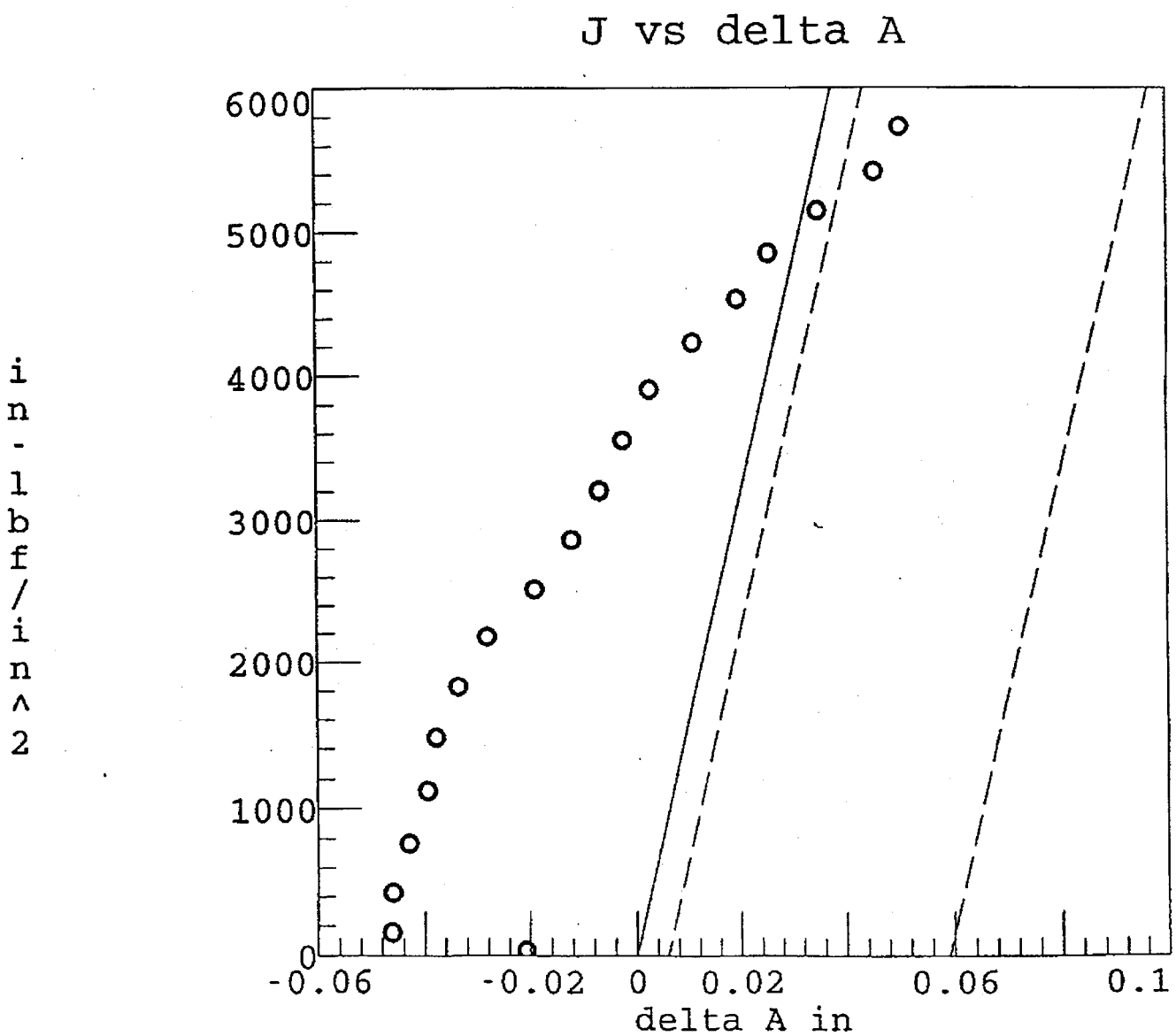
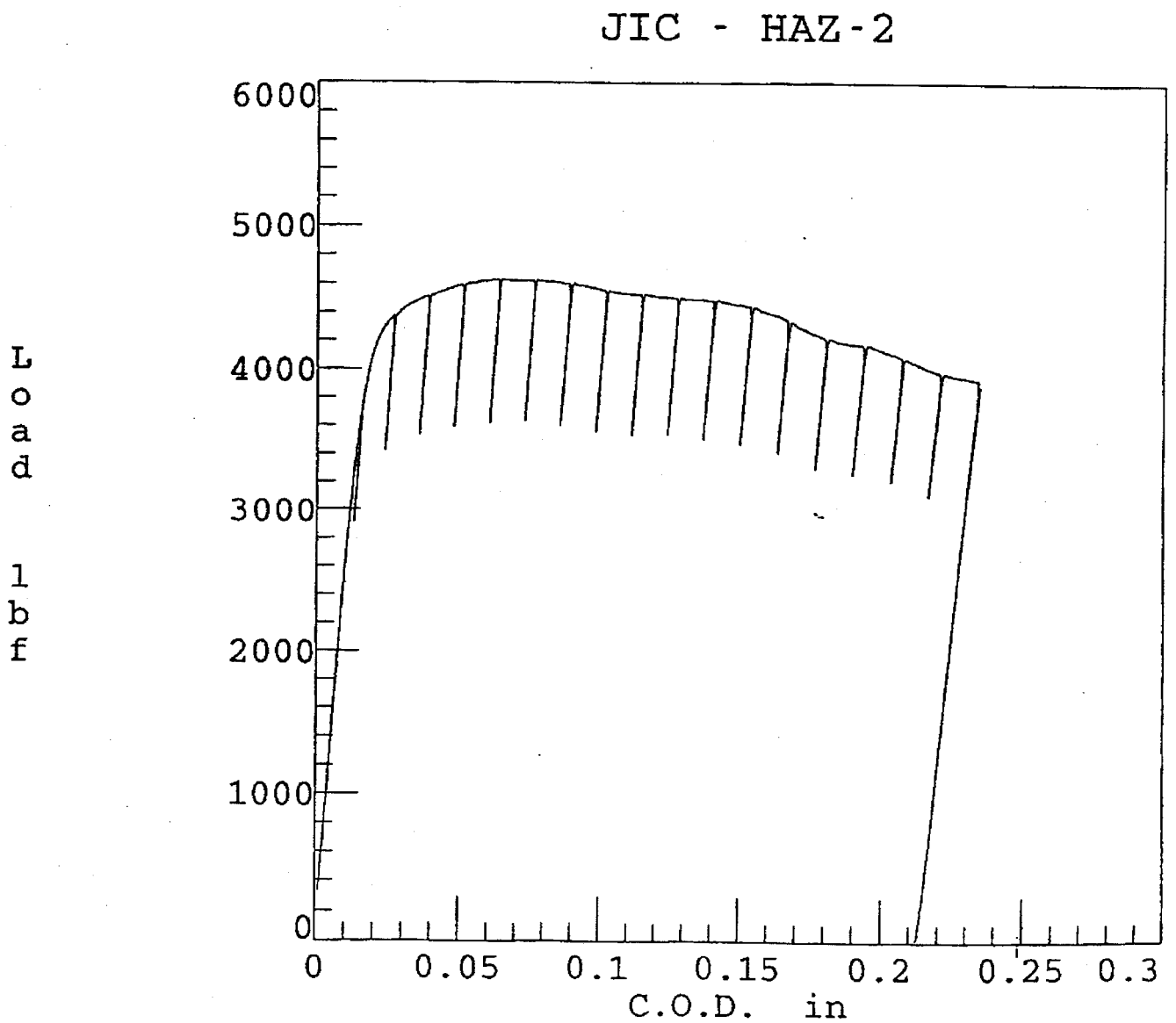
Template: JIC Fracture Toughness
Procedure: SE(B)
Batch: ATRlrgbendHAZlow
Specimen: haz-1
n Time Execute Data Table

