCE	MOMENT
24	0.13	816.625
25	0.14	867.625
26	0.16	969.625
27	0.2	1173.625
28	0.24	1377.625
29	0.28	1581.625
30	0.32	1785.625
31	0.37	2040.625
32	0.41	2244.625
33	0.45	2448.625
34	0.49	2652.625
35	0.54	2907.625
36	0.6	3213.625
37	0.65	3468.625
38	0.69	3672.625
39	0.75	3978.625
40	0.78	4131.625
41	0.83	4386.625
42	0.87	4590.625
43	0.91	4794.625
44	0.96	5049.625
45	1	5253.625

**Bracket Type: Time**

**Wire Size: 0.018x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.01	204.625
16	0.01	204.625
17	0.01	204.625
18	0.01	204.625
19	0.01	204.625
20	0.03	306.625
21	0.04	357.625
22	0.05	408.625
23	0.08	561.625

DEGREE	FORCE	MOMENT
24	0.12	765.625
25	0.14	867.625
26	0.19	1122.625
27	0.2	1173.625
28	0.25	1428.625
29	0.31	1734.625
30	0.32	1785.625
31	0.35	1938.625
32	0.41	2244.625
33	0.46	2499.625
34	0.48	2601.625
35	0.53	2856.625
36	0.57	3060.625
37	0.61	3264.625
38	0.65	3468.625
39	0.68	3621.625
40	0.71	3774.625
41	0.76	4029.625
42	0.79	4182.625
43	0.83	4386.625
44	0.87	4590.625
45	0.91	4794.625



**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.07	510.625
18	0.09	612.625
19	0.16	969.625
20	0.21	1224.625
21	0.24	1377.625
22	0.29	1632.625
23	0.34	1887.625

DEGREE	FORCE	MOMENT
24	0.39	2142.625
25	0.44	2397.625
26	0.51	2754.625
27	0.54	2907.625
28	0.61	3264.625
29	0.64	3417.625
30	0.69	3672.625
31	0.74	3927.625
32	0.79	4182.625
33	0.83	4386.625
34	0.87	4590.625
35	0.91	4794.625
36	0.98	5151.625
37	1.02	5355.625
38	1.09	5712.625
39	1.16	6069.625
40	1.23	6426.625
41	1.32	6885.625
42	1.35	7038.625
43	1.39	7242.625
44	1.45	7548.625
45	1.48	7701.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.01	204.625
16	0.03	306.625
17	0.08	561.625
18	0.1	663.625
19	0.13	816.625
20	0.18	1071.625
21	0.22	1275.625
22	0.28	1581.625
23	0.31	1734.625

DEGREE	FORCE	MOMENT
24	0.38	2091.625
25	0.41	2244.625
26	0.44	2397.625
27	0.48	2601.625
28	0.52	2805.625
29	0.56	3009.625
30	0.61	3264.625
31	0.65	3468.625
32	0.68	3621.625
33	0.73	3876.625
34	0.76	4029.625
35	0.8	4233.625
36	0.83	4386.625
37	0.87	4590.625
38	0.9	4743.625
39	0.91	4794.625
40	0.88	4641.625
41	0.89	4692.625
42	0.94	4947.625
43	0.97	5100.625
44	0.99	5202.625
45	1.03	5406.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.02	255.625
14	0.06	459.625
15	0.08	561.625
16	0.11	714.625
17	0.14	867.625
18	0.17	1020.625
19	0.22	1275.625
20	0.26	1479.625
21	0.31	1734.625
22	0.34	1887.625
23	0.39	2142.625

DEGREE	FORCE	MOMENT
24	0.44	2397.625
25	0.48	2601.625
26	0.53	2856.625
27	0.56	3009.625
28	0.59	3162.625
29	0.64	3417.625
30	0.67	3570.625
31	0.71	3774.625
32	0.76	4029.625
33	0.78	4131.625
34	0.84	4437.625
35	0.88	4641.625
36	0.92	4845.625
37	0.96	5049.625
38	0.98	5151.625
39	1	5253.625
40	1.04	5457.625
41	1.11	5814.625
42	1.18	6171.625
43	1.22	6375.625
44	1.24	6477.625
45	1.27	6630.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.03	306.625
13	0.1	663.625
14	0.12	765.625
15	0.17	1020.625
16	0.21	1224.625
17	0.27	1530.625
18	0.32	1785.625
19	0.36	1989.625
20	0.42	2295.625
21	0.47	2550.625
22	0.53	2856.625
23	0.59	3162.625

DEGREE	FORCE	MOMENT
24	0.63	3366.625
25	0.7	3723.625
26	0.76	4029.625
27	0.71	3774.625
28	0.88	4641.625
29	0.88	4641.625
30	0.93	4896.625
31	0.99	5202.625
32	1.02	5355.625
33	1.08	5661.625
34	1.14	5967.625
35	1.18	6171.625
36	1.21	6324.625
37	1.28	6681.625
38	1.31	6834.625
39	1.36	7089.625
40	1.4	7293.625
41	1.44	7497.625
42	1.46	7599.625
43	1.47	7650.625
44	1.5	7803.625
45	1.53	7956.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.02	255.625
9	0.06	459.625
10	0.1	663.625
11	0.13	816.625
12	0.15	918.625
13	0.18	1071.625
14	0.21	1224.625
15	0.24	1377.625
16	0.27	1530.625
17	0.3	1683.625
18	0.36	1989.625
19	0.43	2346.625
20	0.47	2550.625
21	0.51	2754.625
22	0.56	3009.625
23	0.6	3213.625

DEGREE	FORCE	MOMENT
24	0.62	3315.625
25	0.67	3570.625
26	0.73	3876.625
27	0.76	4029.625
28	0.81	4284.625
29	0.88	4641.625
30	0.93	4896.625
31	0.96	5049.625
32	1	5253.625
33	1.04	5457.625
34	1.08	5661.625
35	1.14	5967.625
36	1.18	6171.625
37	1.22	6375.625
38	1.24	6477.625
39	1.28	6681.625
40	1.32	6885.625
41	1.33	6936.625
42	1.38	7191.625
43	1.41	7344.625
44	1.45	7548.625
45	1.46	7599.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.03	306.625
6	0.05	408.625
7	0.07	510.625
8	0.1	663.625
9	0.14	867.625
10	0.15	918.625
11	0.2	1173.625
12	0.22	1275.625
13	0.26	1479.625
14	0.3	1683.625
15	0.33	1836.625
16	0.36	1989.625
17	0.39	2142.625
18	0.43	2346.625
19	0.47	2550.625
20	0.51	2754.625
21	0.54	2907.625
22	0.58	3111.625
23	0.63	3366.625

DEGREE	FORCE	MOMENT
24	0.67	3570.625
25	0.7	3723.625
26	0.76	4029.625
27	0.8	4233.625
28	0.85	4488.625
29	0.89	4692.625
30	0.92	4845.625
31	0.98	5151.625
32	1.03	5406.625
33	1.05	5508.625
34	1.09	5712.625
35	1.13	5916.625
36	1.17	6120.625
37	1.18	6171.625
38	1.21	6324.625
39	1.24	6477.625
40	1.26	6579.625
41	1.29	6732.625
42	1.31	6834.625
43	1.32	6885.625
44	1.31	6834.625
45	1.31	6834.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.03	306.625
4	0.05	408.625
5	0.06	459.625
6	0.06	459.625
7	0.07	510.625
8	0.08	561.625
9	0.08	561.625
10	0.09	612.625
11	0.1	663.625
12	0.1	663.625
13	0.11	714.625
14	0.11	714.625
15	0.13	816.625
16	0.16	969.625
17	0.2	1173.625
18	0.24	1377.625
19	0.26	1479.625
20	0.31	1734.625
21	0.36	1989.625
22	0.42	2295.625
23	0.44	2397.625

DEGREE	FORCE	MOMENT
24	0.48	2601.625
25	0.51	2754.625
26	0.56	3009.625
27	0.62	3315.625
28	0.64	3417.625
29	0.69	3672.625
30	0.73	3876.625
31	0.77	4080.625
32	0.84	4437.625
33	0.86	4539.625
34	0.92	4845.625
35	0.95	4998.625
36	1	5253.625
37	1.04	5457.625
38	1.05	5508.625
39	1.11	5814.625
40	1.16	6069.625
41	1.19	6222.625
42	1.22	6375.625
43	1.24	6477.625
44	1.25	6528.625
45	1.29	6732.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.03	306.625
14	0.04	357.625
15	0.06	459.625
16	0.07	510.625
17	0.11	714.625
18	0.13	816.625
19	0.17	1020.625
20	0.22	1275.625
21	0.26	1479.625
22	0.3	1683.625
23	0.32	1785.625

DEGREE	FORCE	MOMENT
24	0.36	1989.625
25	0.37	2040.625
26	0.38	2091.625
27	0.44	2397.625
28	0.49	2652.625
29	0.52	2805.625
30	0.58	3111.625
31	0.6	3213.625
32	0.62	3315.625
33	0.68	3621.625
34	0.71	3774.625
35	0.75	3978.625
36	0.79	4182.625
37	0.84	4437.625
38	0.89	4692.625
39	0.91	4794.625
40	0.95	4998.625
41	0.98	5151.625
42	1	5253.625
43	1.04	5457.625
44	1.05	5508.625
45	1.08	5661.625



**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.04	357.625
7	0.05	408.625
8	0.07	510.625
9	0.11	714.625
10	0.14	867.625
11	0.18	1071.625
12	0.19	1122.625
13	0.21	1224.625
14	0.25	1428.625
15	0.3	1683.625
16	0.33	1836.625
17	0.35	1938.625
18	0.36	1989.625
19	0.38	2091.625
20	0.38	2091.625
21	0.37	2040.625
22	0.37	2040.625
23	0.39	2142.625

DEGREE	FORCE	MOMENT
24	0.43	2346.625
25	0.49	2652.625
26	0.56	3009.625
27	0.63	3366.625
28	0.68	3621.625
29	0.72	3825.625
30	0.76	4029.625
31	0.78	4131.625
32	0.83	4386.625
33	0.89	4692.625
34	0.93	4896.625
35	1	5253.625
36	1.02	5355.625
37	1.05	5508.625
38	1.1	5763.625
39	1.13	5916.625
40	1.17	6120.625
41	1.18	6171.625
42	1.21	6324.625
43	1.26	6579.625
44	1.28	6681.625
45	1.3	6783.625

**Bracket Type: Time**

**Wire Size: 0.019x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.03	306.625
4	0.04	357.625
5	0.06	459.625
6	0.07	510.625
7	0.05	408.625
8	0.07	510.625
9	0.06	459.625
10	0.07	510.625
11	0.09	612.625
12	0.1	663.625
13	0.11	714.625
14	0.12	765.625
15	0.14	867.625
16	0.16	969.625
17	0.16	969.625
18	0.18	1071.625
19	0.22	1275.625
20	0.24	1377.625
21	0.26	1479.625
22	0.31	1734.625
23	0.37	2040.625

DEGREE	FORCE	MOMENT
24	0.4	2193.625
25	0.45	2448.625
26	0.48	2601.625
27	0.54	2907.625
28	0.56	3009.625
29	0.6	3213.625
30	0.64	3417.625
31	0.68	3621.625
32	0.71	3774.625
33	0.75	3978.625
34	0.79	4182.625
35	0.86	4539.625
36	0.91	4794.625
37	0.92	4845.625
38	0.99	5202.625
39	1.01	5304.625
40	1.06	5559.625
41	1.13	5916.625
42	1.16	6069.625
43	1.21	6324.625
44	1.26	6579.625
45	1.31	6834.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.04	357.625
7	0.05	408.625
8	0.06	459.625
9	0.06	459.625
10	0.07	510.625
11	0.1	663.625
12	0.1	663.625
13	0.11	714.625
14	0.12	765.625
15	0.12	765.625
16	0.13	816.625
17	0.14	867.625
18	0.14	867.625
19	0.14	867.625
20	0.16	969.625
21	0.16	969.625
22	0.15	918.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.17	1020.625
26	0.18	1071.625
27	0.18	1071.625
28	0.18	1071.625
29	0.2	1173.625
30	0.2	1173.625
31	0.18	1071.625
32	0.19	1122.625
33	0.19	1122.625
34	0.2	1173.625
35	0.21	1224.625
36	0.21	1224.625
37	0.21	1224.625
38	0.2	1173.625
39	0.21	1224.625
40	0.22	1275.625
41	0.22	1275.625
42	0.22	1275.625
43	0.24	1377.625
44	0.24	1377.625
45	0.26	1479.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.02	255.625
9	0.03	306.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.04	357.625
14	0.04	357.625
15	0.05	408.625
16	0.06	459.625
17	0.06	459.625
18	0.06	459.625
19	0.05	408.625
20	0.06	459.625
21	0.05	408.625
22	0.07	510.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.06	459.625
25	0.06	459.625
26	0.06	459.625
27	0.06	459.625
28	0.06	459.625
29	0.09	612.625
30	0.08	561.625
31	0.1	663.625
32	0.1	663.625
33	0.1	663.625
34	0.12	765.625
35	0.13	816.625
36	0.12	765.625
37	0.13	816.625
38	0.12	765.625
39	0.13	816.625
40	0.15	918.625
41	0.13	816.625
42	0.14	867.625
43	0.13	816.625
44	0.13	816.625
45	0.11	714.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.02	255.625
7	0.03	306.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.07	510.625
12	0.09	612.625
13	0.08	561.625
14	0.09	612.625
15	0.11	714.625
16	0.11	714.625
17	0.11	714.625
18	0.12	765.625
19	0.12	765.625
20	0.14	867.625
21	0.14	867.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.16	969.625
26	0.16	969.625
27	0.16	969.625
28	0.16	969.625
29	0.17	1020.625
30	0.17	1020.625
31	0.17	1020.625
32	0.16	969.625
33	0.16	969.625
34	0.18	1071.625
35	0.17	1020.625
36	0.17	1020.625
37	0.18	1071.625
38	0.17	1020.625
39	0.17	1020.625
40	0.17	1020.625
41	0.16	969.625
42	0.15	918.625
43	0.14	867.625
44	0.14	867.625
45	0.14	867.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.03	306.625
4	0.03	306.625
5	0.03	306.625
6	0.05	408.625
7	0.06	459.625
8	0.08	561.625
9	0.08	561.625
10	0.09	612.625
11	0.09	612.625
12	0.11	714.625
13	0.11	714.625
14	0.12	765.625
15	0.13	816.625
16	0.13	816.625
17	0.14	867.625
18	0.14	867.625
19	0.14	867.625
20	0.14	867.625
21	0.15	918.625
22	0.15	918.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.16	969.625
26	0.17	1020.625
27	0.17	1020.625
28	0.17	1020.625
29	0.17	1020.625
30	0.17	1020.625
31	0.18	1071.625
32	0.18	1071.625
33	0.18	1071.625
34	0.18	1071.625
35	0.17	1020.625
36	0.18	1071.625
37	0.17	1020.625
38	0.18	1071.625
39	0.18	1071.625
40	0.18	1071.625
41	0.19	1122.625
42	0.19	1122.625
43	0.19	1122.625
44	0.2	1173.625
45	0.22	1275.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.03	306.625
13	0.03	306.625
14	0.03	306.625
15	0.03	306.625
16	0.03	306.625
17	0.03	306.625
18	0.03	306.625
19	0.03	306.625
20	0.03	306.625
21	0.03	306.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.03	306.625
26	0.03	306.625
27	0.03	306.625
28	0.03	306.625
29	0.03	306.625
30	0.03	306.625
31	0.03	306.625
32	0.03	306.625
33	0.03	306.625
34	0.03	306.625
35	0.03	306.625
36	0.03	306.625
37	0.03	306.625
38	0.03	306.625
39	0.03	306.625
40	0.03	306.625
41	0.03	306.625
42	0.03	306.625
43	0.03	306.625
44	0.03	306.625
45	0.04	357.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.03	306.625
7	0.02	255.625
8	0.02	255.625
9	0.03	306.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.03	306.625
14	0.03	306.625
15	0.03	306.625
16	0.03	306.625
17	0.03	306.625
18	0.03	306.625
19	0.03	306.625
20	0.04	357.625
21	0.05	408.625
22	0.04	357.625
23	0.05	408.625

DEGREE	FORCE	MOMENT
24	0.05	408.625
25	0.05	408.625
26	0.05	408.625
27	0.04	357.625
28	0.05	408.625
29	0.05	408.625
30	0.04	357.625
31	0.05	408.625
32	0.05	408.625
33	0.04	357.625
34	0.04	357.625
35	0.05	408.625
36	0.04	357.625
37	0.05	408.625
38	0.05	408.625
39	0.06	459.625
40	0.06	459.625
41	0.07	510.625
42	0.07	510.625
43	0.08	561.625
44	0.09	612.625
45	0.09	612.625



**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.01	204.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.06	459.625
8	0.07	510.625
9	0.08	561.625
10	0.08	561.625
11	0.08	561.625
12	0.08	561.625
13	0.1	663.625
14	0.11	714.625
15	0.09	612.625
16	0.1	663.625
17	0.1	663.625
18	0.1	663.625
19	0.1	663.625
20	0.11	714.625
21	0.09	612.625
22	0.1	663.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.1	663.625
26	0.1	663.625
27	0.11	714.625
28	0.09	612.625
29	0.09	612.625
30	0.09	612.625
31	0.09	612.625
32	0.08	561.625
33	0.08	561.625
34	0.08	561.625
35	0.08	561.625
36	0.07	510.625
37	0.07	510.625
38	0.07	510.625
39	0.07	510.625
40	0.08	561.625
41	0.07	510.625
42	0.08	561.625
43	0.08	561.625
44	0.07	510.625
45	0.06	459.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.02	255.625
9	0.05	408.625
10	0.05	408.625
11	0.06	459.625
12	0.06	459.625
13	0.07	510.625
14	0.09	612.625
15	0.09	612.625
16	0.11	714.625
17	0.11	714.625
18	0.11	714.625
19	0.13	816.625
20	0.14	867.625
21	0.14	867.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.15	918.625
25	0.16	969.625
26	0.16	969.625
27	0.16	969.625
28	0.18	1071.625
29	0.19	1122.625
30	0.18	1071.625
31	0.18	1071.625
32	0.2	1173.625
33	0.18	1071.625
34	0.2	1173.625
35	0.19	1122.625
36	0.21	1224.625
37	0.23	1326.625
38	0.22	1275.625
39	0.21	1224.625
40	0.22	1275.625
41	0.23	1326.625
42	0.23	1326.625
43	0.24	1377.625
44	0.25	1428.625
45	0.24	1377.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.03	306.625
8	0.04	357.625
9	0.04	357.625
10	0.05	408.625
11	0.05	408.625
12	0.07	510.625
13	0.08	561.625
14	0.08	561.625
15	0.08	561.625
16	0.08	561.625
17	0.08	561.625
18	0.09	612.625
19	0.11	714.625
20	0.12	765.625
21	0.12	765.625
22	0.13	816.625
23	0.14	867.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.17	1020.625
26	0.18	1071.625
27	0.18	1071.625
28	0.2	1173.625
29	0.21	1224.625
30	0.22	1275.625
31	0.21	1224.625
32	0.23	1326.625
33	0.23	1326.625
34	0.24	1377.625
35	0.23	1326.625
36	0.24	1377.625
37	0.25	1428.625
38	0.24	1377.625
39	0.24	1377.625
40	0.26	1479.625
41	0.25	1428.625
42	0.25	1428.625
43	0.25	1428.625
44	0.25	1428.625
45	0.24	1377.625

