

Consolidated Data by Observation (Little to Significant Bending)

 HDG Faying Surfaces $\mu = .16$ (AGA)

 21 Faying Surfaces $\mu = .90$ (Mfg)

 B50 Faying Surfaces $\mu = .54$ (Mfg)

Bolts torqued to tension of 75% of yield/proof loads.

Stack: Fixture (Impact Plate)
 Spacer Rings – 3/4", 1/2", 1/16"
 Top Flange (DUT mount)

* Test M Spacer Rings – 3/4", 1/2", 1/4", 1/8", 1/16", 1/16"

Test	Bolt	Target Force (lbf)	Peak Force (lbf)	Strikes	Corrected Duration (ms)	Observations
S*	Grade 5	1700	1878	1	.95	Little to no bending.
T*	F593C	1700	1859	1	.75	Little to no bending.
X*	F593C	1700	1949	1	1.00	Little to no bending.
Z*	F593C	1700	1868	1	.70	Little to no bending.
S	Grade 5	1700	1923	1	.60	Little to no bending.
T	F593C	1700	1796	1	.60	Little to no bending.
U	F593C M36-GR 35	1700	2055	1	.60	Little to no bending.
V	F593C M36-GR 55	1700	1988	1	.60	Little to no bending.
W	Grade 5	1700	2010	1	.75	Little to no bending.
X	F593C	1700	1940	1	.75	Little to no bending.
Y	Grade 5	1700	1969	1	.65	Little to no bending.
Z	F593C	1700	1869	1	.65	Little to no bending.
N	Grade 5	1700	3142	1	.80	Little to no bending.
R	F593C	1700	2817	1	.60	Little to no bending.
O	F593C	1700	2924	1	.75	Little to no bending. Some ringing in fixture. Corrected duration for initial hit.
P	F593C	1700	2907	1	.65	Little to no bending. Some ringing in fixture. Corrected duration for initial hit.

Consolidated Data by Observation (Little to Significant Bending)

 HDG Faying Surfaces $\mu = .16$ (AGA)

 21 Faying Surfaces $\mu = .90$ (Mfg)

 B50 Faying Surfaces $\mu = .54$ (Mfg)

Bolts torqued to tension of 75% of yield/proof loads.

Stack: Fixture (Impact Plate)
 Spacer Rings – 3/4", 1/2", 1/16"
 Top Flange (DUT mount)

* Test M Spacer Rings – 3/4", 1/2", 1/4", 1/8", 1/16", 1/16"

Test	Bolt	Target Force (lbf)	Peak Force (lbf)	Strikes	Corrected Duration (ms)	Observations
C	F593C M10-GR35 M36-GR35	3300	4013	1	.60	Slight bending. Some ringing in fixture. Corrected duration for initial hit.
D	F593C M36-GR55	3300	4541	1	.60	Slight bending. Some ringing in fixture. Corrected duration for initial hit.
E	F593C	3300	3964	1	.55	Slight bending.
H	F593C M36-GR55	3300	4925	1	.60	Slight bending.
I	F593C	3300	4491	1	.60	Slight bending.
I-1	F593C	3300	4814 4274 4208	3	.55 .60 .50	Slight bending Strike 1, some ringing in fixture. Corrected duration for initial hit.
M*	F593C	3300	4311	1	.65	Slight bending.

Consolidated Data by Observation (Little to Significant Bending)

HDG Faying Surfaces $\mu = .16$ (AGA)

21 Faying Surfaces $\mu = .90$ (Mfg)

B50 Faying Surfaces $\mu = .54$ (Mfg)

Bolts torqued to tension of 75% of yield/proof loads.

Stack: Fixture (Impact Plate)

Spacer Rings – 3/4", 1/2", 1/16"

Top Flange (DUT mount)

* Test M Spacer Rings – 3/4", 1/2", 1/4", 1/8", 1/16", 1/16"

Test	Bolt	Target Force (lbf)	Peak Force (lbf)	Strikes	Corrected Duration (ms)	Observations
A	Grade 5	3300	4878	1	.55	Significant bending
A-1	Grade 5	3300	4341 3928 3473	3	.55 .55 .50	Significant bending in two sections. 3rd strike, some ringing in fixture. Corrected duration on initial hit.
E-1	F593C	3300	4420 4103 3839	3	.55 .65 .65	Significant bending Strikes 2 and 3 some ringing in fixture. Corrected duration for initial hit.
G	F593C M36-GR35	3300	4513	1	.60	Significant bending.