

TABLE: Joint Displacements									
Joint	OutputCase	CaseType	StepType	U1	U2	U3	R1	R2	R3
Text	Text	Text	Text	m	m	m	Radians	Radians	Radians
140	Tren A8	LinDirHis	Max	0	0	3.629E-11	0.000003295	0.000022	0
140	Tren A8	LinDirHis	Min	0	0	-0.00026	-0.000001427	-8.024E-13	0
229	Tren A8	LinDirHis	Max	0	0	1.601E-11	2.194E-08	1.005E-11	0
229	Tren A8	LinDirHis	Min	0	0	-0.00023	-0.000061	-0.00002	0
230	Tren A8	LinDirHis	Max	0	0	3.073E-11	2.907E-07	7.559E-12	0
230	Tren A8	LinDirHis	Min	0	0	-0.000243	-0.00003	-0.000013	0
231	Tren A8	LinDirHis	Max	0	0	2.123E-12	3.287E-12	0.000016	0
231	Tren A8	LinDirHis	Min	0	0	-0.000195	-0.000082	-0.000007673	0
232	Tren A8	LinDirHis	Max	0	0	0.000001982	1.527E-13	0.000049	0
232	Tren A8	LinDirHis	Min	0	0	-0.000327	-0.000094	-0.000004664	0
233	Tren A8	LinDirHis	Max	0	0	0.000002699	4.122E-13	0.000022	0
233	Tren A8	LinDirHis	Min	0	0	-0.000433	-0.000123	-0.000004207	0
234	Tren A8	LinDirHis	Max	0	0	7.592E-07	1.915E-07	0.000045	0
234	Tren A8	LinDirHis	Min	0	0	-0.000489	-0.000162	-0.000007631	0
235	Tren A8	LinDirHis	Max	0	0	3.666E-07	1.332E-07	0.000057	0
235	Tren A8	LinDirHis	Min	0	0	-0.000689	-0.000166	-0.000005456	0
236	Tren A8	LinDirHis	Max	0	0	0.000001519	5.969E-08	0.000044	0
236	Tren A8	LinDirHis	Min	0	0	-0.000834	-0.000187	-0.00001	0
237	Tren A8	LinDirHis	Max	0	0	6.789E-07	1.681E-07	0.000069	0
237	Tren A8	LinDirHis	Min	0	0	-0.000981	-0.00021	-0.000011	0
238	Tren A8	LinDirHis	Max	0	0	6.166E-07	1.811E-07	0.000066	0
238	Tren A8	LinDirHis	Min	0	0	-0.001201	-0.000208	-0.000011	0
239	Tren A8	LinDirHis	Max	0	0	0.000001618	1.057E-07	0.00006	0
239	Tren A8	LinDirHis	Min	0	0	-0.001375	-0.000223	-0.000016	0
240	Tren A8	LinDirHis	Max	0	0	0.000001247	2.001E-07	0.000071	0
240	Tren A8	LinDirHis	Min	0	0	-0.001559	-0.00023	-0.000018	0
241	Tren A8	LinDirHis	Max	0	0	0.000001315	2.497E-07	0.000075	0
241	Tren A8	LinDirHis	Min	0	0	-0.001774	-0.000225	-0.000022	0
242	Tren A8	LinDirHis	Max	0	0	0.000002277	2.265E-07	0.000072	0
242	Tren A8	LinDirHis	Min	0	0	-0.001974	-0.000229	-0.000025	0
244	Tren A8	LinDirHis	Max	0	0	0.000002591	2.795E-07	0.000072	0
244	Tren A8	LinDirHis	Min	0	0	-0.002384	-0.000215	-0.000029	0
245	Tren A8	LinDirHis	Max	0	0	0.00000317	2.911E-07	0.000074	0
245	Tren A8	LinDirHis	Min	0	0	-0.00256	-0.00021	-0.000037	0
246	Tren A8	LinDirHis	Max	0	0	0.000003942	3.391E-07	0.000079	0
246	Tren A8	LinDirHis	Min	0	0	-0.002758	-0.000197	-0.000041	0
247	Tren A8	LinDirHis	Max	0	0	0.000004442	0.000000266	0.00007	0
247	Tren A8	LinDirHis	Min	0	0	-0.00294	-0.000182	-0.000044	0