**Bracket Type: Masters Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.03	306.625
6	0.04	357.625
7	0.03	306.625
8	0.05	408.625
9	0.04	357.625
10	0.06	459.625
11	0.07	510.625
12	0.07	510.625
13	0.07	510.625
14	0.08	561.625
15	0.08	561.625
16	0.09	612.625
17	0.1	663.625
18	0.1	663.625
19	0.09	612.625
20	0.1	663.625
21	0.11	714.625
22	0.1	663.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.09	612.625
25	0.09	612.625
26	0.1	663.625
27	0.1	663.625
28	0.09	612.625
29	0.09	612.625
30	0.09	612.625
31	0.09	612.625
32	0.09	612.625
33	0.09	612.625
34	0.08	561.625
35	0.08	561.625
36	0.08	561.625
37	0.08	561.625
38	0.09	612.625
39	0.09	612.625
40	0.08	561.625
41	0.1	663.625
42	0.08	561.625
43	0.1	663.625
44	0.1	663.625
45	0.1	663.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.03	306.625
9	0.05	408.625
10	0.05	408.625
11	0.06	459.625
12	0.07	510.625
13	0.09	612.625
14	0.11	714.625
15	0.13	816.625
16	0.14	867.625
17	0.17	1020.625
18	0.15	918.625
19	0.18	1071.625
20	0.19	1122.625
21	0.2	1173.625
22	0.21	1224.625
23	0.23	1326.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.23	1326.625
26	0.25	1428.625
27	0.24	1377.625
28	0.25	1428.625
29	0.27	1530.625
30	0.26	1479.625
31	0.22	1275.625
32	0.25	1428.625
33	0.28	1581.625
34	0.3	1683.625
35	0.32	1785.625
36	0.36	1989.625
37	0.43	2346.625
38	0.44	2397.625
39	0.48	2601.625
40	0.53	2856.625
41	0.57	3060.625
42	0.61	3264.625
43	0.67	3570.625
44	0.71	3774.625
45	0.75	3978.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.05	408.625
8	0.06	459.625
9	0.05	408.625
10	0.07	510.625
11	0.07	510.625
12	0.09	612.625
13	0.1	663.625
14	0.11	714.625
15	0.12	765.625
16	0.12	765.625
17	0.13	816.625
18	0.14	867.625
19	0.16	969.625
20	0.16	969.625
21	0.16	969.625
22	0.18	1071.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.2	1173.625
25	0.19	1122.625
26	0.18	1071.625
27	0.16	969.625
28	0.17	1020.625
29	0.17	1020.625
30	0.16	969.625
31	0.18	1071.625
32	0.21	1224.625
33	0.24	1377.625
34	0.28	1581.625
35	0.31	1734.625
36	0.35	1938.625
37	0.39	2142.625
38	0.43	2346.625
39	0.44	2397.625
40	0.48	2601.625
41	0.53	2856.625
42	0.57	3060.625
43	0.61	3264.625
44	0.66	3519.625
45	0.7	3723.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.03	306.625
8	0.05	408.625
9	0.05	408.625
10	0.05	408.625
11	0.07	510.625
12	0.07	510.625
13	0.08	561.625
14	0.09	612.625
15	0.11	714.625
16	0.11	714.625
17	0.13	816.625
18	0.14	867.625
19	0.15	918.625
20	0.15	918.625
21	0.17	1020.625
22	0.17	1020.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.2	1173.625
25	0.21	1224.625
26	0.21	1224.625
27	0.21	1224.625
28	0.23	1326.625
29	0.21	1224.625
30	0.2	1173.625
31	0.24	1377.625
32	0.31	1734.625
33	0.33	1836.625
34	0.38	2091.625
35	0.45	2448.625
36	0.52	2805.625
37	0.58	3111.625
38	0.61	3264.625
39	0.66	3519.625
40	0.68	3621.625
41	0.77	4080.625
42	0.82	4335.625
43	0.86	4539.625
44	0.91	4794.625
45	0.92	4845.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.05	408.625
6	0.06	459.625
7	0.05	408.625
8	0.07	510.625
9	0.07	510.625
10	0.09	612.625
11	0.09	612.625
12	0.1	663.625
13	0.09	612.625
14	0.1	663.625
15	0.12	765.625
16	0.12	765.625
17	0.12	765.625
18	0.14	867.625
19	0.15	918.625
20	0.15	918.625
21	0.16	969.625
22	0.17	1020.625
23	0.17	1020.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.17	1020.625
26	0.18	1071.625
27	0.18	1071.625
28	0.18	1071.625
29	0.18	1071.625
30	0.25	1428.625
31	0.3	1683.625
32	0.36	1989.625
33	0.4	2193.625
34	0.45	2448.625
35	0.5	2703.625
36	0.56	3009.625
37	0.61	3264.625
38	0.64	3417.625
39	0.72	3825.625
40	0.76	4029.625
41	0.8	4233.625
42	0.86	4539.625
43	0.87	4590.625
44	0.91	4794.625
45	1.01	5304.625



**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0	153.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0	153.625
12	0	153.625
13	0	153.625
14	0.02	255.625
15	0.02	255.625
16	0	153.625
17	0	153.625
18	0	153.625
19	0.03	306.625
20	0.02	255.625
21	0.03	306.625
22	0.05	408.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.08	561.625
25	0.1	663.625
26	0.12	765.625
27	0.15	918.625
28	0.19	1122.625
29	0.22	1275.625
30	0.26	1479.625
31	0.31	1734.625
32	0.36	1989.625
33	0.4	2193.625
34	0.44	2397.625
35	0.49	2652.625
36	0.52	2805.625
37	0.54	2907.625
38	0.62	3315.625
39	0.64	3417.625
40	0.7	3723.625
41	0.75	3978.625
42	0.7	3723.625
43	0.84	4437.625
44	0.89	4692.625
45	0.95	4998.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.02	255.625
5	0.03	306.625
6	0.04	357.625
7	0.04	357.625
8	0.04	357.625
9	0.05	408.625
10	0.05	408.625
11	0.07	510.625
12	0.06	459.625
13	0.07	510.625
14	0.06	459.625
15	0.08	561.625
16	0.07	510.625
17	0.08	561.625
18	0.08	561.625
19	0.07	510.625
20	0.08	561.625
21	0.08	561.625
22	0.07	510.625
23	0.09	612.625

DEGREE	FORCE	MOMENT
24	0.09	612.625
25	0.08	561.625
26	0.09	612.625
27	0.09	612.625
28	0.11	714.625
29	0.12	765.625
30	0.15	918.625
31	0.17	1020.625
32	0.21	1224.625
33	0.23	1326.625
34	0.28	1581.625
35	0.31	1734.625
36	0.36	1989.625
37	0.4	2193.625
38	0.46	2499.625
39	0.49	2652.625
40	0.54	2907.625
41	0.59	3162.625
42	0.63	3366.625
43	0.66	3519.625
44	0.71	3774.625
45	0.78	4131.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.02	255.625
7	0.03	306.625
8	0.04	357.625
9	0.04	357.625
10	0.05	408.625
11	0.05	408.625
12	0.07	510.625
13	0.08	561.625
14	0.08	561.625
15	0.1	663.625
16	0.1	663.625
17	0.12	765.625
18	0.13	816.625
19	0.15	918.625
20	0.15	918.625
21	0.17	1020.625
22	0.18	1071.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.2	1173.625
25	0.2	1173.625
26	0.21	1224.625
27	0.24	1377.625
28	0.25	1428.625
29	0.29	1632.625
30	0.3	1683.625
31	0.31	1734.625
32	0.31	1734.625
33	0.31	1734.625
34	0.32	1785.625
35	0.33	1836.625
36	0.32	1785.625
37	0.36	1989.625
38	0.42	2295.625
39	0.46	2499.625
40	0.5	2703.625
41	0.53	2856.625
42	0.58	3111.625
43	0.62	3315.625
44	0.65	3468.625
45	0.72	3825.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.04	357.625
8	0.04	357.625
9	0.06	459.625
10	0.05	408.625
11	0.06	459.625
12	0.07	510.625
13	0.07	510.625
14	0.08	561.625
15	0.08	561.625
16	0.08	561.625
17	0.09	612.625
18	0.11	714.625
19	0.09	612.625
20	0.1	663.625
21	0.1	663.625
22	0.1	663.625
23	0.1	663.625

DEGREE	FORCE	MOMENT
24	0.1	663.625
25	0.1	663.625
26	0.11	714.625
27	0.12	765.625
28	0.11	714.625
29	0.12	765.625
30	0.13	816.625
31	0.14	867.625
32	0.17	1020.625
33	0.24	1377.625
34	0.28	1581.625
35	0.35	1938.625
36	0.4	2193.625
37	0.46	2499.625
38	0.48	2601.625
39	0.56	3009.625
40	0.59	3162.625
41	0.64	3417.625
42	0.69	3672.625
43	0.74	3927.625
44	0.79	4182.625
45	0.84	4437.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.04	357.625
6	0.04	357.625
7	0.06	459.625
8	0.08	561.625
9	0.09	612.625
10	0.1	663.625
11	0.11	714.625
12	0.13	816.625
13	0.16	969.625
14	0.16	969.625
15	0.17	1020.625
16	0.18	1071.625
17	0.18	1071.625
18	0.19	1122.625
19	0.19	1122.625
20	0.2	1173.625
21	0.21	1224.625
22	0.23	1326.625
23	0.23	1326.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.27	1530.625
26	0.28	1581.625
27	0.28	1581.625
28	0.3	1683.625
29	0.31	1734.625
30	0.32	1785.625
31	0.32	1785.625
32	0.32	1785.625
33	0.35	1938.625
34	0.38	2091.625
35	0.41	2244.625
36	0.46	2499.625
37	0.51	2754.625
38	0.55	2958.625
39	0.6	3213.625
40	0.64	3417.625
41	0.69	3672.625
42	0.73	3876.625
43	0.78	4131.625
44	0.8	4233.625
45	0.87	4590.625

**Bracket Type: Masters Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.02	255.625
4	0.03	306.625
5	0.04	357.625
6	0.07	510.625
7	0.09	612.625
8	0.11	714.625
9	0.14	867.625
10	0.13	816.625
11	0.14	867.625
12	0.15	918.625
13	0.16	969.625
14	0.17	1020.625
15	0.17	1020.625
16	0.17	1020.625
17	0.17	1020.625
18	0.18	1071.625
19	0.18	1071.625
20	0.19	1122.625
21	0.2	1173.625
22	0.2	1173.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.21	1224.625
25	0.22	1275.625
26	0.25	1428.625
27	0.24	1377.625
28	0.27	1530.625
29	0.27	1530.625
30	0.28	1581.625
31	0.28	1581.625
32	0.27	1530.625
33	0.3	1683.625
34	0.33	1836.625
35	0.34	1887.625
36	0.44	2397.625
37	0.49	2652.625
38	0.55	2958.625
39	0.59	3162.625
40	0.63	3366.625
41	0.69	3672.625
42	0.72	3825.625
43	0.79	4182.625
44	0.82	4335.625
45	0.84	4437.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.03	306.625
10	0.04	357.625
11	0.04	357.625
12	0.05	408.625
13	0.06	459.625
14	0.07	510.625
15	0.07	510.625
16	0.08	561.625
17	0.08	561.625
18	0.09	612.625
19	0.12	765.625
20	0.12	765.625
21	0.12	765.625
22	0.12	765.625
23	0.13	816.625

DEGREE	FORCE	MOMENT
24	0.13	816.625
25	0.14	867.625
26	0.16	969.625
27	0.13	816.625
28	0.16	969.625
29	0.21	1224.625
30	0.24	1377.625
31	0.29	1632.625
32	0.32	1785.625
33	0.38	2091.625
34	0.41	2244.625
35	0.46	2499.625
36	0.51	2754.625
37	0.55	2958.625
38	0.6	3213.625
39	0.66	3519.625
40	0.69	3672.625
41	0.75	3978.625
42	0.8	4233.625
43	0.85	4488.625
44	0.87	4590.625
45	0.94	4947.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.04	357.625
5	0.05	408.625
6	0.07	510.625
7	0.08	561.625
8	0.1	663.625
9	0.12	765.625
10	0.14	867.625
11	0.14	867.625
12	0.15	918.625
13	0.17	1020.625
14	0.17	1020.625
15	0.2	1173.625
16	0.22	1275.625
17	0.23	1326.625
18	0.23	1326.625
19	0.25	1428.625
20	0.25	1428.625
21	0.24	1377.625
22	0.27	1530.625
23	0.28	1581.625

DEGREE	FORCE	MOMENT
24	0.3	1683.625
25	0.31	1734.625
26	0.33	1836.625
27	0.34	1887.625
28	0.36	1989.625
29	0.37	2040.625
30	0.38	2091.625
31	0.39	2142.625
32	0.4	2193.625
33	0.41	2244.625
34	0.43	2346.625
35	0.43	2346.625
36	0.44	2397.625
37	0.46	2499.625
38	0.47	2550.625
39	0.47	2550.625
40	0.47	2550.625
41	0.48	2601.625
42	0.48	2601.625
43	0.47	2550.625
44	0.5	2703.625
45	0.57	3060.625



**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.03	306.625
5	0.05	408.625
6	0.05	408.625
7	0.07	510.625
8	0.08	561.625
9	0.1	663.625
10	0.11	714.625
11	0.12	765.625
12	0.12	765.625
13	0.14	867.625
14	0.15	918.625
15	0.15	918.625
16	0.16	969.625
17	0.17	1020.625
18	0.19	1122.625
19	0.19	1122.625
20	0.19	1122.625
21	0.2	1173.625
22	0.21	1224.625
23	0.21	1224.625

DEGREE	FORCE	MOMENT
24	0.21	1224.625
25	0.22	1275.625
26	0.21	1224.625
27	0.24	1377.625
28	0.24	1377.625
29	0.23	1326.625
30	0.21	1224.625
31	0.21	1224.625
32	0.2	1173.625
33	0.2	1173.625
34	0.2	1173.625
35	0.2	1173.625
36	0.21	1224.625
37	0.23	1326.625
38	0.29	1632.625
39	0.32	1785.625
40	0.36	1989.625
41	0.42	2295.625
42	0.45	2448.625
43	0.5	2703.625
44	0.56	3009.625
45	0.6	3213.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.02	255.625
4	0.03	306.625
5	0.06	459.625
6	0.07	510.625
7	0.09	612.625
8	0.1	663.625
9	0.11	714.625
10	0.12	765.625
11	0.12	765.625
12	0.11	714.625
13	0.13	816.625
14	0.14	867.625
15	0.14	867.625
16	0.15	918.625
17	0.15	918.625
18	0.16	969.625
19	0.18	1071.625
20	0.19	1122.625
21	0.22	1275.625
22	0.23	1326.625
23	0.25	1428.625

DEGREE	FORCE	MOMENT
24	0.27	1530.625
25	0.29	1632.625
26	0.32	1785.625
27	0.33	1836.625
28	0.33	1836.625
29	0.36	1989.625
30	0.37	2040.625
31	0.38	2091.625
32	0.39	2142.625
33	0.4	2193.625
34	0.41	2244.625
35	0.42	2295.625
36	0.43	2346.625
37	0.44	2397.625
38	0.51	2754.625
39	0.52	2805.625
40	0.59	3162.625
41	0.6	3213.625
42	0.65	3468.625
43	0.71	3774.625
44	0.74	3927.625
45	0.78	4131.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.03	306.625
6	0.04	357.625
7	0.07	510.625
8	0.09	612.625
9	0.09	612.625
10	0.1	663.625
11	0.11	714.625
12	0.13	816.625
13	0.14	867.625
14	0.15	918.625
15	0.16	969.625
16	0.18	1071.625
17	0.18	1071.625
18	0.19	1122.625
19	0.2	1173.625
20	0.21	1224.625
21	0.21	1224.625
22	0.22	1275.625
23	0.23	1326.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.23	1326.625
26	0.24	1377.625
27	0.25	1428.625
28	0.24	1377.625
29	0.24	1377.625
30	0.29	1632.625
31	0.26	1479.625
32	0.27	1530.625
33	0.28	1581.625
34	0.29	1632.625
35	0.32	1785.625
36	0.37	2040.625
37	0.38	2091.625
38	0.46	2499.625
39	0.51	2754.625
40	0.57	3060.625
41	0.61	3264.625
42	0.66	3519.625
43	0.7	3723.625
44	0.77	4080.625
45	0.8	4233.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.03	306.625
6	0.05	408.625
7	0.06	459.625
8	0.08	561.625
9	0.1	663.625
10	0.1	663.625
11	0.11	714.625
12	0.12	765.625
13	0.12	765.625
14	0.13	816.625
15	0.11	714.625
16	0.1	663.625
17	0.1	663.625
18	0.1	663.625
19	0.1	663.625
20	0.13	816.625
21	0.14	867.625
22	0.14	867.625
23	0.14	867.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.17	1020.625
26	0.19	1122.625
27	0.2	1173.625
28	0.22	1275.625
29	0.23	1326.625
30	0.24	1377.625
31	0.27	1530.625
32	0.36	1989.625
33	0.41	2244.625
34	0.44	2397.625
35	0.49	2652.625
36	0.54	2907.625
37	0.6	3213.625
38	0.63	3366.625
39	0.69	3672.625
40	0.75	3978.625
41	0.78	4131.625
42	0.82	4335.625
43	0.86	4539.625
44	0.91	4794.625
45	0.97	5100.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.04	357.625
6	0.05	408.625
7	0.07	510.625
8	0.07	510.625
9	0.07	510.625
10	0.09	612.625
11	0.1	663.625
12	0.09	612.625
13	0.12	765.625
14	0.13	816.625
15	0.12	765.625
16	0.14	867.625
17	0.13	816.625
18	0.14	867.625
19	0.15	918.625
20	0.16	969.625
21	0.16	969.625
22	0.18	1071.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.18	1071.625
25	0.19	1122.625
26	0.19	1122.625
27	0.21	1224.625
28	0.22	1275.625
29	0.23	1326.625
30	0.23	1326.625
31	0.21	1224.625
32	0.22	1275.625
33	0.27	1530.625
34	0.35	1938.625
35	0.4	2193.625
36	0.44	2397.625
37	0.5	2703.625
38	0.54	2907.625
39	0.6	3213.625
40	0.65	3468.625
41	0.67	3570.625
42	0.73	3876.625
43	0.77	4080.625
44	0.84	4437.625
45	0.86	4539.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.04	357.625
7	0.05	408.625
8	0.07	510.625
9	0.08	561.625
10	0.09	612.625
11	0.08	561.625
12	0.09	612.625
13	0.09	612.625
14	0.1	663.625
15	0.09	612.625
16	0.1	663.625
17	0.11	714.625
18	0.11	714.625
19	0.11	714.625
20	0.12	765.625
21	0.13	816.625
22	0.14	867.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.17	1020.625
26	0.18	1071.625
27	0.19	1122.625
28	0.19	1122.625
29	0.22	1275.625
30	0.2	1173.625
31	0.21	1224.625
32	0.24	1377.625
33	0.32	1785.625
34	0.36	1989.625
35	0.4	2193.625
36	0.46	2499.625
37	0.52	2805.625
38	0.54	2907.625
39	0.6	3213.625
40	0.63	3366.625
41	0.67	3570.625
42	0.72	3825.625
43	0.75	3978.625
44	0.8	4233.625
45	0.83	4386.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.03	306.625
5	0.04	357.625
6	0.05	408.625
7	0.07	510.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.14	867.625
12	0.14	867.625
13	0.13	816.625
14	0.15	918.625
15	0.16	969.625
16	0.17	1020.625
17	0.17	1020.625
18	0.18	1071.625
19	0.19	1122.625
20	0.2	1173.625
21	0.22	1275.625
22	0.22	1275.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.25	1428.625
25	0.26	1479.625
26	0.28	1581.625
27	0.29	1632.625
28	0.3	1683.625
29	0.31	1734.625
30	0.32	1785.625
31	0.31	1734.625
32	0.32	1785.625
33	0.33	1836.625
34	0.33	1836.625
35	0.34	1887.625
36	0.35	1938.625
37	0.37	2040.625
38	0.38	2091.625
39	0.43	2346.625
40	0.46	2499.625
41	0.57	3060.625
42	0.62	3315.625
43	0.66	3519.625
44	0.72	3825.625
45	0.76	4029.625