Step Number	Crack Length in	J in-lbf/in^2	Delta a in	Corr. (none)
1	0.905199	10.5790	0.017199	0.995761
2	0.899919	22.3795	0.011919	0.997888
3	0.892995	39.9477	0.004995	0.998061
4	0.889174	79.7196	0.001174	0.998626
5	0.887555	122.467	-0.000445	0.998403
6	0.884721	207.309	-0.003279	0.998591
7	0.889871	295.801	0.001871	0.998118
8	0.888296	400.051	0.000296	0.997302
9	0.887032	511.105	-0.000968	0.997285
10	0.888296	610.095	0.000296	0.998159
11	0.886924	728.263	-0.001076	0.997670
12	0.886777	834.764	-0.001223	0.997562
13	0.884648	859.054	-0.003352	0.998206
14	0.884952	1014.54	-0.003048	0.997312
15	0.885428	1171.41	-0.002572	0.998821
16	0.888813	1327.51	0.000813	0.998370
17	0.888531	1495.75	0.000531	0.998860
18	0.887628	1659.17	-0.000372	0.998507
19	0.892294	1809.05	0.004294	0.998909
20	0.893860	1974.17	0.005860	0.998172
21	0.893019	2147.88	0.005019	0.997256
22	0.908047	2257.62	0.020047	0.996005
23	0.899160	2474.07	0.011160	0.993982
24	0.897108	2656.62	0.009108	0.993585
25	0.904291	2785.86	0.016291	0.992855
26	0.901267	2853.84	0.013267	0.994260
27	0.902592	3058.45	0.014592	0.992639
28	0.905068	3269.89	0.017068	0.993210
29	0.904597	3491.35	0.016597	0.992828
30	0.905479	3718.37	0.017479	0.994259
31	0.910100	3909.55	0.022100	0.994967
32	0.914800	4100.89	0.026800	0.993621
33	0.916903	4316.93	0.028903	0.995014
34	0.923415	4485.98	0.035415	0.994720
35	0.928010	4657.70	0.040010	0.994460
36	0.931641	4863.77	0.043641	0.995465
37	0.935251	5051.23	0.047251	0.995674
38	0.936713	5085.92	0.048713	0.994842
39	0.937033	5373.41	0.049033	0.993689
40	0.941353	5626.13	0.053353	0.994086
41	0.946034	5871.05	0.058034	0.994420
42	0.950959	6117.45	0.062959	0.995781
43	0.954364	6370.74	0.066364	0.996548
44	0.959046	6607.90	0.071046	0.995582
45	0.966080	6811.50	0.078080	0.997044
46	0.973135	7005.60	0.085135	0.997586
47	0.978832	7220.50	0.090832	0.996030
48	0.982444	7454.80	0.094444	0.995697

HAZ-2

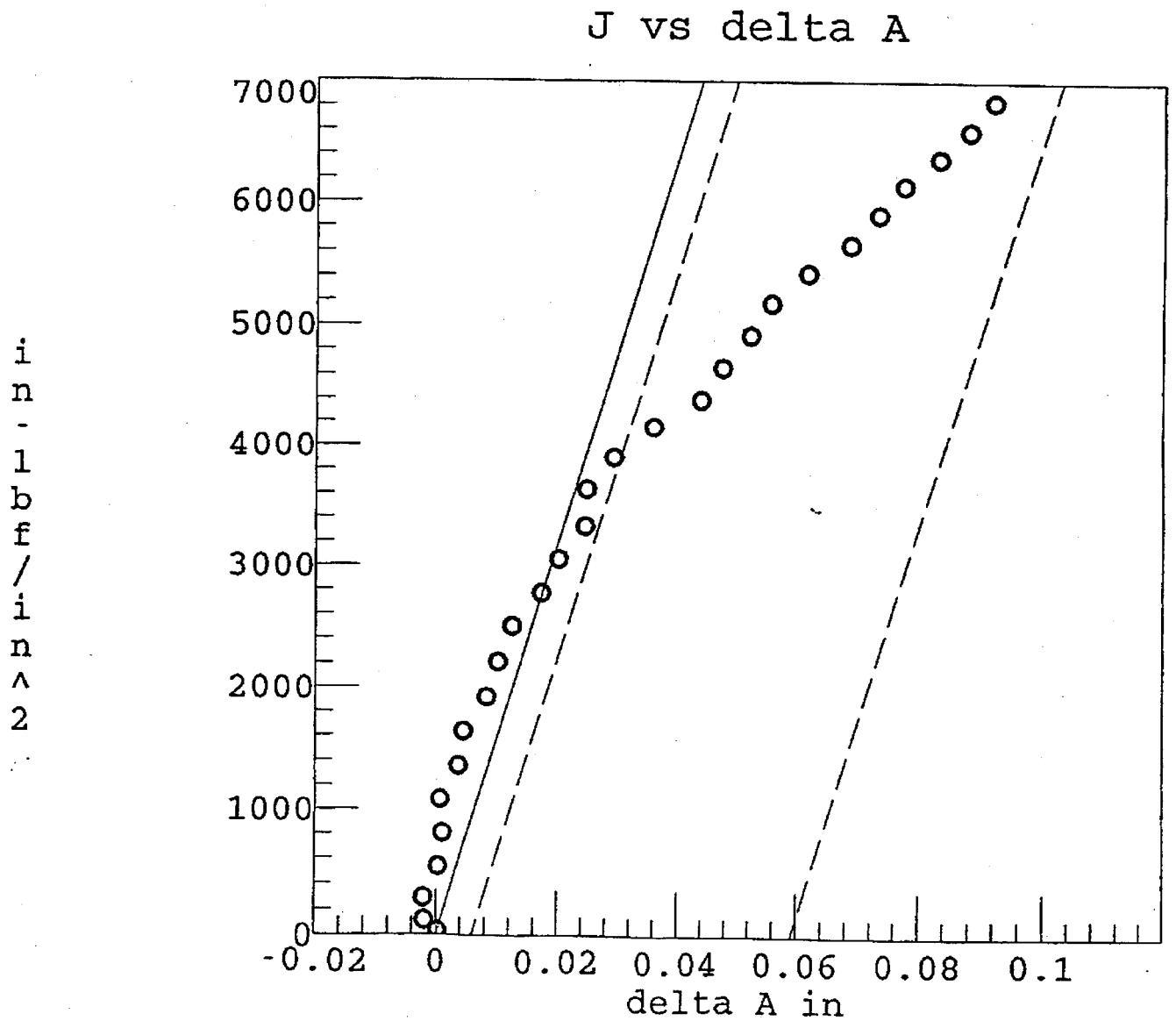

J vs delta A
6000
5000
4000
3000
2000
1000
0
in-lbf/in^2
-0.06
-0.02
0
0.02
0.06
0.1
delta A in