248	Tren A8	LinDirHis	Max	0	0	0.000004656	0.000000279	0.000072	0
248	Tren A8	LinDirHis	Min	0	0	-0.003105	-0.000169	-0.000049	0
249	Tren A8	LinDirHis	Max	0	0	0.000005166	0.000000315	0.000068	0
249	Tren A8	LinDirHis	Min	0	0	-0.003255	-0.00015	-0.000053	0
250	Tren A8	LinDirHis	Max	0	0	0.000006609	2.713E-07	0.000068	0
250	Tren A8	LinDirHis	Min	0	0	-0.003394	-0.00013	-0.000063	0
251	Tren A8	LinDirHis	Max	0	0	0.000008309	2.498E-07	0.000063	0
251	Tren A8	LinDirHis	Min	0	0	-0.003516	-0.000111	-0.000065	0
252	Tren A8	LinDirHis	Max	0	0	0.000009175	2.823E-07	0.000059	0

252	Tren A8	LinDirHis	Min	0	0	-0.003615	-0.000089	-0.000065	0
253	Tren A8	LinDirHis	Max	0	0	0.000009283	2.523E-07	0.00005	0
253	Tren A8	LinDirHis	Min	0	0	-0.003694	-0.000066	-0.000069	0
254	Tren A8	LinDirHis	Max	0	0	0.000009661	1.923E-07	0.000047	0
254	Tren A8	LinDirHis	Min	0	0	-0.003736	-0.000042	-0.000075	0
255	Tren A8	LinDirHis	Max	0	0	0.000011	1.712E-07	0.000046	0
255	Tren A8	LinDirHis	Min	0	0	-0.003776	-0.000021	-0.00008	0
256	Tren A8	LinDirHis	Max	0	0	0.000012	0.000013	0.000034	0
256	Tren A8	LinDirHis	Min	0	0	-0.003784	-0.000006615	-0.000079	0
257	Tren A8	LinDirHis	Max	0	0	0.000012	0.000037	0.000028	0
257	Tren A8	LinDirHis	Min	0	0	-0.003758	-0.000003583	-0.000082	0
258	Tren A8	LinDirHis	Max	0	0	0.00001	0.000061	0.00002	0
258	Tren A8	LinDirHis	Min	0	0	-0.003704	-0.000002354	-0.000079	0
259	Tren A8	LinDirHis	Max	0	0	0.000011	0.000086	0.000017	0
259	Tren A8	LinDirHis	Min	0	0	-0.003633	-0.000001404	-0.000088	0
260	Tren A8	LinDirHis	Max	0	0	0.000012	0.000109	0.000007621	0
260	Tren A8	LinDirHis	Min	0	0	-0.003535	-8.938E-07	-0.000087	0
261	Tren A8	LinDirHis	Max	0	0	0.000012	0.000131	0.000001359	0
261	Tren A8	LinDirHis	Min	0	0	-0.003403	-0.000000845	-0.000085	0
262	Tren A8	LinDirHis	Max	0	0	0.00001	0.000153	0.000001301	0
262	Tren A8	LinDirHis	Min	0	0	-0.003247	-7.152E-07	-0.000091	0
263	Tren A8	LinDirHis	Max	0	0	0.000009267	0.000171	0.000001125	0
263	Tren A8	LinDirHis	Min	0	0	-0.003058	-8.105E-07	-0.000092	0
264	Tren A8	LinDirHis	Max	0	0	0.000009383	0.000188	0.000001107	0
264	Tren A8	LinDirHis	Min	0	0	-0.002869	-7.291E-07	-0.000089	0
265	Tren A8	LinDirHis	Max	0	0	0.000008579	0.000205	0.000001127	0
265	Tren A8	LinDirHis	Min	0	0	-0.002648	-0.000000726	-0.00009	0
266	Tren A8	LinDirHis	Max	0	0	0.000006761	0.000214	0.000001026	0
266	Tren A8	LinDirHis	Min	0	0	-0.002416	-7.583E-07	-0.00009	0
267	Tren A8	LinDirHis	Max	0	0	0.000005452	0.00022	7.944E-07	0
267	Tren A8	LinDirHis	Min	0	0	-0.002172	-6.284E-07	-0.000093	0