**Bracket Type: Masters Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.05	408.625
10	0.06	459.625
11	0.06	459.625
12	0.07	510.625
13	0.07	510.625
14	0.07	510.625
15	0.09	612.625
16	0.09	612.625
17	0.1	663.625
18	0.09	612.625
19	0.11	714.625
20	0.11	714.625
21	0.13	816.625
22	0.13	816.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.15	918.625
25	0.15	918.625
26	0.15	918.625
27	0.17	1020.625
28	0.17	1020.625
29	0.16	969.625
30	0.18	1071.625
31	0.2	1173.625
32	0.21	1224.625
33	0.23	1326.625
34	0.24	1377.625
35	0.26	1479.625
36	0.29	1632.625
37	0.34	1887.625
38	0.41	2244.625
39	0.45	2448.625
40	0.5	2703.625
41	0.55	2958.625
42	0.59	3162.625
43	0.62	3315.625
44	0.67	3570.625
45	0.73	3876.625



**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.02	255.625
6	0.03	306.625
7	0.03	306.625
8	0.06	459.625
9	0.09	612.625
10	0.12	765.625
11	0.15	918.625
12	0.17	1020.625
13	0.18	1071.625
14	0.18	1071.625
15	0.19	1122.625
16	0.21	1224.625
17	0.26	1479.625
18	0.32	1785.625
19	0.37	2040.625
20	0.42	2295.625
21	0.47	2550.625
22	0.54	2907.625
23	0.61	3264.625

DEGREE	FORCE	MOMENT
24	0.67	3570.625
25	0.74	3927.625
26	0.8	4233.625
27	0.85	4488.625
28	0.92	4845.625
29	0.95	4998.625
30	1.03	5406.625
31	1.15	6018.625
32	1.19	6222.625
33	1.22	6375.625
34	1.25	6528.625
35	1.33	6936.625
36	1.36	7089.625
37	1.43	7446.625
38	1.51	7854.625
39	1.51	7854.625
40	1.58	8211.625
41	1.61	8364.625
42	1.66	8619.625
43	1.69	8772.625
44	1.74	9027.625
45	1.78	9231.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.04	357.625
10	0.03	306.625
11	0.04	357.625
12	0.04	357.625
13	0.09	612.625
14	0.11	714.625
15	0.17	1020.625
16	0.22	1275.625
17	0.28	1581.625
18	0.32	1785.625
19	0.4	2193.625
20	0.48	2601.625
21	0.55	2958.625
22	0.57	3060.625
23	0.65	3468.625

DEGREE	FORCE	MOMENT
24	0.74	3927.625
25	0.78	4131.625
26	0.86	4539.625
27	0.94	4947.625
28	1.02	5355.625
29	1.07	5610.625
30	1.12	5865.625
31	1.17	6120.625
32	1.24	6477.625
33	1.31	6834.625
34	1.35	7038.625
35	1.42	7395.625
36	1.47	7650.625
37	1.52	7905.625
38	1.59	8262.625
39	1.64	8517.625
40	1.69	8772.625
41	1.73	8976.625
42	1.77	9180.625
43	1.81	9384.625
44	1.85	9588.625
45	1.91	9894.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.03	306.625
14	0.03	306.625
15	0.03	306.625
16	0.03	306.625
17	0.1	663.625
18	0.13	816.625
19	0.16	969.625
20	0.23	1326.625
21	0.27	1530.625
22	0.33	1836.625
23	0.36	1989.625

DEGREE	FORCE	MOMENT
24	0.46	2499.625
25	0.5	2703.625
26	0.54	2907.625
27	0.59	3162.625
28	0.63	3366.625
29	0.69	3672.625
30	0.75	3978.625
31	0.86	4539.625
32	0.91	4794.625
33	0.95	4998.625
34	1.04	5457.625
35	1.09	5712.625
36	1.15	6018.625
37	1.21	6324.625
38	1.26	6579.625
39	1.31	6834.625
40	1.35	7038.625
41	1.4	7293.625
42	1.47	7650.625
43	1.51	7854.625
44	1.55	8058.625
45	1.59	8262.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.03	306.625
14	0.05	408.625
15	0.06	459.625
16	0.12	765.625
17	0.23	1326.625
18	0.24	1377.625
19	0.27	1530.625
20	0.36	1989.625
21	0.42	2295.625
22	0.51	2754.625
23	0.58	3111.625

DEGREE	FORCE	MOMENT
24	0.62	3315.625
25	0.73	3876.625
26	0.78	4131.625
27	0.82	4335.625
28	0.89	4692.625
29	0.94	4947.625
30	1.02	5355.625
31	1.06	5559.625
32	1.12	5865.625
33	1.19	6222.625
34	1.24	6477.625
35	1.3	6783.625
36	1.34	6987.625
37	1.38	7191.625
38	1.45	7548.625
39	1.49	7752.625
40	1.54	8007.625
41	1.6	8313.625
42	1.63	8466.625
43	1.68	8721.625
44	1.71	8874.625
45	1.77	9180.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.04	357.625
10	0.06	459.625
11	0.06	459.625
12	0.1	663.625
13	0.11	714.625
14	0.13	816.625
15	0.2	1173.625
16	0.22	1275.625
17	0.28	1581.625
18	0.37	2040.625
19	0.44	2397.625
20	0.45	2448.625
21	0.52	2805.625
22	0.6	3213.625
23	0.69	3672.625

DEGREE	FORCE	MOMENT
24	0.71	3774.625
25	0.8	4233.625
26	0.83	4386.625
27	0.87	4590.625
28	0.95	4998.625
29	1	5253.625
30	1.06	5559.625
31	1.11	5814.625
32	1.18	6171.625
33	1.24	6477.625
34	1.29	6732.625
35	1.34	6987.625
36	1.4	7293.625
37	1.45	7548.625
38	1.52	7905.625
39	1.57	8160.625
40	1.64	8517.625
41	1.67	8670.625
42	1.7	8823.625
43	1.75	9078.625
44	1.78	9231.625
45	1.83	9486.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.04	357.625
9	0.04	357.625
10	0.04	357.625
11	0.06	459.625
12	0.08	561.625
13	0.1	663.625
14	0.12	765.625
15	0.17	1020.625
16	0.22	1275.625
17	0.28	1581.625
18	0.34	1887.625
19	0.41	2244.625
20	0.5	2703.625
21	0.53	2856.625
22	0.61	3264.625
23	0.7	3723.625

DEGREE	FORCE	MOMENT
24	0.71	3774.625
25	0.78	4131.625
26	0.85	4488.625
27	0.9	4743.625
28	0.96	5049.625
29	1.03	5406.625
30	1.09	5712.625
31	1.14	5967.625
32	1.21	6324.625
33	1.24	6477.625
34	1.31	6834.625
35	1.38	7191.625
36	1.43	7446.625
37	1.48	7701.625
38	1.52	7905.625
39	1.57	8160.625
40	1.6	8313.625
41	1.67	8670.625
42	1.72	8925.625
43	1.76	9129.625
44	1.79	9282.625
45	1.84	9537.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.02	255.625
16	0.03	306.625
17	0.09	612.625
18	0.11	714.625
19	0.13	816.625
20	0.18	1071.625
21	0.21	1224.625
22	0.27	1530.625
23	0.31	1734.625

DEGREE	FORCE	MOMENT
24	0.38	2091.625
25	0.4	2193.625
26	0.45	2448.625
27	0.56	3009.625
28	0.57	3060.625
29	0.63	3366.625
30	0.67	3570.625
31	0.75	3978.625
32	0.82	4335.625
33	0.89	4692.625
34	0.96	5049.625
35	1	5253.625
36	1.04	5457.625
37	1.12	5865.625
38	1.18	6171.625
39	1.23	6426.625
40	1.29	6732.625
41	1.34	6987.625
42	1.39	7242.625
43	1.44	7497.625
44	1.49	7752.625
45	1.55	8058.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.04	357.625
14	0.05	408.625
15	0.09	612.625
16	0.13	816.625
17	0.18	1071.625
18	0.22	1275.625
19	0.28	1581.625
20	0.31	1734.625
21	0.39	2142.625
22	0.44	2397.625
23	0.49	2652.625

DEGREE	FORCE	MOMENT
24	0.57	3060.625
25	0.62	3315.625
26	0.69	3672.625
27	0.75	3978.625
28	0.82	4335.625
29	0.89	4692.625
30	0.92	4845.625
31	0.98	5151.625
32	1.02	5355.625
33	1.11	5814.625
34	1.14	5967.625
35	1.21	6324.625
36	1.25	6528.625
37	1.32	6885.625
38	1.36	7089.625
39	1.4	7293.625
40	1.48	7701.625
41	1.5	7803.625
42	1.54	8007.625
43	1.6	8313.625
44	1.64	8517.625
45	1.68	8721.625



**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.03	306.625
9	0.04	357.625
10	0.05	408.625
11	0.05	408.625
12	0.06	459.625
13	0.08	561.625
14	0.11	714.625
15	0.16	969.625
16	0.2	1173.625
17	0.24	1377.625
18	0.32	1785.625
19	0.36	1989.625
20	0.43	2346.625
21	0.45	2448.625
22	0.5	2703.625
23	0.58	3111.625

DEGREE	FORCE	MOMENT
24	0.61	3264.625
25	0.68	3621.625
26	0.74	3927.625
27	0.83	4386.625
28	0.86	4539.625
29	0.92	4845.625
30	0.98	5151.625
31	1.05	5508.625
32	1.08	5661.625
33	1.16	6069.625
34	1.19	6222.625
35	1.27	6630.625
36	1.32	6885.625
37	1.37	7140.625
38	1.41	7344.625
39	1.47	7650.625
40	1.51	7854.625
41	1.56	8109.625
42	1.63	8466.625
43	1.66	8619.625
44	1.71	8874.625
45	1.75	9078.625

**Bracket Type: Masters Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.03	306.625
15	0.07	510.625
16	0.12	765.625
17	0.12	765.625
18	0.16	969.625
19	0.2	1173.625
20	0.24	1377.625
21	0.28	1581.625
22	0.33	1836.625
23	0.35	1938.625

DEGREE	FORCE	MOMENT
24	0.42	2295.625
25	0.46	2499.625
26	0.52	2805.625
27	0.57	3060.625
28	0.63	3366.625
29	0.7	3723.625
30	0.75	3978.625
31	0.8	4233.625
32	0.87	4590.625
33	0.9	4743.625
34	0.98	5151.625
35	1.04	5457.625
36	1.1	5763.625
37	1.15	6018.625
38	1.21	6324.625
39	1.24	6477.625
40	1.3	6783.625
41	1.36	7089.625
42	1.41	7344.625
43	1.46	7599.625
44	1.51	7854.625
45	1.56	8109.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.05	408.625
6	0.06	459.625
7	0.08	561.625
8	0.07	510.625
9	0.08	561.625
10	0.07	510.625
11	0.09	612.625
12	0.09	612.625
13	0.1	663.625
14	0.11	714.625
15	0.12	765.625
16	0.13	816.625
17	0.14	867.625
18	0.16	969.625
19	0.17	1020.625
20	0.18	1071.625
21	0.18	1071.625
22	0.2	1173.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.2	1173.625
25	0.21	1224.625
26	0.23	1326.625
27	0.22	1275.625
28	0.23	1326.625
29	0.24	1377.625
30	0.25	1428.625
31	0.26	1479.625
32	0.24	1377.625
33	0.26	1479.625
34	0.24	1377.625
35	0.27	1530.625
36	0.26	1479.625
37	0.27	1530.625
38	0.26	1479.625
39	0.28	1581.625
40	0.27	1530.625
41	0.28	1581.625
42	0.29	1632.625
43	0.3	1683.625
44	0.31	1734.625
45	0.33	1836.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.04	357.625
5	0.04	357.625
6	0.06	459.625
7	0.07	510.625
8	0.09	612.625
9	0.08	561.625
10	0.09	612.625
11	0.11	714.625
12	0.11	714.625
13	0.11	714.625
14	0.13	816.625
15	0.14	867.625
16	0.14	867.625
17	0.14	867.625
18	0.15	918.625
19	0.15	918.625
20	0.17	1020.625
21	0.18	1071.625
22	0.19	1122.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.21	1224.625
25	0.21	1224.625
26	0.22	1275.625
27	0.23	1326.625
28	0.22	1275.625
29	0.23	1326.625
30	0.23	1326.625
31	0.26	1479.625
32	0.26	1479.625
33	0.26	1479.625
34	0.27	1530.625
35	0.28	1581.625
36	0.29	1632.625
37	0.3	1683.625
38	0.32	1785.625
39	0.34	1887.625
40	0.34	1887.625
41	0.36	1989.625
42	0.37	2040.625
43	0.37	2040.625
44	0.4	2193.625
45	0.42	2295.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.04	357.625
8	0.07	510.625
9	0.06	459.625
10	0.07	510.625
11	0.08	561.625
12	0.09	612.625
13	0.11	714.625
14	0.11	714.625
15	0.11	714.625
16	0.12	765.625
17	0.12	765.625
18	0.14	867.625
19	0.13	816.625
20	0.14	867.625
21	0.15	918.625
22	0.14	867.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.16	969.625
26	0.17	1020.625
27	0.17	1020.625
28	0.17	1020.625
29	0.17	1020.625
30	0.18	1071.625
31	0.19	1122.625
32	0.2	1173.625
33	0.19	1122.625
34	0.2	1173.625
35	0.22	1275.625
36	0.21	1224.625
37	0.23	1326.625
38	0.23	1326.625
39	0.24	1377.625
40	0.24	1377.625
41	0.25	1428.625
42	0.25	1428.625
43	0.26	1479.625
44	0.27	1530.625
45	0.26	1479.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.01	204.625
13	0.02	255.625
14	0.03	306.625
15	0.05	408.625
16	0.05	408.625
17	0.05	408.625
18	0.05	408.625
19	0.05	408.625
20	0.05	408.625
21	0.06	459.625
22	0.06	459.625
23	0.07	510.625

DEGREE	FORCE	MOMENT
24	0.07	510.625
25	0.08	561.625
26	0.08	561.625
27	0.08	561.625
28	0.08	561.625
29	0.09	612.625
30	0.09	612.625
31	0.1	663.625
32	0.1	663.625
33	0.08	561.625
34	0.1	663.625
35	0.1	663.625
36	0.1	663.625
37	0.1	663.625
38	0.1	663.625
39	0.11	714.625
40	0.12	765.625
41	0.12	765.625
42	0.14	867.625
43	0.13	816.625
44	0.16	969.625
45	0.17	1020.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.03	306.625
18	0.03	306.625
19	0.04	357.625
20	0.04	357.625
21	0.05	408.625
22	0.06	459.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.05	408.625
25	0.06	459.625
26	0.07	510.625
27	0.06	459.625
28	0.07	510.625
29	0.07	510.625
30	0.09	612.625
31	0.08	561.625
32	0.1	663.625
33	0.11	714.625
34	0.12	765.625
35	0.12	765.625
36	0.12	765.625
37	0.14	867.625
38	0.15	918.625
39	0.17	1020.625
40	0.18	1071.625
41	0.19	1122.625
42	0.2	1173.625
43	0.22	1275.625
44	0.23	1326.625
45	0.26	1479.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.04	357.625
3	0.04	357.625
4	0.05	408.625
5	0.06	459.625
6	0.05	408.625
7	0.08	561.625
8	0.08	561.625
9	0.09	612.625
10	0.11	714.625
11	0.11	714.625
12	0.11	714.625
13	0.12	765.625
14	0.12	765.625
15	0.13	816.625
16	0.14	867.625
17	0.14	867.625
18	0.14	867.625
19	0.14	867.625
20	0.16	969.625
21	0.16	969.625
22	0.16	969.625
23	0.16	969.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.18	1071.625
26	0.19	1122.625
27	0.2	1173.625
28	0.2	1173.625
29	0.2	1173.625
30	0.21	1224.625
31	0.21	1224.625
32	0.21	1224.625
33	0.22	1275.625
34	0.21	1224.625
35	0.22	1275.625
36	0.23	1326.625
37	0.22	1275.625
38	0.22	1275.625
39	0.21	1224.625
40	0.2	1173.625
41	0.21	1224.625
42	0.21	1224.625
43	0.22	1275.625
44	0.23	1326.625
45	0.23	1326.625



**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.03	306.625
5	0.05	408.625
6	0.05	408.625
7	0.06	459.625
8	0.09	612.625
9	0.09	612.625
10	0.11	714.625
11	0.12	765.625
12	0.13	816.625
13	0.14	867.625
14	0.14	867.625
15	0.16	969.625
16	0.15	918.625
17	0.17	1020.625
18	0.16	969.625
19	0.18	1071.625
20	0.19	1122.625
21	0.2	1173.625
22	0.22	1275.625
23	0.22	1275.625

DEGREE	FORCE	MOMENT
24	0.22	1275.625
25	0.24	1377.625
26	0.24	1377.625
27	0.25	1428.625
28	0.28	1581.625
29	0.27	1530.625
30	0.28	1581.625
31	0.26	1479.625
32	0.27	1530.625
33	0.27	1530.625
34	0.28	1581.625
35	0.27	1530.625
36	0.27	1530.625
37	0.27	1530.625
38	0.26	1479.625
39	0.26	1479.625
40	0.27	1530.625
41	0.27	1530.625
42	0.27	1530.625
43	0.28	1581.625
44	0.27	1530.625
45	0.28	1581.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.03	306.625
8	0.04	357.625
9	0.05	408.625
10	0.06	459.625
11	0.07	510.625
12	0.07	510.625
13	0.07	510.625
14	0.08	561.625
15	0.09	612.625
16	0.1	663.625
17	0.1	663.625
18	0.1	663.625
19	0.13	816.625
20	0.14	867.625
21	0.15	918.625
22	0.18	1071.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.2	1173.625
26	0.21	1224.625
27	0.22	1275.625
28	0.22	1275.625
29	0.24	1377.625
30	0.23	1326.625
31	0.24	1377.625
32	0.24	1377.625
33	0.24	1377.625
34	0.25	1428.625
35	0.25	1428.625
36	0.26	1479.625
37	0.25	1428.625
38	0.27	1530.625
39	0.27	1530.625
40	0.29	1632.625
41	0.29	1632.625
42	0.3	1683.625
43	0.29	1632.625
44	0.28	1581.625
45	0.28	1581.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.02	255.625
5	0.03	306.625
6	0.05	408.625
7	0.06	459.625
8	0.09	612.625
9	0.1	663.625
10	0.11	714.625
11	0.12	765.625
12	0.12	765.625
13	0.13	816.625
14	0.13	816.625
15	0.14	867.625
16	0.16	969.625
17	0.17	1020.625
18	0.18	1071.625
19	0.19	1122.625
20	0.21	1224.625
21	0.21	1224.625
22	0.21	1224.625
23	0.23	1326.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.24	1377.625
26	0.25	1428.625
27	0.26	1479.625
28	0.25	1428.625
29	0.25	1428.625
30	0.28	1581.625
31	0.27	1530.625
32	0.26	1479.625
33	0.27	1530.625
34	0.26	1479.625
35	0.27	1530.625
36	0.27	1530.625
37	0.28	1581.625
38	0.29	1632.625
39	0.28	1581.625
40	0.29	1632.625
41	0.29	1632.625
42	0.29	1632.625
43	0.3	1683.625
44	0.3	1683.625
45	0.31	1734.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.016x0.022**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.03	306.625
12	0.04	357.625
13	0.04	357.625
14	0.04	357.625
15	0.07	510.625
16	0.08	561.625
17	0.09	612.625
18	0.1	663.625
19	0.11	714.625
20	0.11	714.625
21	0.11	714.625
22	0.13	816.625
23	0.13	816.625