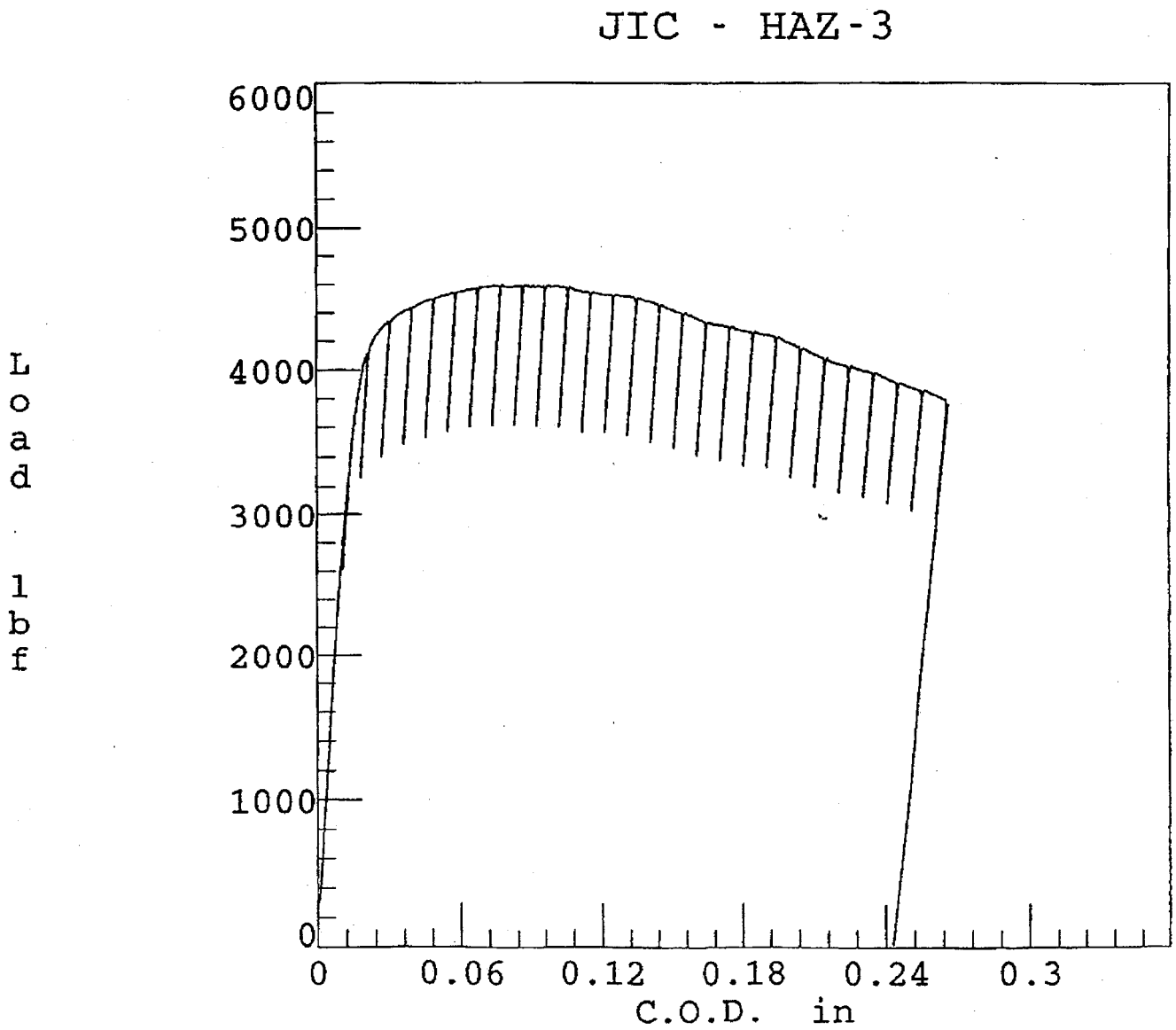

JIC - HAZ-2
6000
5000
4000
3000
2000
1000
0
Load lbf
0
0.05
0.1
0.15
0.2
0.25
0.3
C.O.D. in

Template: JIC Fracture Toughness
Procedure: ATR95
Batch: 72895
Specimen: HAZ-2
Run Time Execute Data Table

Step Number	Crack Length in	J in-lbf/in^2	Delta a in	Corr. (none)
1	0.841541	35.6293	-0.020759	0.998272
2	0.816073	160.315	-0.046227	0.999292
3	0.816297	431.046	-0.046003	0.999394
4	0.819356	764.102	-0.042944	0.999456
5	0.822836	1117.60	-0.039463	0.999190
6	0.824508	1476.40	-0.037792	0.999300
7	0.828749	1827.99	-0.033551	0.999100
8	0.834253	2180.62	-0.028047	0.999243
9	0.843284	2515.37	-0.019016	0.998878
10	0.850226	2861.37	-0.012074	0.998658
11	0.855429	3206.24	-0.006871	0.998859
12	0.859906	3556.41	-0.002394	0.998777
13	0.864968	3907.19	0.002668	0.998634
14	0.873208	4231.77	0.010908	0.998286
15	0.881710	4538.70	0.019410	0.998671
16	0.887685	4859.17	0.025385	0.998941
17	0.897009	5149.85	0.034709	0.998348
18	0.907760	5422.20	0.045460	0.998565
19	0.912572	5733.46	0.050272	0.998910