268	Tren A8	LinDirHis	Max	0	0	0.000005213	0.00023	6.893E-07	0
268	Tren A8	LinDirHis	Min	0	0	-0.001907	-6.297E-07	-0.000089	0
269	Tren A8	LinDirHis	Max	0	0	0.000004634	0.000225	6.553E-07	0
269	Tren A8	LinDirHis	Min	0	0	-0.001667	-7.071E-07	-0.000078	0
270	Tren A8	LinDirHis	Max	0	0	0.000004488	0.000219	5.868E-07	0
270	Tren A8	LinDirHis	Min	0	0	-0.001406	-6.452E-07	-0.000084	0
271	Tren A8	LinDirHis	Max	0	0	0.000003386	0.000217	6.272E-07	0
271	Tren A8	LinDirHis	Min	0	0	-0.001136	-7.214E-07	-0.000074	0
272	Tren A8	LinDirHis	Max	0	0	0.000002722	0.00019	4.435E-07	0
272	Tren A8	LinDirHis	Min	0	0	-0.000929	-5.707E-07	-0.000061	0
273	Tren A8	LinDirHis	Max	0	0	0.000002486	0.000173	4.303E-07	0
273	Tren A8	LinDirHis	Min	0	0	-0.000704	-5.153E-07	-0.000067	0
274	Tren A8	LinDirHis	Max	0	0	0.000001547	0.000153	4.521E-07	0
274	Tren A8	LinDirHis	Min	0	0	-0.000491	-6.035E-07	-0.000041	0
275	Tren A8	LinDirHis	Max	0	0	0.000002092	0.000098	1.901E-07	0
275	Tren A8	LinDirHis	Min	0	0	-0.000405	-4.683E-07	-0.000031	0
276	Tren A8	LinDirHis	Max	0	0	0.000001733	0.000064	5.132E-07	0
276	Tren A8	LinDirHis	Min	0	0	-0.000229	-3.424E-07	-0.000053	0
277	Tren A8	LinDirHis	Max	0	0	0.000003438	0.000022	0.000008509	0

277	Tren A8	LinDirHis	Min	0	0	-0.000093	-3.882E-07	-0.000006943	0
278	Tren A8	LinDirHis	Max	0	0	8.796E-07	0.000032	3.107E-07	0
278	Tren A8	LinDirHis	Min	0	0	-0.000089	-3.683E-07	-0.000037	0
279	Tren A8	LinDirHis	Max	0	0	3.181E-11	0.000002482	0.000074	0
279	Tren A8	LinDirHis	Min	0	0	-0.000132	-7.715E-12	-0.000001379	0
280	Tren A8	LinDirHis	Max	0	0	7.01E-08	7.428E-13	0.000045	0
280	Tren A8	LinDirHis	Min	0	0	-0.000257	-0.000091	-0.000002877	0
283	Tren A8	LinDirHis	Max	0	0	0.000002953	5.407E-13	0.000031	0
283	Tren A8	LinDirHis	Min	0	0	-0.00041	-0.000108	-8.657E-07	0
347	Tren A8	LinDirHis	Max	0	0	0.000001773	8.954E-08	0.000018	0
347	Tren A8	LinDirHis	Min	0	0	-0.000464	-0.000149	-0.000006855	0
378	Tren A8	LinDirHis	Max	0	0	3.337E-07	1.709E-07	0.000067	0
378	Tren A8	LinDirHis	Min	0	0	-0.000595	-0.000167	-0.000005391	0
379	Tren A8	LinDirHis	Max	0	0	0.000001411	1.018E-07	0.000049	0
379	Tren A8	LinDirHis	Min	0	0	-0.000781	-0.000179	-0.000005762	0
380	Tren A8	LinDirHis	Max	0	0	0.000001161	1.255E-07	0.000049	0
380	Tren A8	LinDirHis	Min	0	0	-0.000909	-0.000207	-0.00001	0
381	Tren A8	LinDirHis	Max	0	0	6.684E-07	1.793E-07	0.000072	0
381	Tren A8	LinDirHis	Min	0	0	-0.001106	-0.000213	-0.000009399	0
383	Tren A8	LinDirHis	Max	0	0	0.000001313	1.505E-07	0.00006	0
383	Tren A8	LinDirHis	Min	0	0	-0.001298	-0.000219	-0.000013	0