DEGREE	FORCE	MOMENT
24	0.13	816.625
25	0.14	867.625
26	0.13	816.625
27	0.14	867.625
28	0.15	918.625
29	0.15	918.625
30	0.15	918.625
31	0.16	969.625
32	0.16	969.625
33	0.17	1020.625
34	0.18	1071.625
35	0.18	1071.625
36	0.18	1071.625
37	0.19	1122.625
38	0.18	1071.625
39	0.18	1071.625
40	0.18	1071.625
41	0.18	1071.625
42	0.19	1122.625
43	0.2	1173.625
44	0.2	1173.625
45	0.21	1224.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.03	306.625
8	0.05	408.625
9	0.06	459.625
10	0.05	408.625
11	0.06	459.625
12	0.07	510.625
13	0.07	510.625
14	0.08	561.625
15	0.11	714.625
16	0.12	765.625
17	0.15	918.625
18	0.15	918.625
19	0.16	969.625
20	0.2	1173.625
21	0.21	1224.625
22	0.23	1326.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.25	1428.625
25	0.27	1530.625
26	0.28	1581.625
27	0.3	1683.625
28	0.32	1785.625
29	0.35	1938.625
30	0.35	1938.625
31	0.38	2091.625
32	0.39	2142.625
33	0.4	2193.625
34	0.41	2244.625
35	0.43	2346.625
36	0.45	2448.625
37	0.45	2448.625
38	0.48	2601.625
39	0.48	2601.625
40	0.51	2754.625
41	0.49	2652.625
42	0.52	2805.625
43	0.53	2856.625
44	0.54	2907.625
45	0.57	3060.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.04	357.625
9	0.06	459.625
10	0.07	510.625
11	0.09	612.625
12	0.1	663.625
13	0.11	714.625
14	0.12	765.625
15	0.14	867.625
16	0.14	867.625
17	0.15	918.625
18	0.16	969.625
19	0.18	1071.625
20	0.18	1071.625
21	0.2	1173.625
22	0.21	1224.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.24	1377.625
25	0.26	1479.625
26	0.28	1581.625
27	0.28	1581.625
28	0.29	1632.625
29	0.31	1734.625
30	0.33	1836.625
31	0.34	1887.625
32	0.34	1887.625
33	0.37	2040.625
34	0.37	2040.625
35	0.4	2193.625
36	0.41	2244.625
37	0.42	2295.625
38	0.42	2295.625
39	0.46	2499.625
40	0.47	2550.625
41	0.48	2601.625
42	0.51	2754.625
43	0.52	2805.625
44	0.53	2856.625
45	0.55	2958.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.02	255.625
3	0.03	306.625
4	0.05	408.625
5	0.06	459.625
6	0.07	510.625
7	0.09	612.625
8	0.11	714.625
9	0.11	714.625
10	0.13	816.625
11	0.13	816.625
12	0.15	918.625
13	0.17	1020.625
14	0.18	1071.625
15	0.17	1020.625
16	0.19	1122.625
17	0.19	1122.625
18	0.2	1173.625
19	0.21	1224.625
20	0.22	1275.625
21	0.23	1326.625
22	0.25	1428.625
23	0.25	1428.625

DEGREE	FORCE	MOMENT
24	0.26	1479.625
25	0.26	1479.625
26	0.28	1581.625
27	0.3	1683.625
28	0.29	1632.625
29	0.31	1734.625
30	0.31	1734.625
31	0.32	1785.625
32	0.32	1785.625
33	0.36	1989.625
34	0.42	2295.625
35	0.47	2550.625
36	0.52	2805.625
37	0.57	3060.625
38	0.62	3315.625
39	0.67	3570.625
40	0.71	3774.625
41	0.77	4080.625
42	0.81	4284.625
43	0.85	4488.625
44	0.89	4692.625
45	0.94	4947.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.04	357.625
5	0.05	408.625
6	0.07	510.625
7	0.07	510.625
8	0.08	561.625
9	0.09	612.625
10	0.1	663.625
11	0.12	765.625
12	0.11	714.625
13	0.11	714.625
14	0.11	714.625
15	0.12	765.625
16	0.13	816.625
17	0.14	867.625
18	0.14	867.625
19	0.15	918.625
20	0.16	969.625
21	0.17	1020.625
22	0.18	1071.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.2	1173.625
25	0.18	1071.625
26	0.21	1224.625
27	0.21	1224.625
28	0.2	1173.625
29	0.22	1275.625
30	0.25	1428.625
31	0.26	1479.625
32	0.3	1683.625
33	0.34	1887.625
34	0.39	2142.625
35	0.43	2346.625
36	0.48	2601.625
37	0.53	2856.625
38	0.57	3060.625
39	0.63	3366.625
40	0.66	3519.625
41	0.7	3723.625
42	0.74	3927.625
43	0.79	4182.625
44	0.82	4335.625
45	0.85	4488.625



**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.04	357.625
6	0.04	357.625
7	0.05	408.625
8	0.06	459.625
9	0.08	561.625
10	0.09	612.625
11	0.11	714.625
12	0.13	816.625
13	0.16	969.625
14	0.17	1020.625
15	0.19	1122.625
16	0.22	1275.625
17	0.23	1326.625
18	0.26	1479.625
19	0.28	1581.625
20	0.28	1581.625
21	0.29	1632.625
22	0.31	1734.625
23	0.31	1734.625

DEGREE	FORCE	MOMENT
24	0.32	1785.625
25	0.33	1836.625
26	0.34	1887.625
27	0.34	1887.625
28	0.33	1836.625
29	0.35	1938.625
30	0.35	1938.625
31	0.35	1938.625
32	0.34	1887.625
33	0.36	1989.625
34	0.4	2193.625
35	0.46	2499.625
36	0.5	2703.625
37	0.53	2856.625
38	0.59	3162.625
39	0.63	3366.625
40	0.67	3570.625
41	0.7	3723.625
42	0.76	4029.625
43	0.8	4233.625
44	0.84	4437.625
45	0.88	4641.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.04	357.625
11	0.03	306.625
12	0.04	357.625
13	0.04	357.625
14	0.05	408.625
15	0.06	459.625
16	0.07	510.625
17	0.08	561.625
18	0.09	612.625
19	0.1	663.625
20	0.11	714.625
21	0.11	714.625
22	0.12	765.625
23	0.13	816.625

DEGREE	FORCE	MOMENT
24	0.15	918.625
25	0.16	969.625
26	0.17	1020.625
27	0.17	1020.625
28	0.19	1122.625
29	0.22	1275.625
30	0.23	1326.625
31	0.28	1581.625
32	0.33	1836.625
33	0.38	2091.625
34	0.42	2295.625
35	0.47	2550.625
36	0.5	2703.625
37	0.53	2856.625
38	0.59	3162.625
39	0.61	3264.625
40	0.64	3417.625
41	0.67	3570.625
42	0.7	3723.625
43	0.74	3927.625
44	0.79	4182.625
45	0.82	4335.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.03	306.625
7	0.04	357.625
8	0.07	510.625
9	0.07	510.625
10	0.08	561.625
11	0.09	612.625
12	0.1	663.625
13	0.11	714.625
14	0.11	714.625
15	0.11	714.625
16	0.11	714.625
17	0.11	714.625
18	0.11	714.625
19	0.12	765.625
20	0.11	714.625
21	0.12	765.625
22	0.13	816.625
23	0.13	816.625

DEGREE	FORCE	MOMENT
24	0.12	765.625
25	0.12	765.625
26	0.11	714.625
27	0.13	816.625
28	0.14	867.625
29	0.15	918.625
30	0.2	1173.625
31	0.26	1479.625
32	0.28	1581.625
33	0.32	1785.625
34	0.36	1989.625
35	0.39	2142.625
36	0.43	2346.625
37	0.49	2652.625
38	0.53	2856.625
39	0.59	3162.625
40	0.62	3315.625
41	0.67	3570.625
42	0.7	3723.625
43	0.78	4131.625
44	0.8	4233.625
45	0.84	4437.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0	153.625
3	0.01	204.625
4	0.03	306.625
5	0.04	357.625
6	0.04	357.625
7	0.05	408.625
8	0.06	459.625
9	0.09	612.625
10	0.12	765.625
11	0.13	816.625
12	0.16	969.625
13	0.17	1020.625
14	0.18	1071.625
15	0.21	1224.625
16	0.23	1326.625
17	0.25	1428.625
18	0.25	1428.625
19	0.26	1479.625
20	0.26	1479.625
21	0.29	1632.625
22	0.3	1683.625
23	0.32	1785.625

DEGREE	FORCE	MOMENT
24	0.31	1734.625
25	0.33	1836.625
26	0.32	1785.625
27	0.32	1785.625
28	0.31	1734.625
29	0.33	1836.625
30	0.32	1785.625
31	0.32	1785.625
32	0.32	1785.625
33	0.31	1734.625
34	0.32	1785.625
35	0.34	1887.625
36	0.37	2040.625
37	0.41	2244.625
38	0.41	2244.625
39	0.45	2448.625
40	0.5	2703.625
41	0.55	2958.625
42	0.57	3060.625
43	0.61	3264.625
44	0.66	3519.625
45	0.69	3672.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.03	306.625
10	0.04	357.625
11	0.04	357.625
12	0.05	408.625
13	0.06	459.625
14	0.06	459.625
15	0.05	408.625
16	0.06	459.625
17	0.05	408.625
18	0.06	459.625
19	0.07	510.625
20	0.08	561.625
21	0.07	510.625
22	0.07	510.625
23	0.08	561.625

DEGREE	FORCE	MOMENT
24	0.09	612.625
25	0.09	612.625
26	0.09	612.625
27	0.09	612.625
28	0.11	714.625
29	0.1	663.625
30	0.11	714.625
31	0.11	714.625
32	0.11	714.625
33	0.12	765.625
34	0.13	816.625
35	0.14	867.625
36	0.19	1122.625
37	0.22	1275.625
38	0.26	1479.625
39	0.32	1785.625
40	0.35	1938.625
41	0.38	2091.625
42	0.42	2295.625
43	0.46	2499.625
44	0.49	2652.625
45	0.55	2958.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.017x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.04	357.625
8	0.04	357.625
9	0.05	408.625
10	0.06	459.625
11	0.08	561.625
12	0.08	561.625
13	0.08	561.625
14	0.09	612.625
15	0.1	663.625
16	0.1	663.625
17	0.11	714.625
18	0.12	765.625
19	0.11	714.625
20	0.11	714.625
21	0.12	765.625
22	0.13	816.625
23	0.13	816.625

DEGREE	FORCE	MOMENT
24	0.13	816.625
25	0.14	867.625
26	0.13	816.625
27	0.15	918.625
28	0.16	969.625
29	0.15	918.625
30	0.15	918.625
31	0.15	918.625
32	0.13	816.625
33	0.14	867.625
34	0.15	918.625
35	0.16	969.625
36	0.21	1224.625
37	0.26	1479.625
38	0.3	1683.625
39	0.35	1938.625
40	0.38	2091.625
41	0.44	2397.625
42	0.47	2550.625
43	0.5	2703.625
44	0.55	2958.625
45	0.59	3162.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.04	357.625
7	0.04	357.625
8	0.05	408.625
9	0.06	459.625
10	0.07	510.625
11	0.07	510.625
12	0.09	612.625
13	0.09	612.625
14	0.1	663.625
15	0.1	663.625
16	0.11	714.625
17	0.12	765.625
18	0.12	765.625
19	0.13	816.625
20	0.14	867.625
21	0.16	969.625
22	0.18	1071.625
23	0.19	1122.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.2	1173.625
26	0.21	1224.625
27	0.25	1428.625
28	0.27	1530.625
29	0.33	1836.625
30	0.37	2040.625
31	0.43	2346.625
32	0.47	2550.625
33	0.52	2805.625
34	0.58	3111.625
35	0.63	3366.625
36	0.67	3570.625
37	0.72	3825.625
38	0.78	4131.625
39	0.82	4335.625
40	0.86	4539.625
41	0.89	4692.625
42	0.94	4947.625
43	0.97	5100.625
44	1	5253.625
45	1.04	5457.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.02	255.625
5	0.06	459.625
6	0.04	357.625
7	0.05	408.625
8	0.06	459.625
9	0.03	306.625
10	0.07	510.625
11	0.07	510.625
12	0.07	510.625
13	0.07	510.625
14	0.08	561.625
15	0.08	561.625
16	0.1	663.625
17	0.1	663.625
18	0.13	816.625
19	0.12	765.625
20	0.14	867.625
21	0.13	816.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.17	1020.625
25	0.16	969.625
26	0.17	1020.625
27	0.19	1122.625
28	0.21	1224.625
29	0.25	1428.625
30	0.32	1785.625
31	0.36	1989.625
32	0.41	2244.625
33	0.47	2550.625
34	0.51	2754.625
35	0.57	3060.625
36	0.61	3264.625
37	0.67	3570.625
38	0.7	3723.625
39	0.74	3927.625
40	0.78	4131.625
41	0.82	4335.625
42	0.86	4539.625
43	0.89	4692.625
44	0.92	4845.625
45	0.97	5100.625



**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.03	306.625
5	0.04	357.625
6	0.06	459.625
7	0.07	510.625
8	0.09	612.625
9	0.09	612.625
10	0.1	663.625
11	0.11	714.625
12	0.11	714.625
13	0.11	714.625
14	0.13	816.625
15	0.12	765.625
16	0.13	816.625
17	0.14	867.625
18	0.15	918.625
19	0.15	918.625
20	0.17	1020.625
21	0.17	1020.625
22	0.17	1020.625
23	0.18	1071.625

DEGREE	FORCE	MOMENT
24	0.19	1122.625
25	0.22	1275.625
26	0.24	1377.625
27	0.25	1428.625
28	0.26	1479.625
29	0.27	1530.625
30	0.27	1530.625
31	0.3	1683.625
32	0.34	1887.625
33	0.37	2040.625
34	0.41	2244.625
35	0.45	2448.625
36	0.44	2397.625
37	0.53	2856.625
38	0.59	3162.625
39	0.64	3417.625
40	0.68	3621.625
41	0.73	3876.625
42	0.78	4131.625
43	0.83	4386.625
44	0.87	4590.625
45	0.96	5049.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.03	306.625
10	0.05	408.625
11	0.05	408.625
12	0.05	408.625
13	0.06	459.625
14	0.07	510.625
15	0.09	612.625
16	0.09	612.625
17	0.1	663.625
18	0.11	714.625
19	0.12	765.625
20	0.13	816.625
21	0.17	1020.625
22	0.2	1173.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.29	1632.625
25	0.33	1836.625
26	0.38	2091.625
27	0.43	2346.625
28	0.49	2652.625
29	0.54	2907.625
30	0.56	3009.625
31	0.62	3315.625
32	0.67	3570.625
33	0.72	3825.625
34	0.77	4080.625
35	0.81	4284.625
36	0.85	4488.625
37	0.91	4794.625
38	0.95	4998.625
39	0.99	5202.625
40	1.03	5406.625
41	1.06	5559.625
42	1.1	5763.625
43	1.15	6018.625
44	1.18	6171.625
45	1.21	6324.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.03	306.625
14	0.04	357.625
15	0.04	357.625
16	0.04	357.625
17	0.05	408.625
18	0.05	408.625
19	0.05	408.625
20	0.05	408.625
21	0.06	459.625
22	0.06	459.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.06	459.625
25	0.07	510.625
26	0.12	765.625
27	0.16	969.625
28	0.2	1173.625
29	0.25	1428.625
30	0.29	1632.625
31	0.35	1938.625
32	0.39	2142.625
33	0.45	2448.625
34	0.47	2550.625
35	0.52	2805.625
36	0.58	3111.625
37	0.63	3366.625
38	0.67	3570.625
39	0.72	3825.625
40	0.76	4029.625
41	0.8	4233.625
42	0.84	4437.625
43	0.87	4590.625
44	0.91	4794.625
45	0.94	4947.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.02	255.625
3	0.03	306.625
4	0.05	408.625
5	0.08	561.625
6	0.09	612.625
7	0.11	714.625
8	0.13	816.625
9	0.13	816.625
10	0.15	918.625
11	0.16	969.625
12	0.16	969.625
13	0.18	1071.625
14	0.19	1122.625
15	0.21	1224.625
16	0.21	1224.625
17	0.22	1275.625
18	0.23	1326.625
19	0.25	1428.625
20	0.25	1428.625
21	0.28	1581.625
22	0.28	1581.625
23	0.29	1632.625

DEGREE	FORCE	MOMENT
24	0.3	1683.625
25	0.31	1734.625
26	0.32	1785.625
27	0.33	1836.625
28	0.35	1938.625
29	0.36	1989.625
30	0.37	2040.625
31	0.38	2091.625
32	0.42	2295.625
33	0.44	2397.625
34	0.49	2652.625
35	0.52	2805.625
36	0.58	3111.625
37	0.63	3366.625
38	0.66	3519.625
39	0.7	3723.625
40	0.74	3927.625
41	0.78	4131.625
42	0.83	4386.625
43	0.86	4539.625
44	0.89	4692.625
45	0.94	4947.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.02	255.625
2	0.06	459.625
3	0.07	510.625
4	0.09	612.625
5	0.09	612.625
6	0.13	816.625
7	0.13	816.625
8	0.15	918.625
9	0.15	918.625
10	0.18	1071.625
11	0.2	1173.625
12	0.19	1122.625
13	0.2	1173.625
14	0.22	1275.625
15	0.23	1326.625
16	0.26	1479.625
17	0.26	1479.625
18	0.27	1530.625
19	0.28	1581.625
20	0.29	1632.625
21	0.32	1785.625
22	0.31	1734.625
23	0.33	1836.625

DEGREE	FORCE	MOMENT
24	0.33	1836.625
25	0.35	1938.625
26	0.34	1887.625
27	0.37	2040.625
28	0.36	1989.625
29	0.38	2091.625
30	0.38	2091.625
31	0.4	2193.625
32	0.44	2397.625
33	0.5	2703.625
34	0.54	2907.625
35	0.59	3162.625
36	0.65	3468.625
37	0.69	3672.625
38	0.72	3825.625
39	0.78	4131.625
40	0.82	4335.625
41	0.85	4488.625
42	0.89	4692.625
43	0.94	4947.625
44	0.97	5100.625
45	1.01	5304.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.05	408.625
8	0.06	459.625
9	0.08	561.625
10	0.11	714.625
11	0.12	765.625
12	0.13	816.625
13	0.15	918.625
14	0.18	1071.625
15	0.2	1173.625
16	0.21	1224.625
17	0.22	1275.625
18	0.25	1428.625
19	0.26	1479.625
20	0.28	1581.625
21	0.29	1632.625
22	0.3	1683.625
23	0.34	1887.625

DEGREE	FORCE	MOMENT
24	0.36	1989.625
25	0.36	1989.625
26	0.39	2142.625
27	0.41	2244.625
28	0.43	2346.625
29	0.46	2499.625
30	0.5	2703.625
31	0.54	2907.625
32	0.59	3162.625
33	0.63	3366.625
34	0.67	3570.625
35	0.73	3876.625
36	0.77	4080.625
37	0.8	4233.625
38	0.85	4488.625
39	0.89	4692.625
40	0.94	4947.625
41	0.96	5049.625
42	0.99	5202.625
43	1.04	5457.625
44	1.09	5712.625
45	1.11	5814.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.03	306.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.03	306.625
14	0.04	357.625
15	0.04	357.625
16	0.05	408.625
17	0.07	510.625
18	0.08	561.625
19	0.07	510.625
20	0.09	612.625
21	0.1	663.625
22	0.11	714.625
23	0.12	765.625