HA2-3

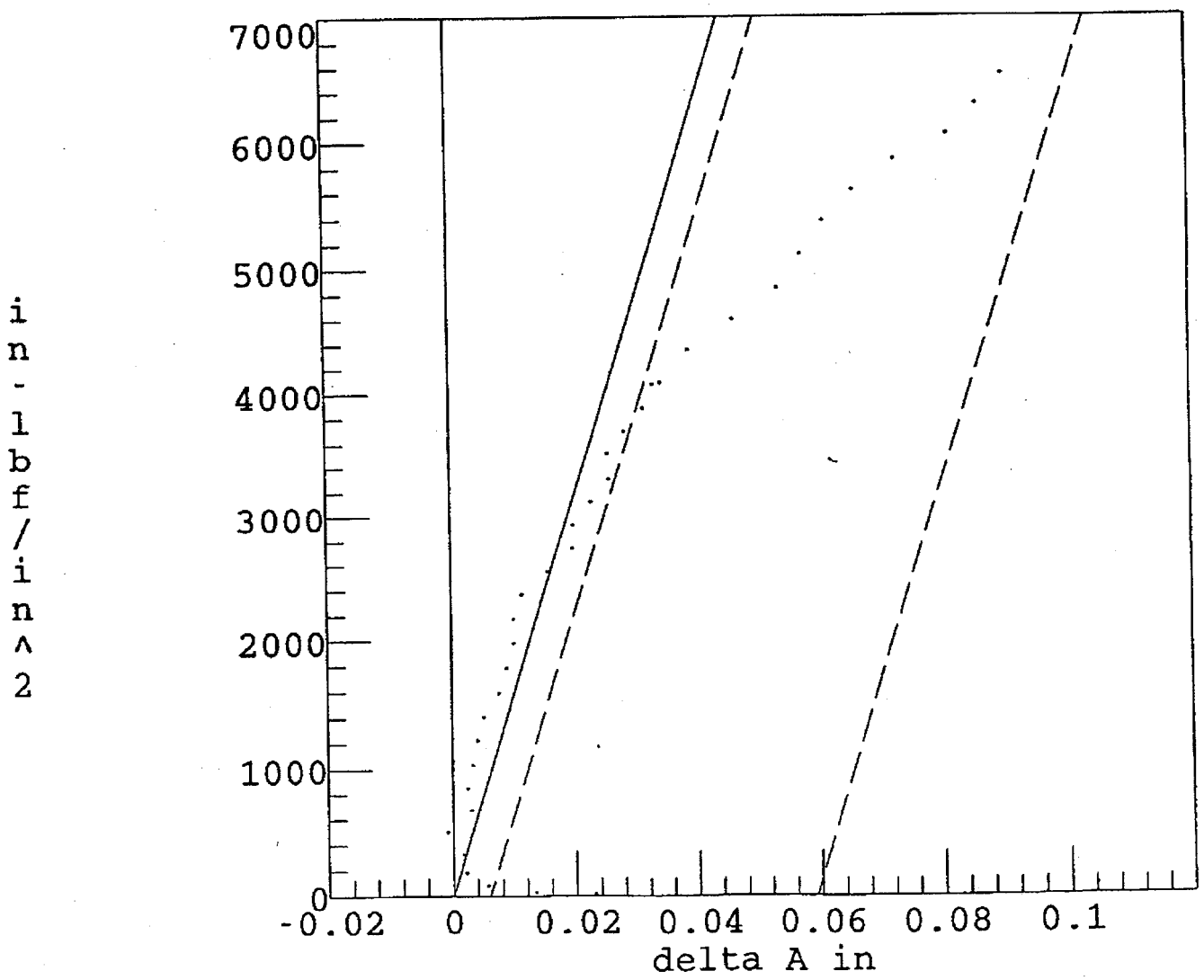

J vs delta A
7000
6000
5000
4000
3000
2000
1000
0
in-lbf/in^2
-0.02
0
0.02
0.04
0.06
0.08
0.1
delta A in

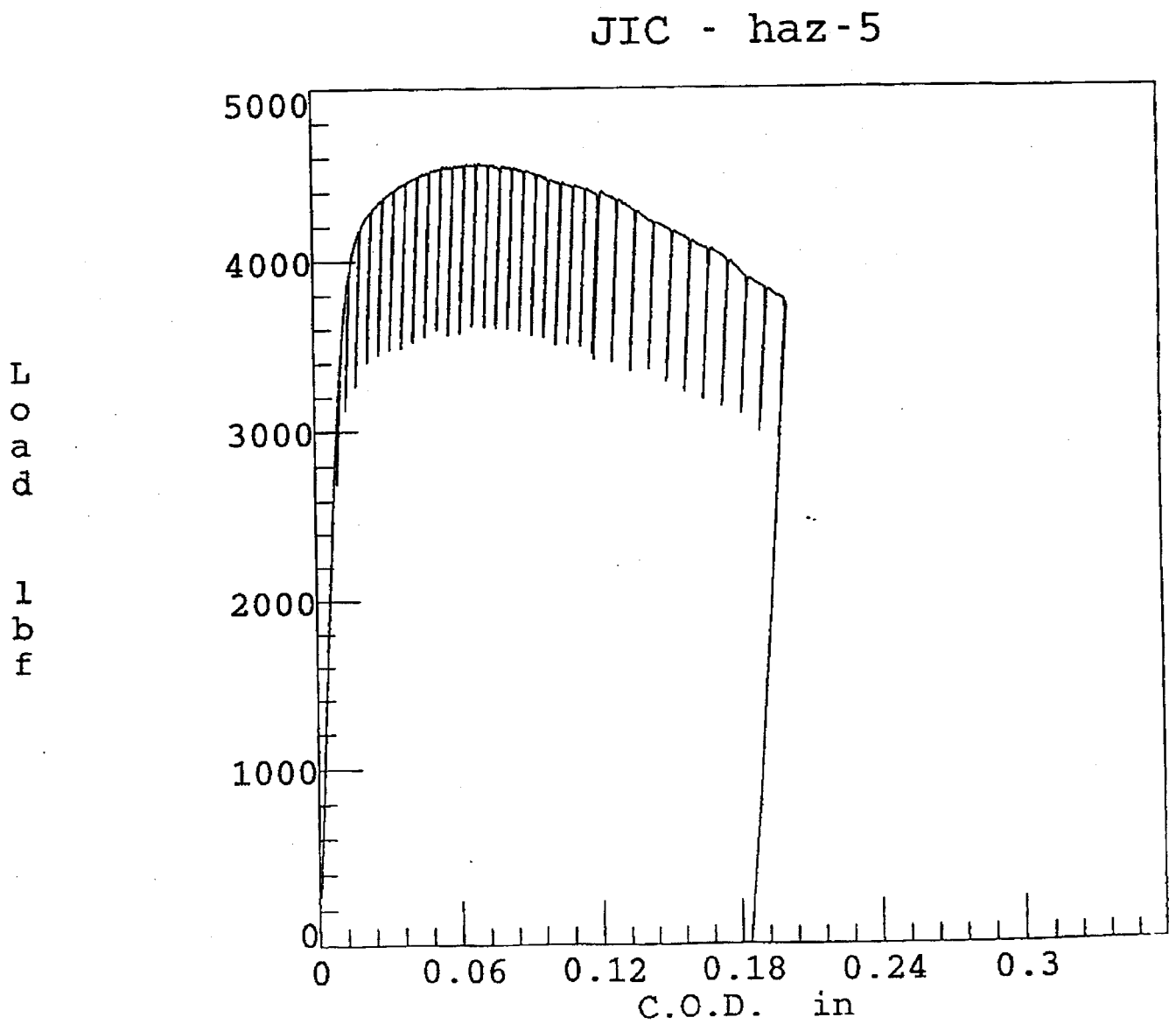

JIC - HAZ-3
6000
5000
4000
3000
2000
1000
0
Load lbf
0
0.06
0.12
0.18
0.24
0.3
C.O.D. in

Template: JIC Fracture Toughness
Procedure: ATR95
Batch: 72795
Specimen: HAZ-3
n Time Execute Data Table

Step Number	Crack Length in	J in-lbf/in^2	Delta a in	Corr. (none)
1	0.864825	29.7949	0.000225	0.998054
2	0.862592	116.335	-0.002008	0.998394
3	0.862462	289.052	-0.002138	0.998250
4	0.864815	537.314	0.000215	0.997747
5	0.865617	806.992	0.001017	0.998419
6	0.865138	1083.08	0.000538	0.997594
7	0.868144	1356.94	0.003544	0.997444
8	0.868975	1639.38	0.004375	0.997636
9	0.872812	1919.26	0.008212	0.998588
10	0.874597	2209.68	0.009997	0.998191
11	0.876965	2500.98	0.012365	0.998562
12	0.881862	2773.57	0.017262	0.998205
13	0.884697	3056.80	0.020097	0.998825
14	0.889055	3333.74	0.024455	0.998623
15	0.889228	3637.85	0.024628	0.998478
16	0.893772	3905.33	0.029172	0.998077
17	0.900397	4160.45	0.035797	0.998611
18	0.908360	4393.56	0.043760	0.998784
19	0.911911	4659.13	0.047311	0.998923
20	0.916557	4922.17	0.051958	0.998835
21	0.920099	5184.62	0.055499	0.998636
22	0.926105	5427.28	0.061505	0.998897
23	0.933043	5659.48	0.068443	0.998881
24	0.937693	5904.23	0.073093	0.998839
25	0.941915	6142.11	0.077315	0.999175
26	0.947612	6368.64	0.083012	0.998504
27	0.952508	6595.37	0.087908	0.999090
28	0.956398	6839.10	0.091798	0.999011