388	Tren A8	LinDirHis	Max	0	0	0.00000141	2.055E-07	0.000068	0
388	Tren A8	LinDirHis	Min	0	0	-0.001471	-0.000233	-0.000016	0
389	Tren A8	LinDirHis	Max	0	0	0.000001467	2.759E-07	0.000075	0
389	Tren A8	LinDirHis	Min	0	0	-0.001678	-0.000231	-0.000017	0
390	Tren A8	LinDirHis	Max	0	0	0.00000208	1.976E-07	0.000069	0
390	Tren A8	LinDirHis	Min	0	0	-0.001889	-0.000231	-0.000021	0
391	Tren A8	LinDirHis	Max	0	0	0.000001961	2.605E-07	0.000074	0
391	Tren A8	LinDirHis	Min	0	0	-0.002078	-0.000233	-0.000024	0
392	Tren A8	LinDirHis	Max	0	0	0.000002521	3.336E-07	0.000079	0
392	Tren A8	LinDirHis	Min	0	0	-0.002293	-0.000224	-0.000029	0
393	Tren A8	LinDirHis	Max	0	0	0.00000336	2.548E-07	0.000074	0
393	Tren A8	LinDirHis	Min	0	0	-0.002486	-0.000218	-0.000031	0
394	Tren A8	LinDirHis	Max	0	0	0.000003665	2.755E-07	0.000076	0
394	Tren A8	LinDirHis	Min	0	0	-0.002671	-0.00021	-0.000033	0
448	Tren A8	LinDirHis	Max	0	0	0.000003486	3.431E-07	0.000072	0
448	Tren A8	LinDirHis	Min	0	0	-0.002862	-0.000194	-0.000037	0
449	Tren A8	LinDirHis	Max	0	0	0.000004545	3.031E-07	0.000072	0
449	Tren A8	LinDirHis	Min	0	0	-0.003028	-0.000181	-0.000048	0
450	Tren A8	LinDirHis	Max	0	0	0.000005582	2.774E-07	0.000072	0
450	Tren A8	LinDirHis	Min	0	0	-0.003195	-0.000162	-0.000052	0
451	Tren A8	LinDirHis	Max	0	0	0.000006316	2.905E-07	0.000066	0
451	Tren A8	LinDirHis	Min	0	0	-0.00334	-0.000142	-0.000053	0
452	Tren A8	LinDirHis	Max	0	0	0.00000715	2.945E-07	0.000062	0
452	Tren A8	LinDirHis	Min	0	0	-0.003468	-0.000123	-0.000058	0
455	Tren A8	LinDirHis	Max	0	0	0.000007688	3.052E-07	0.000058	0
455	Tren A8	LinDirHis	Min	0	0	-0.003567	-0.000102	-0.000063	0
516	Tren A8	LinDirHis	Max	0	0	0.000009255	0.000000233	0.000058	0
516	Tren A8	LinDirHis	Min	0	0	-0.003669	-0.000078	-0.000069	0
517	Tren A8	LinDirHis	Max	0	0	0.000011	2.256E-07	0.000049	0

517	Tren A8	LinDirHis	Min	0	0	-0.003734	-0.000055	-0.000071	0
518	Tren A8	LinDirHis	Max	0	0	0.000011	2.041E-07	0.000043	0
518	Tren A8	LinDirHis	Min	0	0	-0.003771	-0.000032	-0.000072	0
519	Tren A8	LinDirHis	Max	0	0	0.00001	0.00000239	0.000036	0
519	Tren A8	LinDirHis	Min	0	0	-0.003792	-0.000011	-0.000072	0
527	Tren A8	LinDirHis	Max	0	0	0.000011	0.000026	0.000031	0
527	Tren A8	LinDirHis	Min	0	0	-0.003777	-0.000004523	-0.00008	0
528	Tren A8	LinDirHis	Max	0	0	0.000012	0.00005	0.000026	0
528	Tren A8	LinDirHis	Min	0	0	-0.003749	-0.000003001	-0.000082	0
529	Tren A8	LinDirHis	Max	0	0	0.000012	0.000075	0.000017	0
529	Tren A8	LinDirHis	Min	0	0	-0.003686	-0.000001882	-0.00008	0
531	Tren A8	LinDirHis	Max	0	0	0.000012	0.000099	0.000008177	0