DEGREE	FORCE	MOMENT
24	0.13	816.625
25	0.15	918.625
26	0.15	918.625
27	0.16	969.625
28	0.18	1071.625
29	0.18	1071.625
30	0.18	1071.625
31	0.17	1020.625
32	0.19	1122.625
33	0.19	1122.625
34	0.2	1173.625
35	0.21	1224.625
36	0.24	1377.625
37	0.24	1377.625
38	0.24	1377.625
39	0.27	1530.625
40	0.31	1734.625
41	0.36	1989.625
42	0.41	2244.625
43	0.45	2448.625
44	0.49	2652.625
45	0.52	2805.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.018x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.04	357.625
8	0.02	255.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.02	255.625
13	0.04	357.625
14	0.04	357.625
15	0.05	408.625
16	0.06	459.625
17	0.07	510.625
18	0.09	612.625
19	0.1	663.625
20	0.09	612.625
21	0.1	663.625
22	0.12	765.625
23	0.14	867.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.18	1071.625
26	0.19	1122.625
27	0.22	1275.625
28	0.25	1428.625
29	0.26	1479.625
30	0.29	1632.625
31	0.29	1632.625
32	0.32	1785.625
33	0.34	1887.625
34	0.35	1938.625
35	0.38	2091.625
36	0.42	2295.625
37	0.42	2295.625
38	0.45	2448.625
39	0.46	2499.625
40	0.48	2601.625
41	0.5	2703.625
42	0.51	2754.625
43	0.52	2805.625
44	0.57	3060.625
45	0.59	3162.625



**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.03	306.625
4	0.02	255.625
5	0.04	357.625
6	0.05	408.625
7	0.06	459.625
8	0.07	510.625
9	0.09	612.625
10	0.1	663.625
11	0.11	714.625
12	0.13	816.625
13	0.16	969.625
14	0.18	1071.625
15	0.21	1224.625
16	0.28	1581.625
17	0.33	1836.625
18	0.39	2142.625
19	0.46	2499.625
20	0.52	2805.625
21	0.58	3111.625
22	0.65	3468.625
23	0.69	3672.625

DEGREE	FORCE	MOMENT
24	0.74	3927.625
25	0.8	4233.625
26	0.85	4488.625
27	0.9	4743.625
28	0.95	4998.625
29	0.98	5151.625
30	1.02	5355.625
31	1.09	5712.625
32	1.12	5865.625
33	1.13	5916.625
34	1.17	6120.625
35	1.21	6324.625
36	1.25	6528.625
37	1.28	6681.625
38	1.27	6630.625
39	1.3	6783.625
40	1.34	6987.625
41	1.38	7191.625
42	1.38	7191.625
43	1.41	7344.625
44	1.43	7446.625
45	1.45	7548.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.02	255.625
4	0.03	306.625
5	0.05	408.625
6	0.05	408.625
7	0.06	459.625
8	0.08	561.625
9	0.1	663.625
10	0.12	765.625
11	0.14	867.625
12	0.15	918.625
13	0.12	765.625
14	0.14	867.625
15	0.15	918.625
16	0.17	1020.625
17	0.17	1020.625
18	0.24	1377.625
19	0.32	1785.625
20	0.39	2142.625
21	0.47	2550.625
22	0.56	3009.625
23	0.64	3417.625

DEGREE	FORCE	MOMENT
24	0.7	3723.625
25	0.76	4029.625
26	0.82	4335.625
27	0.88	4641.625
28	0.93	4896.625
29	0.98	5151.625
30	1.03	5406.625
31	1.1	5763.625
32	1.13	5916.625
33	1.16	6069.625
34	1.2	6273.625
35	1.22	6375.625
36	1.25	6528.625
37	1.28	6681.625
38	1.32	6885.625
39	1.35	7038.625
40	1.37	7140.625
41	1.4	7293.625
42	1.41	7344.625
43	1.44	7497.625
44	1.46	7599.625
45	1.47	7650.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.06	459.625
5	0.08	561.625
6	0.08	561.625
7	0.09	612.625
8	0.11	714.625
9	0.11	714.625
10	0.13	816.625
11	0.14	867.625
12	0.15	918.625
13	0.17	1020.625
14	0.17	1020.625
15	0.18	1071.625
16	0.18	1071.625
17	0.19	1122.625
18	0.25	1428.625
19	0.33	1836.625
20	0.39	2142.625
21	0.44	2397.625
22	0.52	2805.625
23	0.58	3111.625

DEGREE	FORCE	MOMENT
24	0.64	3417.625
25	0.71	3774.625
26	0.77	4080.625
27	0.83	4386.625
28	0.87	4590.625
29	0.95	4998.625
30	0.99	5202.625
31	1.03	5406.625
32	1.08	5661.625
33	1.11	5814.625
34	1.14	5967.625
35	1.18	6171.625
36	1.2	6273.625
37	1.22	6375.625
38	1.26	6579.625
39	1.28	6681.625
40	1.31	6834.625
41	1.34	6987.625
42	1.36	7089.625
43	1.38	7191.625
44	1.39	7242.625
45	1.42	7395.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0.01	204.625
8	0.01	204.625
9	0.04	357.625
10	0.06	459.625
11	0.09	612.625
12	0.1	663.625
13	0.14	867.625
14	0.19	1122.625
15	0.24	1377.625
16	0.3	1683.625
17	0.35	1938.625
18	0.42	2295.625
19	0.44	2397.625
20	0.55	2958.625
21	0.62	3315.625
22	0.68	3621.625
23	0.75	3978.625

DEGREE	FORCE	MOMENT
24	0.82	4335.625
25	0.88	4641.625
26	0.92	4845.625
27	0.96	5049.625
28	1.02	5355.625
29	1.06	5559.625
30	1.08	5661.625
31	1.15	6018.625
32	1.17	6120.625
33	1.21	6324.625
34	1.25	6528.625
35	1.26	6579.625
36	1.32	6885.625
37	1.34	6987.625
38	1.36	7089.625
39	1.39	7242.625
40	1.42	7395.625
41	1.44	7497.625
42	1.49	7752.625
43	1.5	7803.625
44	1.51	7854.625
45	1.52	7905.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.04	357.625
13	0.08	561.625
14	0.11	714.625
15	0.15	918.625
16	0.19	1122.625
17	0.23	1326.625
18	0.28	1581.625
19	0.35	1938.625
20	0.41	2244.625
21	0.48	2601.625
22	0.56	3009.625
23	0.61	3264.625

DEGREE	FORCE	MOMENT
24	0.69	3672.625
25	0.73	3876.625
26	0.81	4284.625
27	0.85	4488.625
28	0.92	4845.625
29	0.97	5100.625
30	1.02	5355.625
31	1.09	5712.625
32	1.12	5865.625
33	1.14	5967.625
34	1.2	6273.625
35	1.23	6426.625
36	1.26	6579.625
37	1.31	6834.625
38	1.31	6834.625
39	1.33	6936.625
40	1.37	7140.625
41	1.39	7242.625
42	1.43	7446.625
43	1.45	7548.625
44	1.47	7650.625
45	1.47	7650.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.03	306.625
5	0.05	408.625
6	0.07	510.625
7	0.06	459.625
8	0.08	561.625
9	0.09	612.625
10	0.1	663.625
11	0.12	765.625
12	0.12	765.625
13	0.14	867.625
14	0.15	918.625
15	0.19	1122.625
16	0.24	1377.625
17	0.31	1734.625
18	0.38	2091.625
19	0.44	2397.625
20	0.51	2754.625
21	0.57	3060.625
22	0.61	3264.625
23	0.69	3672.625

DEGREE	FORCE	MOMENT
24	0.74	3927.625
25	0.81	4284.625
26	0.85	4488.625
27	0.9	4743.625
28	0.95	4998.625
29	0.99	5202.625
30	1.02	5355.625
31	1.04	5457.625
32	1.1	5763.625
33	1.15	6018.625
34	1.17	6120.625
35	1.22	6375.625
36	1.21	6324.625
37	1.25	6528.625
38	1.29	6732.625
39	1.31	6834.625
40	1.33	6936.625
41	1.35	7038.625
42	1.37	7140.625
43	1.41	7344.625
44	1.42	7395.625
45	1.43	7446.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.04	357.625
7	0.04	357.625
8	0.07	510.625
9	0.09	612.625
10	0.1	663.625
11	0.12	765.625
12	0.13	816.625
13	0.13	816.625
14	0.15	918.625
15	0.15	918.625
16	0.17	1020.625
17	0.18	1071.625
18	0.19	1122.625
19	0.23	1326.625
20	0.29	1632.625
21	0.35	1938.625
22	0.41	2244.625
23	0.47	2550.625

DEGREE	FORCE	MOMENT
24	0.52	2805.625
25	0.59	3162.625
26	0.64	3417.625
27	0.71	3774.625
28	0.77	4080.625
29	0.81	4284.625
30	0.87	4590.625
31	0.91	4794.625
32	0.97	5100.625
33	0.99	5202.625
34	1.03	5406.625
35	1.08	5661.625
36	1.12	5865.625
37	1.14	5967.625
38	1.17	6120.625
39	1.21	6324.625
40	1.24	6477.625
41	1.25	6528.625
42	1.27	6630.625
43	1.3	6783.625
44	1.32	6885.625
45	1.35	7038.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.04	357.625
10	0.04	357.625
11	0.05	408.625
12	0.05	408.625
13	0.06	459.625
14	0.06	459.625
15	0.09	612.625
16	0.13	816.625
17	0.17	1020.625
18	0.23	1326.625
19	0.29	1632.625
20	0.35	1938.625
21	0.42	2295.625
22	0.48	2601.625
23	0.53	2856.625

DEGREE	FORCE	MOMENT
24	0.6	3213.625
25	0.66	3519.625
26	0.73	3876.625
27	0.78	4131.625
28	0.81	4284.625
29	0.88	4641.625
30	0.93	4896.625
31	0.98	5151.625
32	1.03	5406.625
33	1.07	5610.625
34	1.11	5814.625
35	1.14	5967.625
36	1.19	6222.625
37	1.21	6324.625
38	1.26	6579.625
39	1.27	6630.625
40	1.29	6732.625
41	1.31	6834.625
42	1.34	6987.625
43	1.39	7242.625
44	1.4	7293.625
45	1.43	7446.625



**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0.03	306.625
8	0.02	255.625
9	0.03	306.625
10	0.04	357.625
11	0.05	408.625
12	0.06	459.625
13	0.08	561.625
14	0.11	714.625
15	0.16	969.625
16	0.18	1071.625
17	0.22	1275.625
18	0.26	1479.625
19	0.32	1785.625
20	0.38	2091.625
21	0.43	2346.625
22	0.5	2703.625
23	0.55	2958.625

DEGREE	FORCE	MOMENT
24	0.62	3315.625
25	0.67	3570.625
26	0.73	3876.625
27	0.8	4233.625
28	0.85	4488.625
29	0.89	4692.625
30	0.95	4998.625
31	0.99	5202.625
32	1.04	5457.625
33	1.08	5661.625
34	1.12	5865.625
35	1.15	6018.625
36	1.18	6171.625
37	1.22	6375.625
38	1.23	6426.625
39	1.27	6630.625
40	1.31	6834.625
41	1.34	6987.625
42	1.36	7089.625
43	1.39	7242.625
44	1.41	7344.625
45	1.42	7395.625

**Bracket Type: Mini Diamond**

**Wire Size: 0.019x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0.01	204.625
9	0.03	306.625
10	0.06	459.625
11	0.09	612.625
12	0.14	867.625
13	0.18	1071.625
14	0.22	1275.625
15	0.27	1530.625
16	0.33	1836.625
17	0.41	2244.625
18	0.48	2601.625
19	0.54	2907.625
20	0.59	3162.625
21	0.65	3468.625
22	0.72	3825.625
23	0.78	4131.625

DEGREE	FORCE	MOMENT
24	0.83	4386.625
25	0.89	4692.625
26	0.93	4896.625
27	0.99	5202.625
28	1.04	5457.625
29	1.07	5610.625
30	1.12	5865.625
31	1.14	5967.625
32	1.19	6222.625
33	1.22	6375.625
34	1.26	6579.625
35	1.29	6732.625
36	1.31	6834.625
37	1.34	6987.625
38	1.38	7191.625
39	1.39	7242.625
40	1.42	7395.625
41	1.44	7497.625
42	1.47	7650.625
43	1.49	7752.625
44	1.51	7854.625
45	1.53	7956.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.04	357.625
9	0.04	357.625
10	0.04	357.625
11	0.04	357.625
12	0.04	357.625
13	0.06	459.625
14	0.06	459.625
15	0.07	510.625
16	0.07	510.625
17	0.07	510.625
18	0.08	561.625
19	0.07	510.625
20	0.1	663.625
21	0.12	765.625
22	0.1	663.625
23	0.09	612.625

DEGREE	FORCE	MOMENT
24	0.1	663.625
25	0.1	663.625
26	0.11	714.625
27	0.1	663.625
28	0.09	612.625
29	0.09	612.625
30	0.09	612.625
31	0.09	612.625
32	0.09	612.625
33	0.09	612.625
34	0.09	612.625
35	0.09	612.625
36	0.09	612.625
37	0.09	612.625
38	0.09	612.625
39	0.09	612.625
40	0.06	459.625
41	0.08	561.625
42	0.06	459.625
43	0.07	510.625
44	0.1	663.625
45	0.08	561.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.03	306.625
14	0.03	306.625
15	0.04	357.625
16	0.04	357.625
17	0.06	459.625
18	0.06	459.625
19	0.06	459.625
20	0.06	459.625
21	0.04	357.625
22	0.05	408.625
23	0.04	357.625

DEGREE	FORCE	MOMENT
24	0.05	408.625
25	0.03	306.625
26	0.05	408.625
27	0.05	408.625
28	0.05	408.625
29	0.05	408.625
30	0.08	561.625
31	0.1	663.625
32	0.11	714.625
33	0.11	714.625
34	0.11	714.625
35	0.11	714.625
36	0.11	714.625
37	0.11	714.625
38	0.11	714.625
39	0.11	714.625
40	0.11	714.625
41	0.11	714.625
42	0.11	714.625
43	0.11	714.625
44	0.11	714.625
45	0.11	714.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.03	306.625
11	0.04	357.625
12	0.05	408.625
13	0.07	510.625
14	0.08	561.625
15	0.09	612.625
16	0.09	612.625
17	0.1	663.625
18	0.11	714.625
19	0.12	765.625
20	0.14	867.625
21	0.13	816.625
22	0.14	867.625
23	0.14	867.625

DEGREE	FORCE	MOMENT
24	0.16	969.625
25	0.17	1020.625
26	0.18	1071.625
27	0.2	1173.625
28	0.22	1275.625
29	0.23	1326.625
30	0.24	1377.625
31	0.26	1479.625
32	0.27	1530.625
33	0.27	1530.625
34	0.27	1530.625
35	0.28	1581.625
36	0.29	1632.625
37	0.29	1632.625
38	0.3	1683.625
39	0.3	1683.625
40	0.31	1734.625
41	0.34	1887.625
42	0.34	1887.625
43	0.33	1836.625
44	0.34	1887.625
45	0.34	1887.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.04	357.625
6	0.04	357.625
7	0.05	408.625
8	0.06	459.625
9	0.08	561.625
10	0.1	663.625
11	0.11	714.625
12	0.13	816.625
13	0.14	867.625
14	0.16	969.625
15	0.17	1020.625
16	0.18	1071.625
17	0.18	1071.625
18	0.2	1173.625
19	0.21	1224.625
20	0.22	1275.625
21	0.24	1377.625
22	0.24	1377.625
23	0.24	1377.625

DEGREE	FORCE	MOMENT
24	0.26	1479.625
25	0.26	1479.625
26	0.27	1530.625
27	0.28	1581.625
28	0.28	1581.625
29	0.28	1581.625
30	0.27	1530.625
31	0.27	1530.625
32	0.27	1530.625
33	0.27	1530.625
34	0.29	1632.625
35	0.29	1632.625
36	0.28	1581.625
37	0.28	1581.625
38	0.28	1581.625
39	0.28	1581.625
40	0.28	1581.625
41	0.27	1530.625
42	0.27	1530.625
43	0.27	1530.625
44	0.27	1530.625
45	0.27	1530.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.01	204.625
16	0.01	204.625
17	0.01	204.625
18	0.01	204.625
19	0.01	204.625
20	0.01	204.625
21	0.02	255.625
22	0.02	255.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.04	357.625
26	0.03	306.625
27	0.03	306.625
28	0.04	357.625
29	0.04	357.625
30	0.05	408.625
31	0.04	357.625
32	0.04	357.625
33	0.04	357.625
34	0.04	357.625
35	0.04	357.625
36	0.05	408.625
37	0.05	408.625
38	0.06	459.625
39	0.06	459.625
40	0.05	408.625
41	0.07	510.625
42	0.07	510.625
43	0.07	510.625
44	0.08	561.625
45	0.09	612.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.02	255.625
22	0.02	255.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.02	255.625
25	0.02	255.625
26	0.02	255.625
27	0.02	255.625
28	0.02	255.625
29	0.02	255.625
30	0.02	255.625
31	0.02	255.625
32	0.02	255.625
33	0.02	255.625
34	0.02	255.625
35	0.02	255.625
36	0.02	255.625
37	0.03	306.625
38	0.03	306.625
39	0.03	306.625
40	0.03	306.625
41	0.03	306.625
42	0.03	306.625
43	0.04	357.625
44	0.05	408.625
45	0.07	510.625



**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.05	408.625
8	0.05	408.625
9	0.05	408.625
10	0.07	510.625
11	0.07	510.625
12	0.08	561.625
13	0.09	612.625
14	0.09	612.625
15	0.1	663.625
16	0.11	714.625
17	0.11	714.625
18	0.13	816.625
19	0.12	765.625
20	0.13	816.625
21	0.14	867.625
22	0.13	816.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.14	867.625
25	0.14	867.625
26	0.14	867.625
27	0.14	867.625
28	0.14	867.625
29	0.13	816.625
30	0.15	918.625
31	0.15	918.625
32	0.15	918.625
33	0.15	918.625
34	0.16	969.625
35	0.15	918.625
36	0.16	969.625
37	0.16	969.625
38	0.16	969.625
39	0.17	1020.625
40	0.16	969.625
41	0.15	918.625
42	0.16	969.625
43	0.17	1020.625
44	0.17	1020.625
45	0.16	969.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.01	204.625
16	0.01	204.625
17	0.01	204.625
18	0.01	204.625
19	0.01	204.625
20	0.01	204.625
21	0.01	204.625
22	0.01	204.625
23	0.01	204.625

DEGREE	FORCE	MOMENT
24	0.01	204.625
25	0.01	204.625
26	0.01	204.625
27	0.01	204.625
28	0.01	204.625
29	0.01	204.625
30	0.01	204.625
31	0.01	204.625
32	0.01	204.625
33	0.01	204.625
34	0.01	204.625
35	0.01	204.625
36	0.01	204.625
37	0.01	204.625
38	0.01	204.625
39	0.01	204.625
40	0.01	204.625
41	0.01	204.625
42	0.01	204.625
43	0.01	204.625
44	0.02	255.625
45	0.03	306.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.03	306.625
7	0.04	357.625
8	0.05	408.625
9	0.07	510.625
10	0.08	561.625
11	0.08	561.625
12	0.1	663.625
13	0.09	612.625
14	0.11	714.625
15	0.12	765.625
16	0.13	816.625
17	0.13	816.625
18	0.14	867.625
19	0.12	765.625
20	0.14	867.625
21	0.14	867.625
22	0.15	918.625
23	0.15	918.625

DEGREE	FORCE	MOMENT
24	0.14	867.625
25	0.14	867.625
26	0.14	867.625
27	0.14	867.625
28	0.12	765.625
29	0.12	765.625
30	0.12	765.625
31	0.12	765.625
32	0.12	765.625
33	0.13	816.625
34	0.13	816.625
35	0.13	816.625
36	0.13	816.625
37	0.14	867.625
38	0.16	969.625
39	0.15	918.625
40	0.16	969.625
41	0.16	969.625
42	0.16	969.625
43	0.17	1020.625
44	0.19	1122.625
45	0.22	1275.625