J vs delta A MAz-5



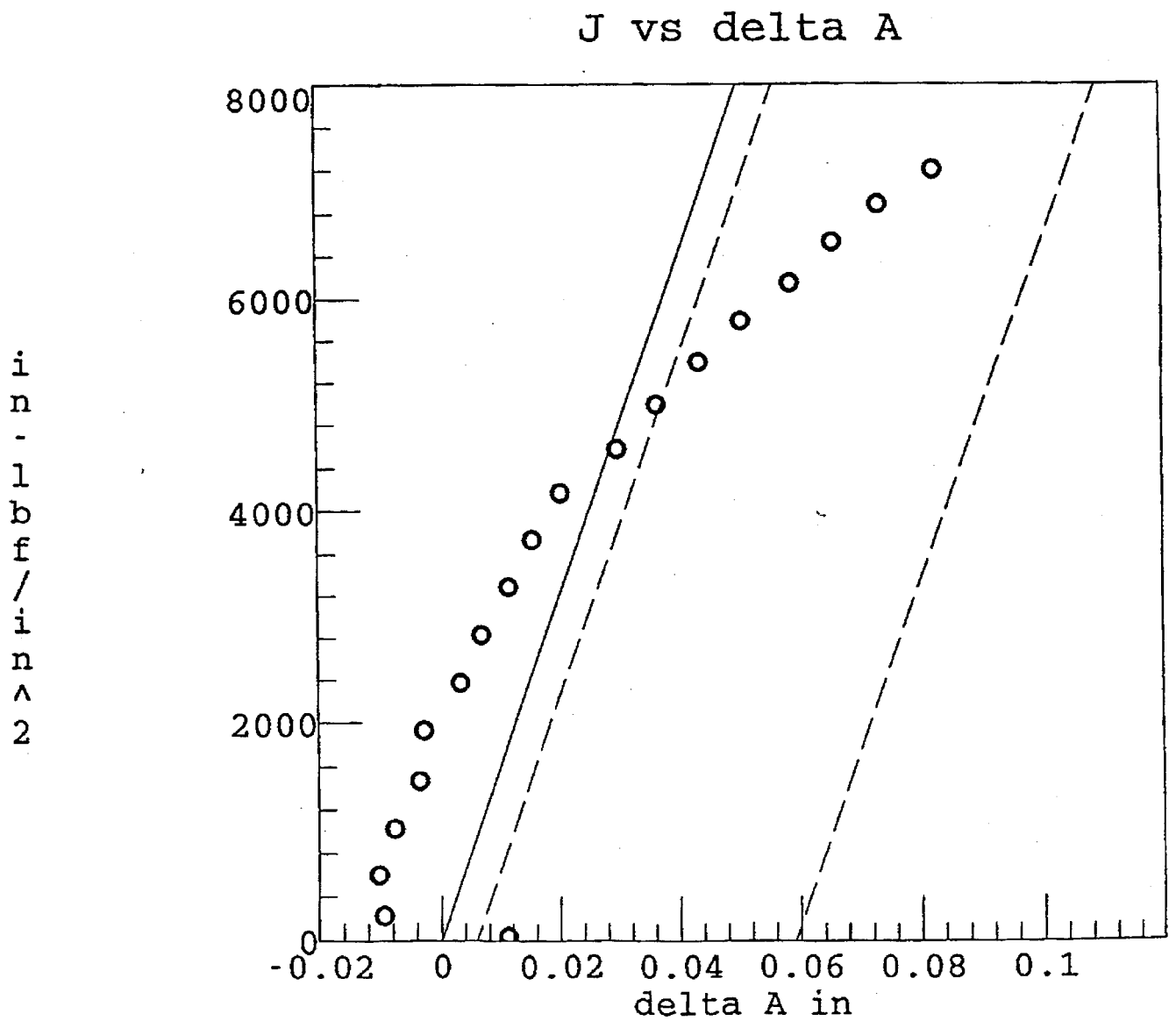

JIC - haz-5
5000
4000
3000
2000
1000
0
Load lbf
0
0.06
0.12
0.18
0.24
0.3
C.O.D. in

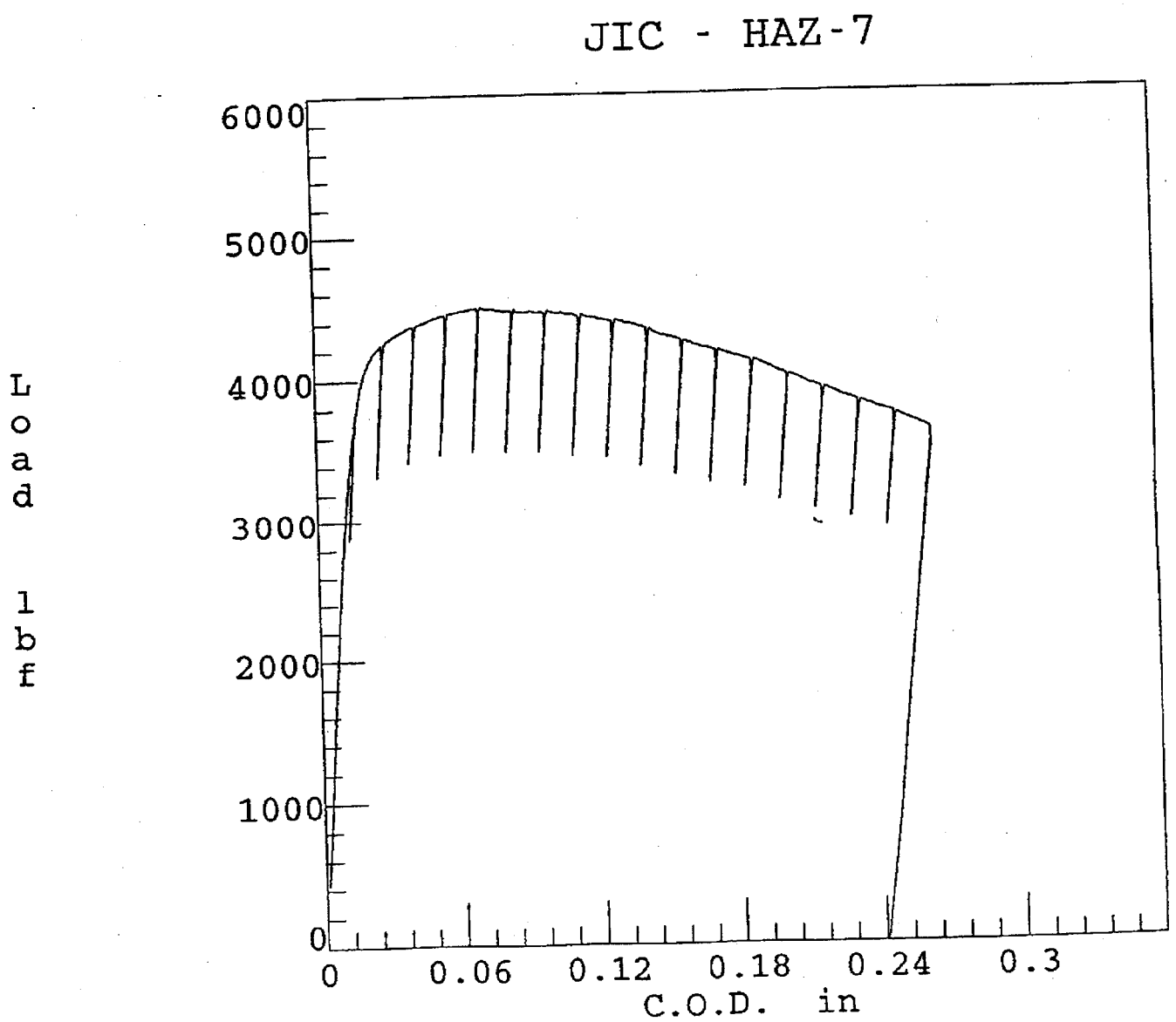
Template: JIC Fracture Toughness
Procedure: SE(B)
Batch: ATRlrgbendHAZlow
Specimen: haz-5