531	Tren A8	LinDirHis	Min	0	0	-0.003598	-0.000001166	-0.000083	0
532	Tren A8	LinDirHis	Max	0	0	0.00001	0.000122	0.000001167	0
532	Tren A8	LinDirHis	Min	0	0	-0.003471	-9.367E-07	-0.000083	0
533	Tren A8	LinDirHis	Max	0	0	0.000011	0.000144	0.000001202	0
533	Tren A8	LinDirHis	Min	0	0	-0.003341	-8.444E-07	-0.000084	0
539	Tren A8	LinDirHis	Max	0	0	0.000011	0.000165	0.000001263	0
539	Tren A8	LinDirHis	Min	0	0	-0.00317	-8.663E-07	-0.000086	0
540	Tren A8	LinDirHis	Max	0	0	0.00001	0.000183	0.000001215	0
540	Tren A8	LinDirHis	Min	0	0	-0.002976	-7.596E-07	-0.000088	0
541	Tren A8	LinDirHis	Max	0	0	0.000008124	0.000202	0.000001103	0
541	Tren A8	LinDirHis	Min	0	0	-0.002769	-8.267E-07	-0.000091	0
542	Tren A8	LinDirHis	Max	0	0	0.000007346	0.000215	9.259E-07	0
542	Tren A8	LinDirHis	Min	0	0	-0.002537	-8.067E-07	-0.000091	0
543	Tren A8	LinDirHis	Max	0	0	0.000006661	0.000221	0.000000879	0
543	Tren A8	LinDirHis	Min	0	0	-0.002311	-6.902E-07	-0.000087	0
544	Tren A8	LinDirHis	Max	0	0	0.000006008	0.00023	8.058E-07	0
544	Tren A8	LinDirHis	Min	0	0	-0.002051	-0.000000717	-0.00009	0
545	Tren A8	LinDirHis	Max	0	0	0.00000468	0.000233	7.469E-07	0
545	Tren A8	LinDirHis	Min	0	0	-0.001793	-7.916E-07	-0.000082	0
546	Tren A8	LinDirHis	Max	0	0	0.000003937	0.000223	5.587E-07	0
546	Tren A8	LinDirHis	Min	0	0	-0.001547	-5.977E-07	-0.000082	0
547	Tren A8	LinDirHis	Max	0	0	0.000003762	0.000223	5.582E-07	0
547	Tren A8	LinDirHis	Min	0	0	-0.001279	-6.254E-07	-0.000082	0
548	Tren A8	LinDirHis	Max	0	0	0.000002985	0.00021	4.838E-07	0
548	Tren A8	LinDirHis	Min	0	0	-0.00104	-7.378E-07	-0.000058	0
549	Tren A8	LinDirHis	Max	0	0	0.000002941	0.000183	3.713E-07	0
549	Tren A8	LinDirHis	Min	0	0	-0.000831	-6.094E-07	-0.000064	0
550	Tren A8	LinDirHis	Max	0	0	0.000002388	0.000169	4.422E-07	0
550	Tren A8	LinDirHis	Min	0	0	-0.000596	-5.923E-07	-0.000061	0
551	Tren A8	LinDirHis	Max	0	0	0.000001409	0.000131	3.135E-07	0
551	Tren A8	LinDirHis	Min	0	0	-0.000456	-5.138E-07	-0.00002	0
552	Tren A8	LinDirHis	Max	0	0	0.000002514	0.00008	2.281E-07	0
552	Tren A8	LinDirHis	Min	0	0	-0.000344	-4.035E-07	-0.000049	0
553	Tren A8	LinDirHis	Max	0	0	0.000000789	0.00005	4.641E-07	0
553	Tren A8	LinDirHis	Min	0	0	-0.000158	-4.143E-07	-0.000036	0
556	Tren A8	LinDirHis	Max	0	0	3.207E-11	0.000004202	0.000081	0
556	Tren A8	LinDirHis	Min	0	0	-0.000152	-7.72E-12	-0.000001538	0
557	Tren A8	LinDirHis	Max	0	0	0.000002549	2.679E-07	0.000079	0

Apéndice r1				Flecha Dinámica Tren A8						V= 336 km/h
557	Tren A8	LinDirHis	Min	0	0	-0.002177	-0.000224	-0.000025	0	