**Bracket Type: Victory Series**

**Wire Size: 0.016x0.022**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.02	255.625
22	0.02	255.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.02	255.625
25	0.02	255.625
26	0.02	255.625
27	0.02	255.625
28	0.02	255.625
29	0.02	255.625
30	0.02	255.625
31	0.02	255.625
32	0.02	255.625
33	0.02	255.625
34	0.02	255.625
35	0.02	255.625
36	0.02	255.625
37	0.02	255.625
38	0.02	255.625
39	0.02	255.625
40	0.02	255.625
41	0.02	255.625
42	0.02	255.625
43	0.02	255.625
44	0.02	255.625
45	0.02	255.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.02	255.625
7	0.03	306.625
8	0.02	255.625
9	0.03	306.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.03	306.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.02	255.625
22	0.03	306.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.03	306.625
26	0.03	306.625
27	0.03	306.625
28	0.04	357.625
29	0.03	306.625
30	0.05	408.625
31	0.06	459.625
32	0.08	561.625
33	0.09	612.625
34	0.12	765.625
35	0.15	918.625
36	0.16	969.625
37	0.18	1071.625
38	0.21	1224.625
39	0.25	1428.625
40	0.29	1632.625
41	0.35	1938.625
42	0.38	2091.625
43	0.41	2244.625
44	0.46	2499.625
45	0.48	2601.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.03	306.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.04	357.625
26	0.06	459.625
27	0.08	561.625
28	0.11	714.625
29	0.14	867.625
30	0.17	1020.625
31	0.21	1224.625
32	0.24	1377.625
33	0.26	1479.625
34	0.31	1734.625
35	0.36	1989.625
36	0.41	2244.625
37	0.45	2448.625
38	0.49	2652.625
39	0.56	3009.625
40	0.59	3162.625
41	0.63	3366.625
42	0.68	3621.625
43	0.73	3876.625
44	0.77	4080.625
45	0.82	4335.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.02	255.625
6	0.04	357.625
7	0.03	306.625
8	0.04	357.625
9	0.04	357.625
10	0.06	459.625
11	0.05	408.625
12	0.07	510.625
13	0.06	459.625
14	0.06	459.625
15	0.07	510.625
16	0.06	459.625
17	0.06	459.625
18	0.07	510.625
19	0.06	459.625
20	0.07	510.625
21	0.06	459.625
22	0.05	408.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.06	459.625
25	0.07	510.625
26	0.08	561.625
27	0.1	663.625
28	0.11	714.625
29	0.15	918.625
30	0.17	1020.625
31	0.22	1275.625
32	0.25	1428.625
33	0.29	1632.625
34	0.34	1887.625
35	0.37	2040.625
36	0.42	2295.625
37	0.47	2550.625
38	0.53	2856.625
39	0.57	3060.625
40	0.62	3315.625
41	0.67	3570.625
42	0.73	3876.625
43	0.77	4080.625
44	0.82	4335.625
45	0.85	4488.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.03	306.625
18	0.03	306.625
19	0.03	306.625
20	0.03	306.625
21	0.03	306.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.03	306.625
26	0.03	306.625
27	0.05	408.625
28	0.07	510.625
29	0.08	561.625
30	0.1	663.625
31	0.13	816.625
32	0.17	1020.625
33	0.19	1122.625
34	0.2	1173.625
35	0.25	1428.625
36	0.27	1530.625
37	0.32	1785.625
38	0.36	1989.625
39	0.41	2244.625
40	0.45	2448.625
41	0.5	2703.625
42	0.55	2958.625
43	0.6	3213.625
44	0.63	3366.625
45	0.69	3672.625



**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.04	357.625
10	0.04	357.625
11	0.03	306.625
12	0.03	306.625
13	0.04	357.625
14	0.04	357.625
15	0.02	255.625
16	0.03	306.625
17	0.03	306.625
18	0.04	357.625
19	0.04	357.625
20	0.04	357.625
21	0.04	357.625
22	0.04	357.625
23	0.05	408.625

DEGREE	FORCE	MOMENT
24	0.04	357.625
25	0.05	408.625
26	0.04	357.625
27	0.04	357.625
28	0.04	357.625
29	0.04	357.625
30	0.04	357.625
31	0.05	408.625
32	0.07	510.625
33	0.09	612.625
34	0.13	816.625
35	0.15	918.625
36	0.18	1071.625
37	0.23	1326.625
38	0.27	1530.625
39	0.31	1734.625
40	0.35	1938.625
41	0.39	2142.625
42	0.42	2295.625
43	0.47	2550.625
44	0.53	2856.625
45	0.58	3111.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.02	255.625
20	0.02	255.625
21	0.02	255.625
22	0.02	255.625
23	0.02	255.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.04	357.625
26	0.05	408.625
27	0.11	714.625
28	0.13	816.625
29	0.16	969.625
30	0.21	1224.625
31	0.27	1530.625
32	0.31	1734.625
33	0.36	1989.625
34	0.42	2295.625
35	0.46	2499.625
36	0.49	2652.625
37	0.56	3009.625
38	0.6	3213.625
39	0.64	3417.625
40	0.69	3672.625
41	0.75	3978.625
42	0.78	4131.625
43	0.81	4284.625
44	0.86	4539.625
45	0.91	4794.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.03	306.625
6	0.03	306.625
7	0.04	357.625
8	0.04	357.625
9	0.04	357.625
10	0.05	408.625
11	0.05	408.625
12	0.05	408.625
13	0.05	408.625
14	0.06	459.625
15	0.06	459.625
16	0.06	459.625
17	0.06	459.625
18	0.06	459.625
19	0.05	408.625
20	0.05	408.625
21	0.06	459.625
22	0.06	459.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.06	459.625
25	0.06	459.625
26	0.06	459.625
27	0.07	510.625
28	0.12	765.625
29	0.13	816.625
30	0.17	1020.625
31	0.21	1224.625
32	0.25	1428.625
33	0.28	1581.625
34	0.31	1734.625
35	0.35	1938.625
36	0.41	2244.625
37	0.44	2397.625
38	0.48	2601.625
39	0.52	2805.625
40	0.57	3060.625
41	0.6	3213.625
42	0.66	3519.625
43	0.72	3825.625
44	0.77	4080.625
45	0.82	4335.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.02	255.625
17	0.02	255.625
18	0.02	255.625
19	0.03	306.625
20	0.03	306.625
21	0.03	306.625
22	0.03	306.625
23	0.03	306.625

DEGREE	FORCE	MOMENT
24	0.03	306.625
25	0.03	306.625
26	0.03	306.625
27	0.05	408.625
28	0.07	510.625
29	0.08	561.625
30	0.11	714.625
31	0.15	918.625
32	0.17	1020.625
33	0.21	1224.625
34	0.24	1377.625
35	0.28	1581.625
36	0.32	1785.625
37	0.34	1887.625
38	0.38	2091.625
39	0.43	2346.625
40	0.47	2550.625
41	0.52	2805.625
42	0.57	3060.625
43	0.61	3264.625
44	0.66	3519.625
45	0.69	3672.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.03	306.625
8	0.03	306.625
9	0.03	306.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.03	306.625
14	0.03	306.625
15	0.03	306.625
16	0.03	306.625
17	0.03	306.625
18	0.04	357.625
19	0.03	306.625
20	0.04	357.625
21	0.04	357.625
22	0.04	357.625
23	0.04	357.625

DEGREE	FORCE	MOMENT
24	0.04	357.625
25	0.06	459.625
26	0.06	459.625
27	0.06	459.625
28	0.08	561.625
29	0.08	561.625
30	0.09	612.625
31	0.13	816.625
32	0.19	1122.625
33	0.21	1224.625
34	0.24	1377.625
35	0.3	1683.625
36	0.32	1785.625
37	0.37	2040.625
38	0.4	2193.625
39	0.45	2448.625
40	0.52	2805.625
41	0.55	2958.625
42	0.6	3213.625
43	0.64	3417.625
44	0.67	3570.625
45	0.73	3876.625

**Bracket Type: Victory Series**

**Wire Size: 0.017x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.03	306.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.04	357.625
14	0.04	357.625
15	0.04	357.625
16	0.05	408.625
17	0.06	459.625
18	0.06	459.625
19	0.06	459.625
20	0.06	459.625
21	0.06	459.625
22	0.06	459.625
23	0.06	459.625

DEGREE	FORCE	MOMENT
24	0.06	459.625
25	0.06	459.625
26	0.06	459.625
27	0.07	510.625
28	0.08	561.625
29	0.12	765.625
30	0.16	969.625
31	0.22	1275.625
32	0.24	1377.625
33	0.28	1581.625
34	0.32	1785.625
35	0.34	1887.625
36	0.36	1989.625
37	0.4	2193.625
38	0.47	2550.625
39	0.53	2856.625
40	0.58	3111.625
41	0.62	3315.625
42	0.66	3519.625
43	0.72	3825.625
44	0.74	3927.625
45	0.81	4284.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.02	255.625
5	0.03	306.625
6	0.03	306.625
7	0.03	306.625
8	0.08	561.625
9	0.06	459.625
10	0.07	510.625
11	0.08	561.625
12	0.08	561.625
13	0.1	663.625
14	0.11	714.625
15	0.13	816.625
16	0.14	867.625
17	0.13	816.625
18	0.14	867.625
19	0.21	1224.625
20	0.26	1479.625
21	0.3	1683.625
22	0.34	1887.625
23	0.41	2244.625

DEGREE	FORCE	MOMENT
24	0.48	2601.625
25	0.54	2907.625
26	0.61	3264.625
27	0.67	3570.625
28	0.76	4029.625
29	0.82	4335.625
30	0.88	4641.625
31	0.95	4998.625
32	1.01	5304.625
33	1.07	5610.625
34	1.11	5814.625
35	1.18	6171.625
36	1.23	6426.625
37	1.28	6681.625
38	1.34	6987.625
39	1.38	7191.625
40	1.44	7497.625
41	1.5	7803.625
42	1.54	8007.625
43	1.58	8211.625
44	1.62	8415.625
45	1.68	8721.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.04	357.625
14	0.05	408.625
15	0.05	408.625
16	0.05	408.625
17	0.05	408.625
18	0.05	408.625
19	0.06	459.625
20	0.06	459.625
21	0.06	459.625
22	0.06	459.625
23	0.09	612.625

DEGREE	FORCE	MOMENT
24	0.11	714.625
25	0.25	1428.625
26	0.29	1632.625
27	0.34	1887.625
28	0.39	2142.625
29	0.46	2499.625
30	0.52	2805.625
31	0.58	3111.625
32	0.64	3417.625
33	0.71	3774.625
34	0.75	3978.625
35	0.81	4284.625
36	0.89	4692.625
37	0.95	4998.625
38	1.02	5355.625
39	1.06	5559.625
40	1.12	5865.625
41	1.19	6222.625
42	1.24	6477.625
43	1.29	6732.625
44	1.34	6987.625
45	1.39	7242.625



**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0	153.625
6	0	153.625
7	0	153.625
8	0	153.625
9	0	153.625
10	0	153.625
11	0.01	204.625
12	0.01	204.625
13	0.01	204.625
14	0.01	204.625
15	0.02	255.625
16	0.04	357.625
17	0.06	459.625
18	0.11	714.625
19	0.14	867.625
20	0.2	1173.625
21	0.25	1428.625
22	0.3	1683.625
23	0.34	1887.625

DEGREE	FORCE	MOMENT
24	0.4	2193.625
25	0.46	2499.625
26	0.52	2805.625
27	0.57	3060.625
28	0.63	3366.625
29	0.7	3723.625
30	0.75	3978.625
31	0.81	4284.625
32	0.88	4641.625
33	0.93	4896.625
34	0.99	5202.625
35	1.02	5355.625
36	1.09	5712.625
37	1.11	5814.625
38	1.2	6273.625
39	1.26	6579.625
40	1.3	6783.625
41	1.33	6936.625
42	1.37	7140.625
43	1.44	7497.625
44	1.48	7701.625
45	1.52	7905.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.03	306.625
12	0.03	306.625
13	0.05	408.625
14	0.06	459.625
15	0.08	561.625
16	0.09	612.625
17	0.09	612.625
18	0.11	714.625
19	0.17	1020.625
20	0.23	1326.625
21	0.28	1581.625
22	0.34	1887.625
23	0.38	2091.625

DEGREE	FORCE	MOMENT
24	0.44	2397.625
25	0.52	2805.625
26	0.59	3162.625
27	0.63	3366.625
28	0.71	3774.625
29	0.77	4080.625
30	0.84	4437.625
31	0.88	4641.625
32	0.94	4947.625
33	1.01	5304.625
34	1.07	5610.625
35	1.11	5814.625
36	1.17	6120.625
37	1.23	6426.625
38	1.28	6681.625
39	1.32	6885.625
40	1.37	7140.625
41	1.42	7395.625
42	1.46	7599.625
43	1.51	7854.625
44	1.55	8058.625
45	1.58	8211.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.03	306.625
9	0.03	306.625
10	0.05	408.625
11	0.06	459.625
12	0.06	459.625
13	0.06	459.625
14	0.07	510.625
15	0.07	510.625
16	0.07	510.625
17	0.08	561.625
18	0.09	612.625
19	0.14	867.625
20	0.17	1020.625
21	0.2	1173.625
22	0.24	1377.625
23	0.29	1632.625

DEGREE	FORCE	MOMENT
24	0.34	1887.625
25	0.4	2193.625
26	0.46	2499.625
27	0.52	2805.625
28	0.58	3111.625
29	0.65	3468.625
30	0.72	3825.625
31	0.79	4182.625
32	0.81	4284.625
33	0.92	4845.625
34	0.98	5151.625
35	1.04	5457.625
36	1.1	5763.625
37	1.16	6069.625
38	1.22	6375.625
39	1.27	6630.625
40	1.33	6936.625
41	1.38	7191.625
42	1.41	7344.625
43	1.46	7599.625
44	1.51	7854.625
45	1.58	8211.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.02	255.625
16	0.03	306.625
17	0.07	510.625
18	0.08	561.625
19	0.13	816.625
20	0.19	1122.625
21	0.23	1326.625
22	0.28	1581.625
23	0.35	1938.625

DEGREE	FORCE	MOMENT
24	0.36	1989.625
25	0.43	2346.625
26	0.53	2856.625
27	0.57	3060.625
28	0.65	3468.625
29	0.71	3774.625
30	0.76	4029.625
31	0.83	4386.625
32	0.86	4539.625
33	0.92	4845.625
34	0.99	5202.625
35	1.05	5508.625
36	1.11	5814.625
37	1.15	6018.625
38	1.22	6375.625
39	1.27	6630.625
40	1.31	6834.625
41	1.36	7089.625
42	1.4	7293.625
43	1.44	7497.625
44	1.49	7752.625
45	1.53	7956.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.04	357.625
10	0.05	408.625
11	0.08	561.625
12	0.1	663.625
13	0.11	714.625
14	0.11	714.625
15	0.12	765.625
16	0.13	816.625
17	0.18	1071.625
18	0.24	1377.625
19	0.28	1581.625
20	0.32	1785.625
21	0.34	1887.625
22	0.42	2295.625
23	0.47	2550.625

DEGREE	FORCE	MOMENT
24	0.53	2856.625
25	0.61	3264.625
26	0.65	3468.625
27	0.69	3672.625
28	0.76	4029.625
29	0.81	4284.625
30	0.88	4641.625
31	0.94	4947.625
32	0.98	5151.625
33	1.04	5457.625
34	1.1	5763.625
35	1.15	6018.625
36	1.21	6324.625
37	1.28	6681.625
38	1.33	6936.625
39	1.37	7140.625
40	1.42	7395.625
41	1.48	7701.625
42	1.53	7956.625
43	1.56	8109.625
44	1.61	8364.625
45	1.64	8517.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.06	459.625
10	0.05	408.625
11	0.06	459.625
12	0.07	510.625
13	0.08	561.625
14	0.07	510.625
15	0.08	561.625
16	0.08	561.625
17	0.08	561.625
18	0.1	663.625
19	0.13	816.625
20	0.16	969.625
21	0.23	1326.625
22	0.31	1734.625
23	0.34	1887.625

DEGREE	FORCE	MOMENT
24	0.39	2142.625
25	0.47	2550.625
26	0.53	2856.625
27	0.59	3162.625
28	0.64	3417.625
29	0.72	3825.625
30	0.75	3978.625
31	0.82	4335.625
32	0.87	4590.625
33	0.95	4998.625
34	0.99	5202.625
35	1.05	5508.625
36	1.12	5865.625
37	1.17	6120.625
38	1.23	6426.625
39	1.27	6630.625
40	1.31	6834.625
41	1.39	7242.625
42	1.42	7395.625
43	1.48	7701.625
44	1.51	7854.625
45	1.54	8007.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.03	306.625
12	0.04	357.625
13	0.06	459.625
14	0.07	510.625
15	0.09	612.625
16	0.09	612.625
17	0.1	663.625
18	0.11	714.625
19	0.12	765.625
20	0.13	816.625
21	0.16	969.625
22	0.21	1224.625
23	0.28	1581.625

DEGREE	FORCE	MOMENT
24	0.34	1887.625
25	0.41	2244.625
26	0.47	2550.625
27	0.53	2856.625
28	0.6	3213.625
29	0.67	3570.625
30	0.76	4029.625
31	0.82	4335.625
32	0.89	4692.625
33	0.93	4896.625
34	1	5253.625
35	1.05	5508.625
36	1.11	5814.625
37	1.16	6069.625
38	1.22	6375.625
39	1.27	6630.625
40	1.33	6936.625
41	1.38	7191.625
42	1.42	7395.625
43	1.48	7701.625
44	1.52	7905.625
45	1.56	8109.625

**Bracket Type: Victory Series**

**Wire Size: 0.018x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0	153.625
4	0	153.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.07	510.625
10	0.08	561.625
11	0.09	612.625
12	0.11	714.625
13	0.11	714.625
14	0.11	714.625
15	0.13	816.625
16	0.14	867.625
17	0.19	1122.625
18	0.18	1071.625
19	0.18	1071.625
20	0.19	1122.625
21	0.22	1275.625
22	0.3	1683.625
23	0.31	1734.625

DEGREE	FORCE	MOMENT
24	0.43	2346.625
25	0.48	2601.625
26	0.54	2907.625
27	0.59	3162.625
28	0.65	3468.625
29	0.72	3825.625
30	0.78	4131.625
31	0.84	4437.625
32	0.88	4641.625
33	0.96	5049.625
34	1.01	5304.625
35	1.06	5559.625
36	1.13	5916.625
37	1.18	6171.625
38	1.25	6528.625
39	1.3	6783.625
40	1.36	7089.625
41	1.4	7293.625
42	1.44	7497.625
43	1.48	7701.625
44	1.54	8007.625
45	1.57	8160.625



**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 1**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.03	306.625
13	0.09	612.625
14	0.14	867.625
15	0.18	1071.625
16	0.22	1275.625
17	0.31	1734.625
18	0.36	1989.625
19	0.42	2295.625
20	0.49	2652.625
21	0.53	2856.625
22	0.59	3162.625
23	0.67	3570.625

DEGREE	FORCE	MOMENT
24	0.73	3876.625
25	0.81	4284.625
26	0.87	4590.625
27	0.94	4947.625
28	1	5253.625
29	1.05	5508.625
30	1.11	5814.625
31	1.14	5967.625
32	1.23	6426.625
33	1.27	6630.625
34	1.34	6987.625
35	1.39	7242.625
36	1.45	7548.625
37	1.49	7752.625
38	1.54	8007.625
39	1.57	8160.625
40	1.61	8364.625
41	1.66	8619.625
42	1.71	8874.625
43	1.74	9027.625
44	1.78	9231.625
45	1.77	9180.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 2**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.03	306.625
7	0.03	306.625
8	0.03	306.625
9	0.03	306.625
10	0.04	357.625
11	0.05	408.625
12	0.06	459.625
13	0.08	561.625
14	0.12	765.625
15	0.16	969.625
16	0.19	1122.625
17	0.24	1377.625
18	0.29	1632.625
19	0.34	1887.625
20	0.39	2142.625
21	0.44	2397.625
22	0.49	2652.625
23	0.54	2907.625