n Time Execute Data Table

Step Number	Crack Length in	J in-lbf/in^2	Delta a in	Corr. (none)
1	0.900165	9.48470	0.022965	0.994474
2	0.890526	28.2461	0.013326	0.989393
3	0.882746	83.1281	0.005546	0.993752
4	0.879311	180.373	0.002111	0.993509
5	0.878933	326.832	0.001733	0.995639
6	0.876327	499.643	-0.000873	0.995569
7	0.880286	674.101	0.003086	0.996258
8	0.879639	848.804	0.002439	0.996173
9	0.880537	1034.59	0.003337	0.996969
10	0.881323	1227.55	0.004123	0.996042
11	0.882336	1411.92	0.005136	0.996975
12	0.884800	1592.13	0.007600	0.996491
13	0.886076	1787.41	0.008876	0.996648
14	0.887320	1981.75	0.010120	0.995416
15	0.887348	2174.51	0.010148	0.995445
16	0.888683	2374.30	0.011483	0.995833
17	0.893006	2555.60	0.015806	0.995778
18	0.896971	2743.67	0.019771	0.996111
19	0.897069	2936.87	0.019869	0.995602
20	0.900050	3125.64	0.022850	0.996805
21	0.903011	3310.17	0.025811	0.996229
22	0.902816	3520.73	0.025616	0.997722
23	0.905580	3701.33	0.028380	0.997025
24	0.908728	3884.36	0.031528	0.997468
25	0.910289	4076.65	0.033089	0.997756
26	0.911532	4086.64	0.034332	0.998163
27	0.916124	4357.12	0.038924	0.997302
28	0.923344	4603.39	0.046144	0.997952
29	0.930693	4849.29	0.053493	0.998250
30	0.934548	5118.26	0.057348	0.998267
31	0.938252	5380.67	0.061052	0.998230
32	0.943208	5626.36	0.066008	0.998372
33	0.949954	5862.17	0.072754	0.998424
34	0.958616	6061.83	0.081416	0.998609
35	0.963309	6300.52	0.086109	0.998627
36	0.967461	6542.39	0.090261	0.998143

HA2-7.

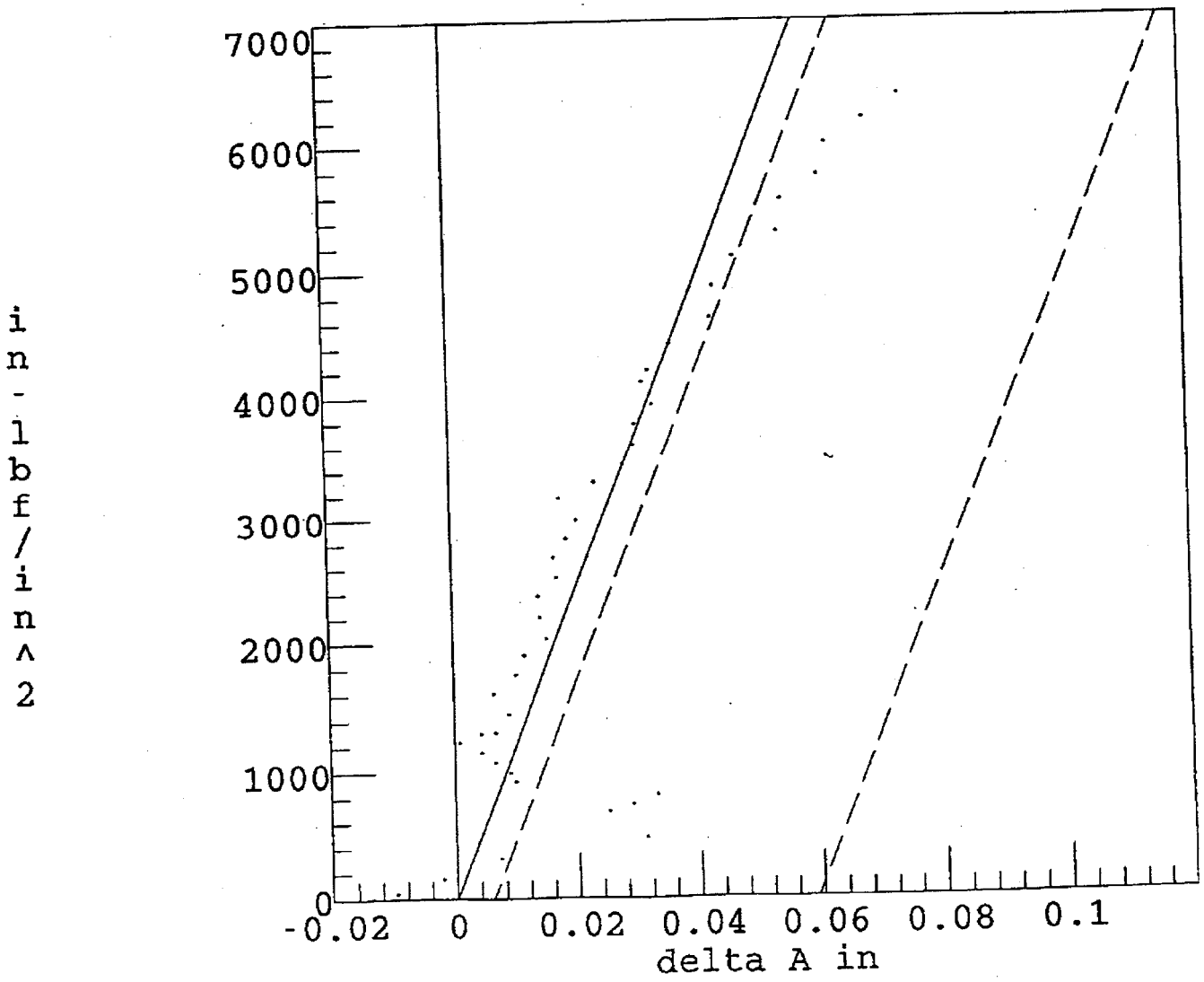

J vs delta A
8000
6000
4000
2000
0
in-lbf/in^2
-0.02
0
0.02
0.04
0.06
0.08
0.1
delta A in

