

Girder Hot Spot Stress Summary

P-SDC11038/R-G5EXFLD4, Structural Design Corp. USA © 2010/2012 Crane Girder Analysis 01/01/88 08:32:04

NOTE: Nodal stress condition is adequate only if the interaction constant (ratio of calculated stress to allowable stress) ≤ 1.00

RANK	ZONE	Geometric	Interfacin	FACTG	LCOASDE	Fatigue Stress				Non-fatigue Stress			Allowable = 21.6		OK
		Node ID	Seg ID			Fiber	Shear	Allowed Fsr	Ftg IC ratio	fb	fv	SRSS	IC ratio	Enveloped max IC ratio	
1	11	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.788	0.28	4.5	4.175	9.3942	0.199	9.396	0.435	4.175	No
2	11	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.786	0.25	4.5	4.175	9.3931	0.154	9.394	0.435	4.175	No
3	10	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.768	0.334	4.5	4.171	9.3841	0.226	9.387	0.435	4.171	No
4	09	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.768	0.459	4.5	4.171	9.3841	0.301	9.389	0.435	4.171	No
5	09	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.766	0.542	4.5	4.17	9.3830	0.307	9.388	0.435	4.17	No
6	10	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.766	0.356	4.5	4.17	9.3830	0.208	9.385	0.435	4.17	No
7	12	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.731	0.362	4.5	4.162	9.3653	0.248	9.369	0.434	4.162	No
8	13	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.731	0.487	4.5	4.162	9.3653	0.323	9.371	0.434	4.162	No
9	13	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.728	0.556	4.5	4.162	9.3642	0.318	9.37	0.434	4.162	No
10	12	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.728	0.37	4.5	4.162	9.3642	0.219	9.367	0.434	4.162	No
11	08	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.369	0.547	4.5	4.082	9.1847	0.355	9.192	0.426	4.082	No
12	08	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.367	0.666	4.5	4.082	9.1836	0.374	9.191	0.426	4.082	No
13	14	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.344	0.568	4.5	4.076	9.1718	0.372	9.179	0.425	4.076	No
14	14	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	18.341	0.676	4.5	4.076	9.1707	0.382	9.179	0.425	4.076	No
15	07	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	17.634	0.628	4.5	3.919	8.817	0.405	8.826	0.409	3.919	No
16	07	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	17.632	0.782	4.5	3.918	8.8159	0.436	8.827	0.409	3.918	No
17	15	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	17.616	0.647	4.5	3.915	8.8079	0.42	8.818	0.408	3.915	No
18	15	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	17.614	0.791	4.5	3.914	8.8069	0.444	8.818	0.408	3.914	No
19	11	06 Continuous fillet	05 web - 1	<input checked="" type="checkbox"/>	1	37.883	2.95	10	3.788	37.883	2.95	37.997	1.759	3.788	No
20	11	06 Continuous fillet	06 web - 1	<input checked="" type="checkbox"/>	1	37.883	2.95	10	3.788	37.883	2.95	37.997	1.759	3.788	No
21	10	06 Continuous fillet	06 web - 1	<input checked="" type="checkbox"/>	1	37.84	3.	10	3.784	37.84	3.	37.958	1.757	3.784	No
22	10	06 Continuous fillet	05 web - 1	<input checked="" type="checkbox"/>	1	37.84	3.	10	3.784	37.84	3.	37.958	1.757	3.784	No
23	12	06 Continuous fillet	06 web - 1	<input checked="" type="checkbox"/>	1	37.78	3.392	10	3.778	37.780	3.392	37.932	1.756	3.778	No
24	12	06 Continuous fillet	05 web - 1	<input checked="" type="checkbox"/>	1	37.78	3.392	10	3.778	37.780	3.392	37.932	1.756	3.778	No
25	08	06 Continuous fillet	05 web - 1	<input checked="" type="checkbox"/>	1	36.753	4.196	10	3.675	36.753	4.196	36.992	1.713	3.675	No
26	08	06 Continuous fillet	06 web - 1	<input checked="" type="checkbox"/>	1	36.753	4.196	10	3.675	36.753	4.196	36.992	1.713	3.675	No
27	14	06 Continuous fillet	05 web - 1	<input checked="" type="checkbox"/>	1	36.712	4.5	10	3.671	36.712	4.5	36.987	1.712	3.671	No
28	14	06 Continuous fillet	06 web - 1	<input checked="" type="checkbox"/>	1	36.712	4.5	10	3.671	36.712	4.5	36.987	1.712	3.671	No
29	06	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	15.824	0.703	4.5	3.517	7.9122	0.451	7.925	0.367	3.517	No
30	06	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	15.823	0.889	4.5	3.516	7.9113	0.494	7.927	0.367	3.516	No
31	16	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	15.818	0.723	4.5	3.515	7.9091	0.466	7.923	0.367	3.515	No
32	16	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	15.816	0.899	4.5	3.515	7.9081	0.502	7.924	0.367	3.515	No
33	05	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	14.39	0.805	4.5	3.198	7.1952	0.514	7.214	0.334	3.198	No
34	05	30 Stitch weld	29 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	14.389	1.029	4.5	3.197	7.1944	0.57	7.217	0.334	3.197	No
35	17	30 Stitch weld	30 top kick pl/l - 1	<input checked="" type="checkbox"/>	1	14.38	0.825	4.5	3.196	7.1902	0.53	7.21	0.334	3.196	No