DEGREE	FORCE	MOMENT
24	0.59	3162.625
25	0.65	3468.625
26	0.7	3723.625
27	0.75	3978.625
28	0.81	4284.625
29	0.86	4539.625
30	0.92	4845.625
31	0.97	5100.625
32	1.02	5355.625
33	1.07	5610.625
34	1.13	5916.625
35	1.18	6171.625
36	1.23	6426.625
37	1.28	6681.625
38	1.33	6936.625
39	1.37	7140.625
40	1.43	7446.625
41	1.47	7650.625
42	1.51	7854.625
43	1.55	8058.625
44	1.6	8313.625
45	1.63	8466.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 3**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.02	255.625
13	0.06	459.625
14	0.1	663.625
15	0.13	816.625
16	0.14	867.625
17	0.2	1173.625
18	0.25	1428.625
19	0.29	1632.625
20	0.33	1836.625
21	0.37	2040.625
22	0.41	2244.625
23	0.45	2448.625

DEGREE	FORCE	MOMENT
24	0.49	2652.625
25	0.53	2856.625
26	0.57	3060.625
27	0.61	3264.625
28	0.65	3468.625
29	0.69	3672.625
30	0.74	3927.625
31	0.78	4131.625
32	0.82	4335.625
33	0.87	4590.625
34	0.91	4794.625
35	0.97	5100.625
36	0.99	5202.625
37	1.04	5457.625
38	1.1	5763.625
39	1.14	5967.625
40	1.21	6324.625
41	1.24	6477.625
42	1.29	6732.625
43	1.35	7038.625
44	1.38	7191.625
45	1.43	7446.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 4**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.05	408.625
4	0.06	459.625
5	0.07	510.625
6	0.09	612.625
7	0.11	714.625
8	0.13	816.625
9	0.12	765.625
10	0.15	918.625
11	0.17	1020.625
12	0.18	1071.625
13	0.22	1275.625
14	0.26	1479.625
15	0.3	1683.625
16	0.34	1887.625
17	0.39	2142.625
18	0.44	2397.625
19	0.48	2601.625
20	0.54	2907.625
21	0.59	3162.625
22	0.66	3519.625
23	0.7	3723.625

DEGREE	FORCE	MOMENT
24	0.76	4029.625
25	0.81	4284.625
26	0.85	4488.625
27	0.89	4692.625
28	0.96	5049.625
29	1.02	5355.625
30	1.07	5610.625
31	1.14	5967.625
32	1.18	6171.625
33	1.22	6375.625
34	1.3	6783.625
35	1.32	6885.625
36	1.42	7395.625
37	1.45	7548.625
38	1.51	7854.625
39	1.57	8160.625
40	1.62	8415.625
41	1.67	8670.625
42	1.73	8976.625
43	1.77	9180.625
44	1.83	9486.625
45	1.85	9588.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 5**

DEGREE	FORCE	MOMENT
1	0	153.625
2	0	153.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.02	255.625
9	0.03	306.625
10	0.05	408.625
11	0.06	459.625
12	0.09	612.625
13	0.13	816.625
14	0.18	1071.625
15	0.2	1173.625
16	0.25	1428.625
17	0.27	1530.625
18	0.31	1734.625
19	0.36	1989.625
20	0.41	2244.625
21	0.45	2448.625
22	0.5	2703.625
23	0.51	2754.625

DEGREE	FORCE	MOMENT
24	0.55	2958.625
25	0.62	3315.625
26	0.67	3570.625
27	0.71	3774.625
28	0.76	4029.625
29	0.81	4284.625
30	0.87	4590.625
31	0.91	4794.625
32	0.97	5100.625
33	1.01	5304.625
34	1.05	5508.625
35	1.11	5814.625
36	1.16	6069.625
37	1.2	6273.625
38	1.24	6477.625
39	1.28	6681.625
40	1.33	6936.625
41	1.37	7140.625
42	1.4	7293.625
43	1.43	7446.625
44	1.48	7701.625
45	1.51	7854.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 6**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.02	255.625
4	0.02	255.625
5	0.02	255.625
6	0.02	255.625
7	0.02	255.625
8	0.02	255.625
9	0.02	255.625
10	0.03	306.625
11	0.03	306.625
12	0.03	306.625
13	0.04	357.625
14	0.06	459.625
15	0.11	714.625
16	0.19	1122.625
17	0.2	1173.625
18	0.24	1377.625
19	0.31	1734.625
20	0.36	1989.625
21	0.41	2244.625
22	0.45	2448.625
23	0.49	2652.625

DEGREE	FORCE	MOMENT
24	0.53	2856.625
25	0.57	3060.625
26	0.64	3417.625
27	0.68	3621.625
28	0.74	3927.625
29	0.79	4182.625
30	0.86	4539.625
31	0.91	4794.625
32	0.98	5151.625
33	1.01	5304.625
34	1.07	5610.625
35	1.14	5967.625
36	1.19	6222.625
37	1.24	6477.625
38	1.31	6834.625
39	1.36	7089.625
40	1.42	7395.625
41	1.47	7650.625
42	1.53	7956.625
43	1.57	8160.625
44	1.64	8517.625
45	1.67	8670.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 7**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.02	255.625
11	0.02	255.625
12	0.04	357.625
13	0.06	459.625
14	0.12	765.625
15	0.17	1020.625
16	0.18	1071.625
17	0.24	1377.625
18	0.28	1581.625
19	0.33	1836.625
20	0.38	2091.625
21	0.44	2397.625
22	0.49	2652.625
23	0.55	2958.625

DEGREE	FORCE	MOMENT
24	0.62	3315.625
25	0.7	3723.625
26	0.75	3978.625
27	0.79	4182.625
28	0.86	4539.625
29	0.93	4896.625
30	0.97	5100.625
31	1.01	5304.625
32	1.07	5610.625
33	1.1	5763.625
34	1.2	6273.625
35	1.25	6528.625
36	1.3	6783.625
37	1.35	7038.625
38	1.41	7344.625
39	1.44	7497.625
40	1.5	7803.625
41	1.52	7905.625
42	1.56	8109.625
43	1.61	8364.625
44	1.65	8568.625
45	1.69	8772.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 8**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.01	204.625
10	0.01	204.625
11	0.02	255.625
12	0.02	255.625
13	0.02	255.625
14	0.02	255.625
15	0.04	357.625
16	0.08	561.625
17	0.12	765.625
18	0.17	1020.625
19	0.21	1224.625
20	0.26	1479.625
21	0.31	1734.625
22	0.35	1938.625
23	0.41	2244.625

DEGREE	FORCE	MOMENT
24	0.44	2397.625
25	0.51	2754.625
26	0.56	3009.625
27	0.6	3213.625
28	0.7	3723.625
29	0.77	4080.625
30	0.84	4437.625
31	0.89	4692.625
32	0.97	5100.625
33	1.01	5304.625
34	1.07	5610.625
35	1.14	5967.625
36	1.2	6273.625
37	1.26	6579.625
38	1.31	6834.625
39	1.36	7089.625
40	1.41	7344.625
41	1.46	7599.625
42	1.51	7854.625
43	1.54	8007.625
44	1.6	8313.625
45	1.66	8619.625



**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 9**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.02	255.625
3	0.03	306.625
4	0.05	408.625
5	0.05	408.625
6	0.06	459.625
7	0.07	510.625
8	0.07	510.625
9	0.07	510.625
10	0.08	561.625
11	0.1	663.625
12	0.12	765.625
13	0.13	816.625
14	0.16	969.625
15	0.21	1224.625
16	0.25	1428.625
17	0.28	1581.625
18	0.34	1887.625
19	0.39	2142.625
20	0.43	2346.625
21	0.47	2550.625
22	0.53	2856.625
23	0.56	3009.625

DEGREE	FORCE	MOMENT
24	0.63	3366.625
25	0.64	3417.625
26	0.71	3774.625
27	0.76	4029.625
28	0.78	4131.625
29	0.83	4386.625
30	0.88	4641.625
31	0.94	4947.625
32	0.97	5100.625
33	1.02	5355.625
34	1.06	5559.625
35	1.1	5763.625
36	1.14	5967.625
37	1.17	6120.625
38	1.23	6426.625
39	1.28	6681.625
40	1.32	6885.625
41	1.37	7140.625
42	1.4	7293.625
43	1.43	7446.625
44	1.47	7650.625
45	1.51	7854.625

**Bracket Type: Victory Series**

**Wire Size: 0.019x0.025**

**Experimental Trial: 10**

DEGREE	FORCE	MOMENT
1	0.01	204.625
2	0.01	204.625
3	0.01	204.625
4	0.01	204.625
5	0.01	204.625
6	0.01	204.625
7	0.01	204.625
8	0.01	204.625
9	0.02	255.625
10	0.02	255.625
11	0.02	255.625
12	0.02	255.625
13	0.04	357.625
14	0.08	561.625
15	0.09	612.625
16	0.12	765.625
17	0.17	1020.625
18	0.21	1224.625
19	0.24	1377.625
20	0.33	1836.625
21	0.38	2091.625
22	0.44	2397.625
23	0.5	2703.625

DEGREE	FORCE	MOMENT
24	0.58	3111.625
25	0.63	3366.625
26	0.67	3570.625
27	0.74	3927.625
28	0.83	4386.625
29	0.87	4590.625
30	0.93	4896.625
31	0.98	5151.625
32	1.05	5508.625
33	1.1	5763.625
34	1.15	6018.625
35	1.2	6273.625
36	1.25	6528.625
37	1.31	6834.625
38	1.36	7089.625
39	1.39	7242.625
40	1.44	7497.625
41	1.47	7650.625
42	1.46	7599.625
43	1.54	8007.625
44	1.57	8160.625
45	1.61	8364.625

## APPENDIX IX MEAN LABIOLINGUAL FORCES AND MOMENTS

Bracket Type: Damon II

DEG	Force (N)			
	16x22	17x25	18x25	19x25
1	0.001	0.004	0.007	0.014
2	0.001	0.005	0.014	0.023
3	0.002	0.005	0.016	0.032
4	0.01	0.008	0.023	0.051
5	0.02	0.019	0.035	0.069
6	0.023	0.032	0.048	0.087
7	0.032	0.039	0.052	0.109
8	0.041	0.05	0.065	0.132
9	0.042	0.063	0.069	0.154
10	0.046	0.071	0.076	0.172
11	0.053	0.082	0.086	0.186
12	0.063	0.089	0.096	0.202
13	0.068	0.098	0.105	0.218
14	0.076	0.107	0.109	0.234
15	0.079	0.119	0.122	0.256
16	0.082	0.128	0.131	0.274
17	0.087	0.136	0.14	0.298
18	0.092	0.144	0.145	0.312
19	0.094	0.15	0.16	0.33
20	0.1	0.164	0.164	0.369
21	0.107	0.171	0.169	0.406
22	0.112	0.18	0.176	0.449
23	0.118	0.188	0.184	0.482
24	0.121	0.203	0.199	0.529
25	0.125	0.217	0.215	0.571
26	0.129	0.227	0.235	0.608
27	0.128	0.241	0.264	0.657
28	0.133	0.26	0.29	0.706
29	0.128	0.273	0.323	0.768
30	0.129	0.287	0.358	0.819
31	0.133	0.301	0.402	0.869
32	0.132	0.317	0.439	0.925
33	0.144	0.337	0.486	0.983
34	0.15	0.356	0.532	1.046
35	0.143	0.385	0.575	1.101
36	0.138	0.413	0.614	1.152
37	0.131	0.443	0.665	1.224
38	0.127	0.485	0.714	1.28
39	0.129	0.52	0.766	1.335
40	0.132	0.561	0.817	1.393
41	0.128	0.601	0.856	1.438
42	0.129	0.647	0.915	1.489
43	0.137	0.698	0.955	1.545
44	0.144	0.748	1.008	1.598
45	0.148	0.793	1.053	1.652

DEG	Moment (g-mm)			
	16x22	17x25	18x25	19x25
1	158.725	174.025	189.325	225.025
2	158.725	179.125	225.025	270.925
3	163.825	179.125	235.225	316.825
4	204.625	194.425	270.925	413.725
5	255.625	250.525	332.125	505.525
6	270.925	316.825	398.425	597.325
7	316.825	352.525	418.825	709.525
8	362.725	408.625	485.125	826.825
9	367.825	474.925	505.525	939.025
10	388.225	515.725	541.225	1030.825
11	423.925	571.825	592.225	1102.225
12	474.925	607.525	643.225	1183.825
13	500.425	653.425	689.125	1265.425
14	541.225	699.325	709.525	1347.025
15	556.525	760.525	775.825	1459.225
16	571.825	806.425	821.725	1551.025
17	597.325	847.225	867.625	1673.425
18	622.825	888.025	893.125	1744.825
19	633.025	918.625	969.625	1836.625
20	663.625	990.025	990.025	2035.525
21	699.325	1025.725	1015.525	2224.225
22	724.825	1071.625	1051.225	2443.525
23	755.425	1112.425	1092.025	2611.825
24	770.725	1188.925	1168.525	2851.525
25	791.125	1260.325	1250.125	3065.725
26	811.525	1311.325	1352.125	3254.425
27	806.425	1382.725	1500.025	3504.325
28	831.925	1479.625	1632.625	3754.225
29	806.425	1545.925	1800.925	4070.425
30	811.525	1617.325	1979.425	4330.525
31	831.925	1688.725	2203.825	4585.525
32	826.825	1770.325	2392.525	4871.125
33	888.025	1872.325	2632.225	5166.925
34	918.625	1969.225	2866.825	5488.225
35	882.925	2117.125	3086.125	5768.725
36	857.425	2259.925	3285.025	6028.825
37	821.725	2412.925	3545.125	6396.025
38	801.325	2627.125	3795.025	6681.625
39	811.525	2805.625	4060.225	6962.125
40	826.825	3014.725	4320.325	7257.925
41	806.425	3218.725	4519.225	7487.425
42	811.525	3453.325	4820.125	7747.525
43	852.325	3713.425	5024.125	8033.125
44	888.025	3968.425	5294.425	8303.425
45	908.425	4197.925	5523.925	8578.825

Bracket Type: In-Ovation

DEG	Force (N) in			
	16x22	17x25	18x25	19x25
1	0.003	0.011	0.007	0.003
2	0.007	0.018	0.011	0.008
3	0.023	0.025	0.016	0.016
4	0.027	0.027	0.021	0.02
5	0.039	0.034	0.027	0.024
6	0.049	0.046	0.035	0.031
7	0.059	0.048	0.046	0.039
8	0.065	0.055	0.047	0.048
9	0.071	0.066	0.056	0.061
10	0.08	0.071	0.063	0.087
11	0.085	0.079	0.072	0.111
12	0.09	0.082	0.081	0.138
13	0.095	0.085	0.086	0.163
14	0.1	0.093	0.099	0.206
15	0.108	0.102	0.112	0.248
16	0.115	0.106	0.122	0.288
17	0.115	0.118	0.137	0.342
18	0.127	0.124	0.154	0.408
19	0.128	0.131	0.169	0.45
20	0.135	0.133	0.191	0.494
21	0.137	0.135	0.213	0.55
22	0.142	0.141	0.237	0.594
23	0.147	0.142	0.262	0.653
24	0.152	0.152	0.302	0.699
25	0.16	0.164	0.325	0.753
26	0.156	0.176	0.363	0.808
27	0.162	0.198	0.405	0.864
28	0.164	0.228	0.438	0.914
29	0.168	0.255	0.49	0.974
30	0.174	0.289	0.537	1.041
31	0.174	0.323	0.587	1.091
32	0.178	0.352	0.634	1.161
33	0.178	0.387	0.678	1.219
34	0.184	0.429	0.721	1.279
35	0.188	0.472	0.778	1.344
36	0.194	0.517	0.83	1.409
37	0.198	0.559	0.884	1.467
38	0.199	0.61	0.93	1.519
39	0.201	0.66	0.973	1.574
40	0.203	0.712	1.031	1.628
41	0.21	0.753	1.073	1.681
42	0.219	0.802	1.116	1.74
43	0.228	0.853	1.165	1.787
44	0.242	0.898	1.208	1.832
45	0.256	0.945	1.245	1.882

DEG	Moment (g-mm)			
	16x22	17x25	18x25	19x25
1	168.925	209.725	189.325	168.925
2	189.325	245.425	209.725	194.425
3	270.925	281.125	235.225	235.225
4	291.325	291.325	260.725	255.625
5	352.525	327.025	291.325	276.025
6	403.525	388.225	332.125	311.725
7	454.525	398.425	388.225	352.525
8	485.125	434.125	393.325	398.425
9	515.725	490.225	439.225	464.725
10	561.625	515.725	474.925	597.325
11	587.125	556.525	520.825	719.725
12	612.625	571.825	566.725	857.425
13	638.125	587.125	592.225	984.925
14	663.625	627.925	658.525	1204.225
15	704.425	673.825	724.825	1418.425
16	740.125	694.225	775.825	1622.425
17	740.125	755.425	852.325	1897.825
18	801.325	786.025	939.025	2234.425
19	806.425	821.725	1015.525	2448.625
20	842.125	831.925	1127.725	2673.025
21	852.325	842.125	1239.925	2958.625
22	877.825	872.725	1362.325	3183.025
23	903.325	877.825	1489.825	3483.925
24	928.825	928.825	1693.825	3718.525
25	969.625	990.025	1811.125	3993.925
26	949.225	1051.225	2004.925	4274.425
27	979.825	1163.425	2219.125	4560.025
28	990.025	1316.425	2387.425	4815.025
29	1010.425	1454.125	2652.625	5121.025
30	1041.025	1627.525	2892.325	5462.725
31	1041.025	1800.925	3147.325	5717.725
32	1061.425	1948.825	3387.025	6074.725
33	1061.425	2127.325	3611.425	6370.525
34	1092.025	2341.525	3830.725	6676.525
35	1112.425	2560.825	4121.425	7008.025
36	1143.025	2790.325	4386.625	7339.525
37	1163.425	3004.525	4662.025	7635.325
38	1168.525	3264.625	4896.625	7900.525
39	1178.725	3519.625	5115.925	8181.025
40	1188.925	3784.825	5411.725	8456.425
41	1224.625	3993.925	5625.925	8726.725
42	1270.525	4243.825	5845.225	9027.625
43	1316.425	4503.925	6095.125	9267.325
44	1387.825	4733.425	6314.425	9496.825
45	1459.225	4973.125	6503.125	9751.825

Bracket Type: Speed

DEG	Force (N)			
	16x22	17x25	18x25	19x25
1	0.004	0.005	0.001	0
2	0.016	0.014	0.008	0.006
3	0.023	0.031	0.018	0.019
4	0.036	0.045	0.024	0.034
5	0.05	0.055	0.039	0.051
6	0.06	0.072	0.049	0.066
7	0.074	0.086	0.061	0.08
8	0.087	0.097	0.068	0.095
9	0.093	0.105	0.077	0.106
10	0.1	0.116	0.086	0.116
11	0.108	0.127	0.092	0.125
12	0.119	0.135	0.103	0.129
13	0.127	0.139	0.108	0.137
14	0.134	0.146	0.115	0.155
15	0.14	0.153	0.118	0.168
16	0.143	0.163	0.132	0.183
17	0.153	0.17	0.142	0.202
18	0.165	0.172	0.154	0.223
19	0.166	0.177	0.161	0.247
20	0.173	0.188	0.173	0.269
21	0.181	0.2	0.187	0.293
22	0.182	0.213	0.195	0.317
23	0.189	0.232	0.216	0.337
24	0.197	0.241	0.225	0.363
25	0.2	0.257	0.239	0.385
26	0.209	0.267	0.251	0.408
27	0.214	0.273	0.262	0.428
28	0.223	0.283	0.273	0.445
29	0.225	0.294	0.284	0.474
30	0.23	0.305	0.292	0.494
31	0.232	0.319	0.304	0.508
32	0.238	0.335	0.31	0.523
33	0.245	0.353	0.324	0.542
34	0.253	0.367	0.341	0.563
35	0.26	0.383	0.358	0.583
36	0.268	0.407	0.378	0.594
37	0.282	0.414	0.401	0.612
38	0.289	0.441	0.424	0.626
39	0.302	0.456	0.452	0.645
40	0.31	0.479	0.477	0.656
41	0.324	0.501	0.501	0.669
42	0.332	0.525	0.514	0.671
43	0.345	0.547	0.534	0.689
44	0.358	0.574	0.556	0.697
45	0.372	0.589	0.578	0.704