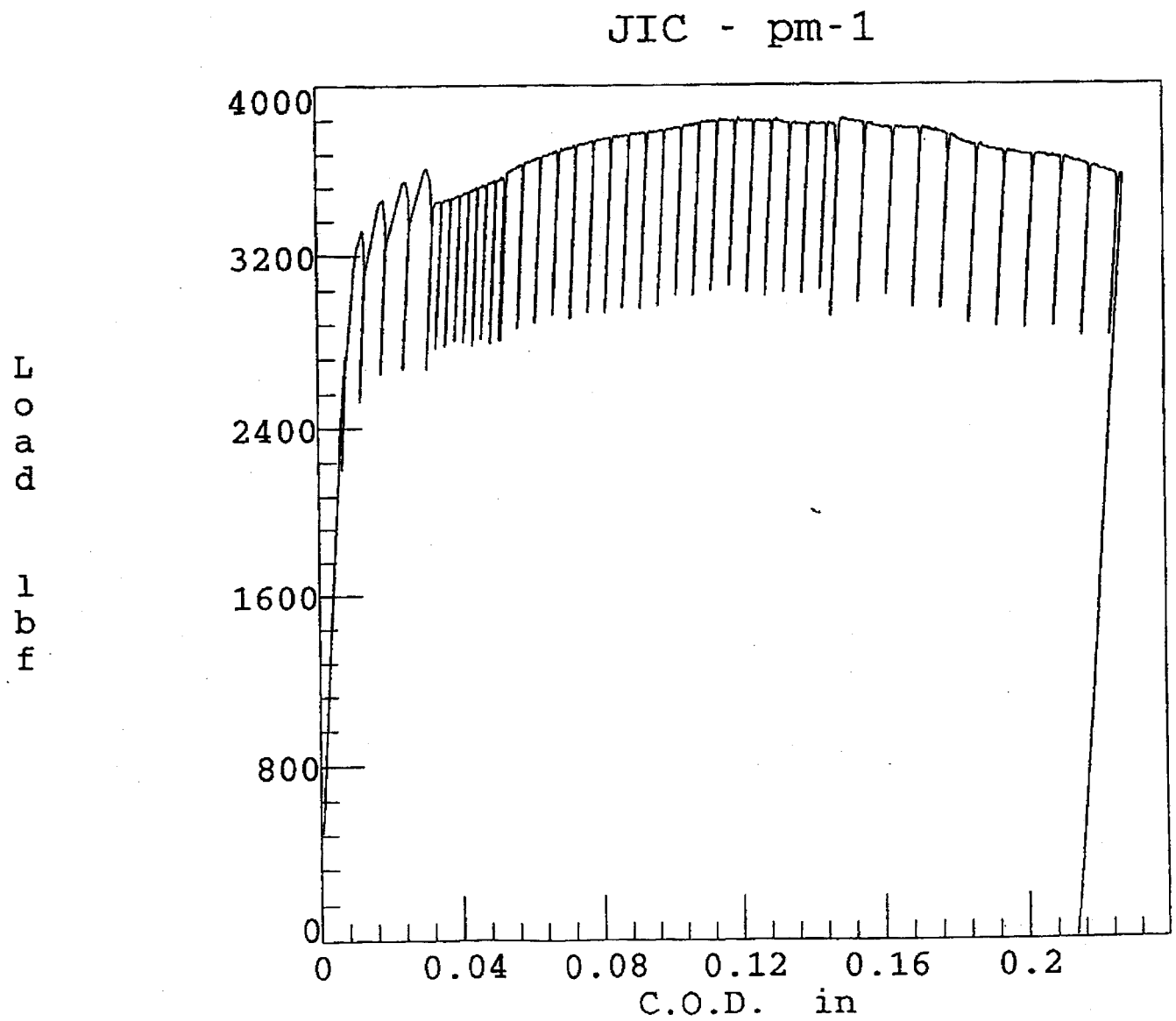

JIC - HAZ-7
6000
5000
4000
3000
2000
1000
0
Load lbf
0
0.06
0.12
0.18
0.24
0.3
C.O.D. in

Template: JIC Fracture Toughness
Procedure: ATR95
Batch: 81195
Specimen: HAZ-7
n Time Execute Data Table

Step Number	Crack Length in	J in-lbf/in^2	Delta a in	Corr. (none)
1	0.940196	42.0717	0.011196	0.996822
2	0.919525	228.323	-0.009475	0.988288
3	0.918714	598.522	-0.010286	0.995956
4	0.921342	1025.98	-0.007658	0.995728
5	0.925424	1470.10	-0.003576	0.994112
6	0.926175	1930.30	-0.002825	0.995250
7	0.932359	2378.63	0.003359	0.994717
8	0.935929	2833.32	0.006929	0.995656
9	0.940504	3286.08	0.011504	0.994481
10	0.944545	3736.31	0.015545	0.993875
11	0.949304	4178.79	0.020304	0.993836
12	0.958799	4579.12	0.029799	0.996241
13	0.965394	4991.27	0.036394	0.996373
14	0.972446	5395.07	0.043446	0.997303
15	0.979471	5792.91	0.050471	0.998294
16	0.987631	6152.24	0.058631	0.998444
17	0.994642	6536.57	0.065642	0.997978
18	1.00216	6888.41	0.073157	0.998266
19	1.01135	7206.19	0.082351	0.998155

J vs delta A pM-1



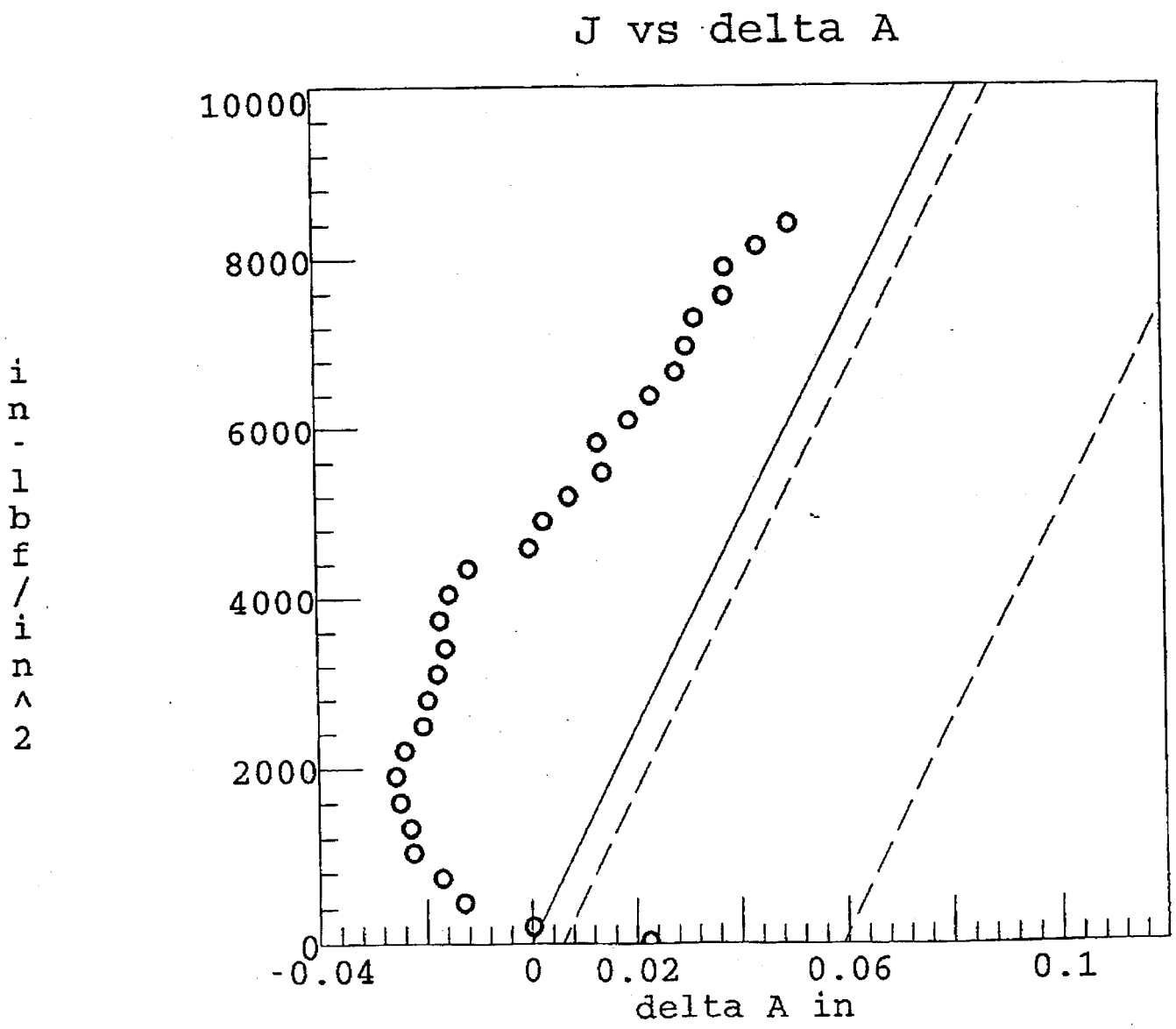

JIC - pm-1
4000
3200
2400
1600
800
0
Load lbf
0
0.04
0.08
0.12
0.16
0.2
C.O.D. in