DEG	Moment (g-mm)			
	16x22	17x25	18x25	19x25
1	174.025	179.125	158.725	153.625
2	235.225	225.025	194.425	184.225
3	270.925	311.725	245.425	250.525
4	337.225	383.125	276.025	327.025
5	408.625	434.125	352.525	413.725
6	459.625	520.825	403.525	490.225
7	531.025	592.225	464.725	561.625
8	597.325	648.325	500.425	638.125
9	627.925	689.125	546.325	694.225
10	663.625	745.225	592.225	745.225
11	704.425	801.325	622.825	791.125
12	760.525	842.125	678.925	811.525
13	801.325	862.525	704.425	852.325
14	837.025	898.225	740.125	944.125
15	867.625	933.925	755.425	1010.425
16	882.925	984.925	826.825	1086.925
17	933.925	1020.625	877.825	1183.825
18	995.125	1030.825	939.025	1290.925
19	1000.225	1056.325	974.725	1413.325
20	1035.925	1112.425	1035.925	1525.525
21	1076.725	1173.625	1107.325	1647.925
22	1081.825	1239.925	1148.125	1770.325
23	1117.525	1336.825	1255.225	1872.325
24	1158.325	1382.725	1301.125	2004.925
25	1173.625	1464.325	1372.525	2117.125
26	1219.525	1515.325	1433.725	2234.425
27	1245.025	1545.925	1489.825	2336.425
28	1290.925	1596.925	1545.925	2423.125
29	1301.125	1653.025	1602.025	2571.025
30	1326.625	1709.125	1642.825	2673.025
31	1336.825	1780.525	1704.025	2744.425
32	1367.425	1862.125	1734.625	2820.925
33	1403.125	1953.925	1806.025	2917.825
34	1443.925	2025.325	1892.725	3024.925
35	1479.625	2106.925	1979.425	3126.925
36	1520.425	2229.325	2081.425	3183.025
37	1591.825	2265.025	2198.725	3274.825
38	1627.525	2402.725	2316.025	3346.225
39	1693.825	2479.225	2458.825	3443.125
40	1734.625	2596.525	2586.325	3499.225
41	1806.025	2708.725	2708.725	3565.525
42	1846.825	2831.125	2775.025	3575.725
43	1913.125	2943.325	2877.025	3667.525
44	1979.425	3081.025	2989.225	3708.325
45	2050.825	3157.525	3101.425	3744.025

Bracket Type: Time

DEG	Force (N)			
	16x22	17x25	18x25	19x25
1	0.004	0.008	0.005	0.006
2	0.008	0.011	0.01	0.009
3	0.011	0.014	0.014	0.014
4	0.015	0.019	0.015	0.018
5	0.02	0.024	0.018	0.022
6	0.026	0.025	0.02	0.03
7	0.031	0.029	0.021	0.033
8	0.036	0.031	0.025	0.041
9	0.038	0.033	0.024	0.052
10	0.047	0.036	0.026	0.062
11	0.046	0.039	0.025	0.078
12	0.053	0.041	0.028	0.085
13	0.057	0.044	0.032	0.105
14	0.061	0.046	0.03	0.124
15	0.071	0.048	0.034	0.148
16	0.076	0.051	0.039	0.172
17	0.077	0.053	0.042	0.207
18	0.082	0.054	0.052	0.238
19	0.089	0.057	0.058	0.28
20	0.097	0.058	0.076	0.32
21	0.101	0.059	0.1	0.354
22	0.103	0.06	0.132	0.398
23	0.109	0.061	0.166	0.438
24	0.111	0.062	0.204	0.48
25	0.122	0.067	0.236	0.522
26	0.12	0.079	0.269	0.571
27	0.128	0.089	0.313	0.608
28	0.129	0.101	0.362	0.663
29	0.131	0.115	0.407	0.702
30	0.136	0.137	0.448	0.746
31	0.143	0.151	0.487	0.786
32	0.147	0.171	0.543	0.828
33	0.153	0.191	0.58	0.869
34	0.158	0.209	0.632	0.913
35	0.165	0.243	0.681	0.96
36	0.171	0.27	0.731	1.001
37	0.175	0.298	0.783	1.038
38	0.18	0.325	0.827	1.076
39	0.185	0.357	0.871	1.111
40	0.186	0.39	0.916	1.147
41	0.196	0.441	0.966	1.186
42	0.2	0.472	1.009	1.221
43	0.205	0.51	1.045	1.253
44	0.208	0.55	1.085	1.278
45	0.217	0.598	1.139	1.306

DEG	Moment (g-mm)			
	16x22	17x25	18x25	19x25
1	174.025	194.425	179.125	184.225
2	194.425	209.725	204.625	199.525
3	209.725	225.025	225.025	225.025
4	230.125	250.525	230.125	245.425
5	255.625	276.025	245.425	265.825
6	286.225	281.125	255.625	306.625
7	311.725	301.525	260.725	321.925
8	337.225	311.725	281.125	362.725
9	347.425	321.925	276.025	418.825
10	393.325	337.225	286.225	469.825
11	388.225	352.525	281.125	551.425
12	423.925	362.725	296.425	587.125
13	444.325	378.025	316.825	689.125
14	464.725	388.225	306.625	786.025
15	515.725	398.425	327.025	908.425
16	541.225	413.725	352.525	1030.825
17	546.325	423.925	367.825	1209.325
18	571.825	429.025	418.825	1367.425
19	607.525	444.325	449.425	1581.625
20	648.325	449.425	541.225	1785.625
21	668.725	454.525	663.625	1959.025
22	678.925	459.625	826.825	2183.425
23	709.525	464.725	1000.225	2387.425
24	719.725	469.825	1194.025	2601.625
25	775.825	495.325	1357.225	2815.825
26	765.625	556.525	1525.525	3065.725
27	806.425	607.525	1749.925	3254.425
28	811.525	668.725	1999.825	3534.925
29	821.725	740.125	2229.325	3733.825
30	847.225	852.325	2438.425	3958.225
31	882.925	923.725	2637.325	4162.225
32	903.325	1025.725	2922.925	4376.425
33	933.925	1127.725	3111.625	4585.525
34	959.425	1219.525	3376.825	4809.925
35	995.125	1392.925	3626.725	5049.625
36	1025.725	1530.625	3881.725	5258.725
37	1046.125	1673.425	4146.925	5447.425
38	1071.625	1811.125	4371.325	5641.225
39	1097.125	1974.325	4595.725	5819.725
40	1102.225	2142.625	4825.225	6003.325
41	1153.225	2402.725	5080.225	6202.225
42	1173.625	2560.825	5299.525	6380.725
43	1199.125	2754.625	5483.125	6543.925
44	1214.425	2958.625	5687.125	6671.425
45	1260.325	3203.425	5962.525	6814.225

Bracket Type: Masters Series

DEG	Force (N)			
	16x22	17x25	18x25	19x25
1	0.002	0.002	0	0.002
2	0.011	0.002	0.003	0.004
3	0.011	0.008	0.01	0.006
4	0.012	0.014	0.02	0.008
5	0.017	0.025	0.035	0.012
6	0.026	0.034	0.047	0.015
7	0.033	0.041	0.061	0.015
8	0.041	0.053	0.074	0.024
9	0.047	0.061	0.085	0.032
10	0.052	0.065	0.096	0.039
11	0.06	0.072	0.102	0.045
12	0.067	0.081	0.107	0.054
13	0.072	0.09	0.117	0.068
14	0.079	0.098	0.126	0.082
15	0.081	0.11	0.129	0.116
16	0.087	0.109	0.139	0.15
17	0.09	0.119	0.142	0.206
18	0.092	0.126	0.148	0.253
19	0.094	0.135	0.16	0.302
20	0.104	0.139	0.168	0.36
21	0.104	0.148	0.177	0.409
22	0.107	0.156	0.186	0.47
23	0.11	0.164	0.196	0.532
24	0.114	0.168	0.203	0.589
25	0.115	0.176	0.213	0.649
26	0.118	0.188	0.225	0.706
27	0.12	0.191	0.235	0.768
28	0.121	0.204	0.243	0.825
29	0.128	0.218	0.256	0.882
30	0.128	0.232	0.266	0.939
31	0.128	0.243	0.273	1.007
32	0.13	0.27	0.293	1.064
33	0.128	0.306	0.323	1.121
34	0.136	0.339	0.346	1.175
35	0.133	0.374	0.372	1.238
36	0.136	0.422	0.404	1.286
37	0.14	0.471	0.439	1.343
38	0.138	0.517	0.483	1.401
39	0.139	0.559	0.525	1.445
40	0.146	0.603	0.567	1.498
41	0.145	0.647	0.61	1.544
42	0.145	0.686	0.652	1.592
43	0.148	0.74	0.689	1.636
44	0.149	0.78	0.738	1.677
45	0.153	0.837	0.784	1.726

DEG	Moment (g-mm)			
	16x22	17x25	18x25	19x25
1	163.825	163.825	153.625	163.825
2	209.725	163.825	168.925	174.025
3	209.725	194.425	204.625	184.225
4	214.825	225.025	255.625	194.425
5	240.325	281.125	332.125	214.825
6	286.225	327.025	393.325	230.125
7	321.925	362.725	464.725	230.125
8	362.725	423.925	531.025	276.025
9	393.325	464.725	587.125	316.825
10	418.825	485.125	643.225	352.525
11	459.625	520.825	673.825	383.125
12	495.325	566.725	699.325	429.025
13	520.825	612.625	750.325	500.425
14	556.525	653.425	796.225	571.825
15	566.725	714.625	811.525	745.225
16	597.325	709.525	862.525	918.625
17	612.625	760.525	877.825	1204.225
18	622.825	796.225	908.425	1443.925
19	633.025	842.125	969.625	1693.825
20	684.025	862.525	1010.425	1989.625
21	684.025	908.425	1056.325	2239.525
22	699.325	949.225	1102.225	2550.625
23	714.625	990.025	1153.225	2866.825
24	735.025	1010.425	1188.925	3157.525
25	740.125	1051.225	1239.925	3463.525
26	755.425	1112.425	1301.125	3754.225
27	765.625	1127.725	1352.125	4070.425
28	770.725	1194.025	1392.925	4361.125
29	806.425	1265.425	1459.225	4651.825
30	806.425	1336.825	1510.225	4942.525
31	806.425	1392.925	1545.925	5289.325
32	816.625	1530.625	1647.925	5580.025
33	806.425	1714.225	1800.925	5870.725
34	847.225	1882.525	1918.225	6146.125
35	831.925	2061.025	2050.825	6467.425
36	847.225	2305.825	2214.025	6712.225
37	867.625	2555.725	2392.525	7002.925
38	857.425	2790.325	2616.925	7298.725
39	862.525	3004.525	2831.125	7523.125
40	898.225	3228.925	3045.325	7793.425
41	893.125	3453.325	3264.625	8028.025
42	893.125	3652.225	3478.825	8272.825
43	908.425	3927.625	3667.525	8497.225
44	913.525	4131.625	3917.425	8706.325
45	933.925	4422.325	4152.025	8956.225

Bracket Type: Mini Diamond

DEG	Force (N)			
	16x22	17x25	18x25	19x25
1	0.004	0.004	0.002	0
2	0.01	0.005	0.009	0
3	0.011	0.01	0.016	0.007
4	0.021	0.021	0.027	0.015
5	0.03	0.029	0.038	0.026
6	0.035	0.036	0.047	0.034
7	0.045	0.044	0.055	0.039
8	0.057	0.056	0.063	0.049
9	0.058	0.066	0.064	0.063
10	0.065	0.078	0.081	0.076
11	0.076	0.088	0.086	0.092
12	0.079	0.099	0.087	0.107
13	0.086	0.108	0.096	0.126
14	0.091	0.115	0.109	0.148
15	0.103	0.126	0.116	0.179
16	0.109	0.137	0.126	0.217
17	0.115	0.146	0.135	0.256
18	0.121	0.154	0.148	0.312
19	0.129	0.164	0.153	0.372
20	0.139	0.171	0.163	0.438
21	0.145	0.181	0.178	0.501
22	0.155	0.193	0.188	0.569
23	0.158	0.202	0.204	0.629
24	0.166	0.207	0.218	0.69
25	0.172	0.214	0.233	0.75
26	0.179	0.221	0.251	0.805
27	0.183	0.229	0.277	0.86
28	0.187	0.234	0.3	0.911
29	0.191	0.249	0.328	0.958
30	0.199	0.26	0.353	1.003
31	0.203	0.277	0.384	1.052
32	0.204	0.286	0.424	1.095
33	0.207	0.31	0.463	1.126
34	0.211	0.337	0.499	1.165
35	0.218	0.369	0.541	1.198
36	0.219	0.406	0.581	1.229
37	0.225	0.441	0.624	1.259
38	0.228	0.477	0.661	1.285
39	0.234	0.519	0.701	1.31
40	0.238	0.551	0.74	1.34
41	0.244	0.585	0.775	1.364
42	0.251	0.62	0.815	1.388
43	0.257	0.658	0.852	1.416
44	0.265	0.691	0.889	1.432
45	0.275	0.728	0.929	1.449

DEG	Moment (g-mm)			
	16x22	17x25	18x25	19x25
1	174.025	174.025	163.825	153.625
2	204.625	179.125	199.525	153.625
3	209.725	204.625	235.225	189.325
4	260.725	260.725	291.325	230.125
5	306.625	301.525	347.425	286.225
6	332.125	337.225	393.325	327.025
7	383.125	378.025	434.125	352.525
8	444.325	439.225	474.925	403.525
9	449.425	490.225	480.025	474.925
10	485.125	551.425	566.725	541.225
11	541.225	602.425	592.225	622.825
12	556.525	658.525	597.325	699.325
13	592.225	704.425	643.225	796.225
14	617.725	740.125	709.525	908.425
15	678.925	796.225	745.225	1066.525
16	709.525	852.325	796.225	1260.325
17	740.125	898.225	842.125	1459.225
18	770.725	939.025	908.425	1744.825
19	811.525	990.025	933.925	2050.825
20	862.525	1025.725	984.925	2387.425
21	893.125	1076.725	1061.425	2708.725
22	944.125	1137.925	1112.425	3055.525
23	959.425	1183.825	1194.025	3361.525
24	1000.225	1209.325	1265.425	3672.625
25	1030.825	1245.025	1341.925	3978.625
26	1066.525	1280.725	1433.725	4259.125
27	1086.925	1321.525	1566.325	4539.625
28	1107.325	1347.025	1683.625	4799.725
29	1127.725	1423.525	1826.425	5039.425
30	1168.525	1479.625	1953.925	5268.925
31	1188.925	1566.325	2112.025	5518.825
32	1194.025	1612.225	2316.025	5738.125
33	1209.325	1734.625	2514.925	5896.225
34	1229.725	1872.325	2698.525	6095.125
35	1265.425	2035.525	2912.725	6263.425
36	1270.525	2224.225	3116.725	6421.525
37	1301.125	2402.725	3336.025	6574.525
38	1316.425	2586.325	3524.725	6707.125
39	1347.025	2800.525	3728.725	6834.625
40	1367.425	2963.725	3927.625	6987.625
41	1398.025	3137.125	4106.125	7110.025
42	1433.725	3315.625	4310.125	7232.425
43	1464.325	3509.425	4498.825	7375.225
44	1505.125	3677.725	4687.525	7456.825
45	1556.125	3866.425	4891.525	7543.525



Bracket Type: Victory Series

DEG	Force (N)			
	16X22	17X25	18X25	19X25
1	0.002	0	0.003	0.008
2	0.004	0.002	0.005	0.011
3	0.006	0.004	0.006	0.018
4	0.01	0.006	0.01	0.021
5	0.015	0.013	0.013	0.022
6	0.019	0.017	0.013	0.026
7	0.023	0.02	0.013	0.029
8	0.028	0.022	0.022	0.032
9	0.033	0.025	0.032	0.034
10	0.04	0.028	0.038	0.043
11	0.042	0.028	0.049	0.051
12	0.048	0.03	0.055	0.061
13	0.054	0.031	0.064	0.087
14	0.059	0.033	0.068	0.124
15	0.065	0.033	0.079	0.159
16	0.068	0.033	0.086	0.196
17	0.071	0.035	0.103	0.242
18	0.078	0.038	0.121	0.289
19	0.076	0.036	0.156	0.337
20	0.085	0.038	0.191	0.392
21	0.088	0.039	0.227	0.439
22	0.088	0.039	0.28	0.491
23	0.088	0.04	0.326	0.538
24	0.093	0.041	0.382	0.592
25	0.093	0.047	0.457	0.647
26	0.097	0.05	0.519	0.699
27	0.099	0.066	0.57	0.747
28	0.099	0.085	0.637	0.809
29	0.099	0.101	0.703	0.862
30	0.105	0.127	0.764	0.919
31	0.108	0.165	0.826	0.967
32	0.11	0.197	0.876	1.026
33	0.111	0.226	0.944	1.068
34	0.114	0.263	0.999	1.128
35	0.114	0.301	1.052	1.18
36	0.116	0.334	1.116	1.233
37	0.118	0.376	1.167	1.279
38	0.122	0.419	1.231	1.334
39	0.122	0.467	1.277	1.376
40	0.119	0.513	1.329	1.429
41	0.124	0.558	1.383	1.47
42	0.123	0.603	1.423	1.51
43	0.126	0.648	1.472	1.553
44	0.135	0.691	1.517	1.6
45	0.139	0.738	1.557	1.633

DEG	Moment (g-mm)			
	16X22	17X25	18X25	19X25
1	163.825	153.625	168.925	194.425
2	174.025	163.825	179.125	209.725
3	184.225	174.025	184.225	245.425
4	204.625	184.225	204.625	260.725
5	230.125	219.925	219.925	265.825
6	250.525	240.325	219.925	286.225
7	270.925	255.625	219.925	301.525
8	296.425	265.825	265.825	316.825
9	321.925	281.125	316.825	327.025
10	357.625	296.425	347.425	372.925
11	367.825	296.425	403.525	413.725
12	398.425	306.625	434.125	464.725
13	429.025	311.725	480.025	597.325
14	454.525	321.925	500.425	786.025
15	485.125	321.925	556.525	964.525
16	500.425	321.925	592.225	1153.225
17	515.725	332.125	678.925	1387.825
18	551.425	347.425	770.725	1627.525
19	541.225	337.225	949.225	1872.325
20	587.125	347.425	1127.725	2152.825
21	602.425	352.525	1311.325	2392.525
22	602.425	352.525	1581.625	2657.725
23	602.425	357.625	1816.225	2897.425
24	627.925	362.725	2101.825	3172.825
25	627.925	393.325	2484.325	3453.325
26	648.325	408.625	2800.525	3718.525
27	658.525	490.225	3060.625	3963.325
28	658.525	587.125	3402.325	4279.525
29	658.525	668.725	3738.925	4549.825
30	689.125	801.325	4050.025	4840.525
31	704.425	995.125	4366.225	5085.325
32	714.625	1158.325	4621.225	5386.225
33	719.725	1306.225	4968.025	5600.425
34	735.025	1494.925	5248.525	5906.425
35	735.025	1688.725	5518.825	6171.625
36	745.225	1857.025	5845.225	6441.925
37	755.425	2071.225	6105.325	6676.525
38	775.825	2290.525	6431.725	6957.025
39	775.825	2535.325	6666.325	7171.225
40	760.525	2769.925	6931.525	7441.525
41	786.025	2999.425	7206.925	7650.625
42	780.925	3228.925	7410.925	7854.625
43	796.225	3458.425	7660.825	8073.925
44	842.125	3677.725	7890.325	8313.625
45	862.525	3917.425	8094.325	8481.925