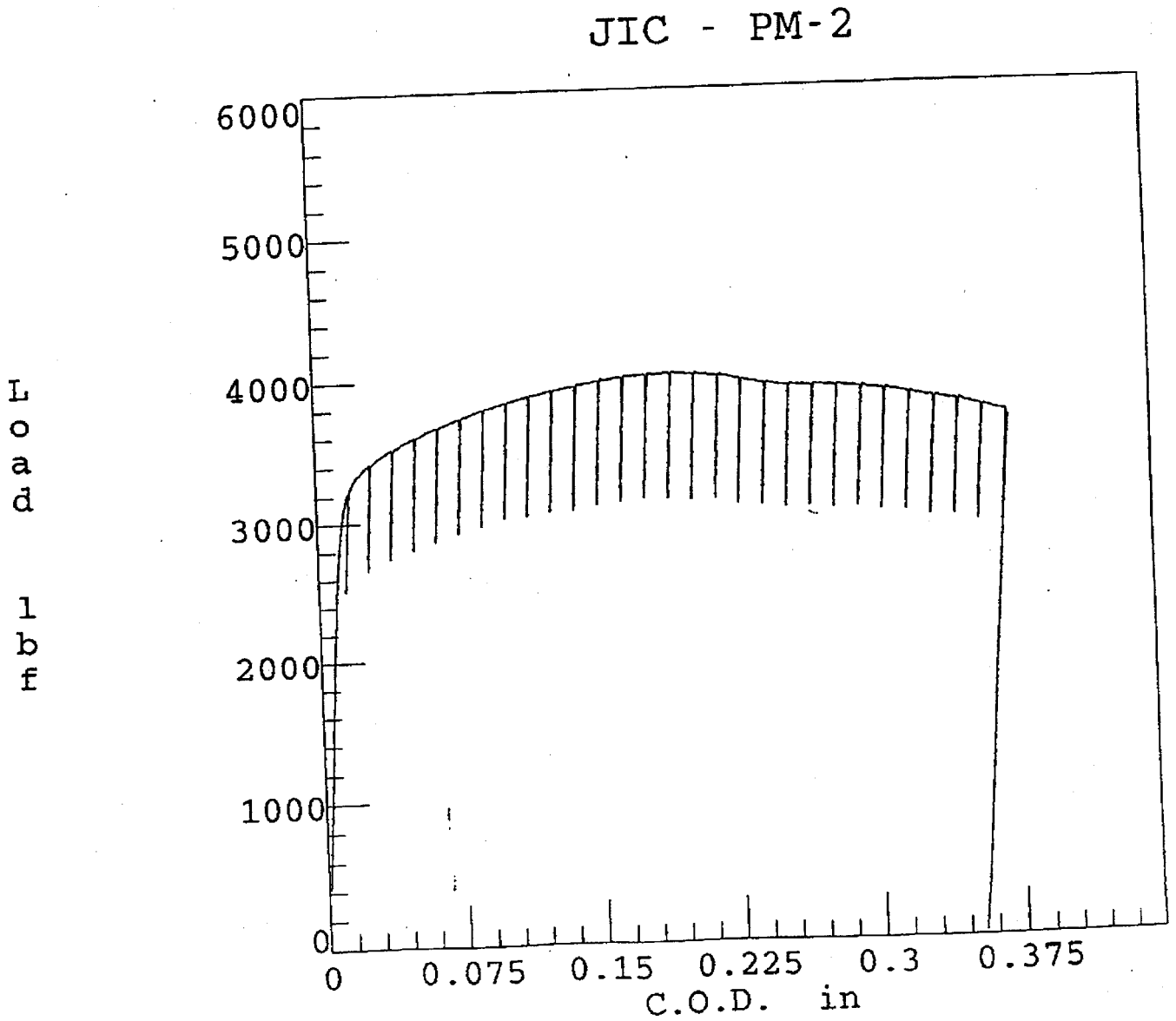
Template: JIC Fracture Toughness
Procedure: SE(B)
Batch: ATR1rgbendBASElow
Specimen: pm-1

.n Time Execute Data Table

Step Number	Crack Length in	J in-lbf/in^2	Delta a in	Corr. (none)
1	0.858030	4.96594	-0.013770	0.992827
2	0.862032	38.2804	-0.009768	0.997988
3	0.869625	155.809	-0.002175	0.999032
4	0.879017	318.549	0.007217	0.999009
5	0.902840	475.612	0.031040	0.998629
6	0.896756	685.653	0.024956	0.996797
7	0.900787	745.022	0.028987	0.995533
8	0.904690	818.587	0.032890	0.997136
9	0.881624	928.433	0.009824	0.994900
10	0.880732	999.337	0.008932	0.994154
11	0.878370	1080.50	0.006570	0.994292
12	0.876144	1158.44	0.004343	0.991295
13	0.872633	1238.47	0.000833	0.991822
14	0.876177	1302.75	0.004377	0.988473
15	0.878495	1311.17	0.006695	0.991674
16	0.880643	1452.14	0.008843	0.990988
17	0.878269	1608.82	0.006469	0.990715
18	0.881900	1752.65	0.010100	0.992331
19	0.883252	1905.27	0.011452	0.990796
20	0.886961	2037.80	0.015161	0.993677
21	0.886048	2207.40	0.014248	0.993728
22	0.885835	2378.04	0.014035	0.990714
23	0.888885	2525.70	0.017085	0.990475
24	0.888442	2685.44	0.016642	0.990598
25	0.890595	2843.13	0.018795	0.991721
26	0.892286	2992.93	0.020486	0.993298
27	0.889611	3175.64	0.017811	0.994038
28	0.895344	3309.56	0.023544	0.994023
29	0.900181	3450.70	0.028381	0.996645
30	0.901872	3612.36	0.030072	0.996400
31	0.902238	3777.44	0.030438	0.997164
32	0.905135	3932.73	0.033335	0.997967
33	0.903488	4111.31	0.031688	0.996342
34	0.904560	4204.13	0.032760	0.996524
35	0.908152	4421.79	0.036352	0.996552
36	0.914999	4629.60	0.043199	0.996221
37	0.915510	4886.43	0.043710	0.997116
38	0.918909	5114.98	0.047109	0.997246
39	0.926219	5306.73	0.054419	0.997075
40	0.926935	5562.54	0.055135	0.997750
41	0.932948	5753.48	0.061148	0.997323
42	0.934278	6005.03	0.062478	0.998747
43	0.940413	6198.53	0.068613	0.998728
44	0.946218	6387.59	0.074418	0.998865

PM-2


J vs delta A
10000
8000
6000
4000
2000
0
in-lbf/in^2
-0.04
0
0.02
0.06
0.1
delta A in


JIC - PM-2
6000
5000
4000
3000
2000
1000
0
Load lbf
0
0.075
0.15
0.225
0.3
0.375
C.O.D. in