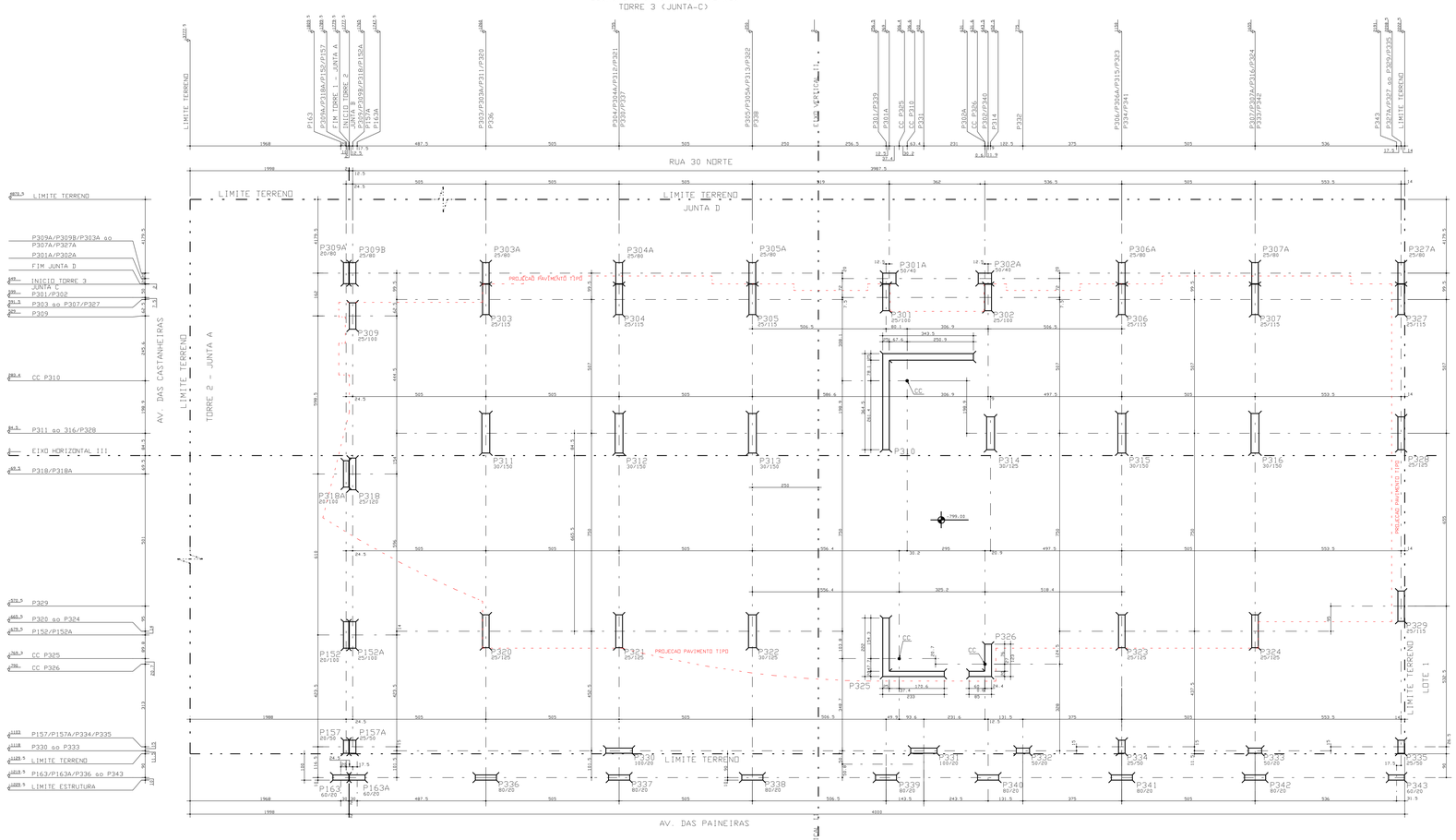
LOCACAO E CARGAS NOS PILARES
TORRE 3 (JUNTA-C)



1-OBSERVACOES :

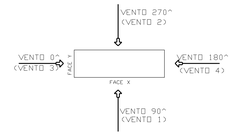
1) OS VENTOS INCIDENTES NAS FACES X (90^) E Y (0^) , RESPECTIVAMENTE, NAO OCORREM SIMULTANEAMENTE.

2) NAO CONSIDERAMOS VIGAS DE TRAVAMENTO. O MESMO SERA EXECUTADO COM O CONTRA-PISO ARMADO.

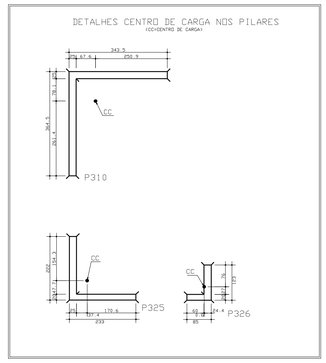
3) CONVENCOES: INCIDENCIA DOS VENTOS E SINAIS DE MX E MY

MOMENTOS NOS EIXOS GLOBAIS X E Y
COM SINAIS SEGUNDO A CONVENCAO VETORIAL

Fx= ESFORCO HORIZONTAL NA DIRECAO X (tf)
Fy= ESFORCO HORIZONTAL NA DIRECAO Y (tf)
Mx= MOMENTO FLETOR EM TORNO DO EIXO X (tfm)
My= MOMENTO FLETOR EM TORNO DO EIXO Y (tfm)



DETALHES CENTRO DE CARGA NOS PILARES
(CC=CENTRO DE CARGA)



DIREITOS AUTORAIS:
ESTE PROJETO E DE USO EXCLUSIVO DA OBRA EM REFERENCIA.NAO SENDO PERMITIDA A SUA UTILIZACAO PARA QUAISQUER FINALIDADES QUE NAO SEJA EXCLUSIVAMENTE RELACIONADA COM ESTA OBRA.SENDO TERMINANTEMEMTE PROIBIDA SUA DISPONIBILIZACAO PARA USO DE TERCEIROS.

NORMAS UTILIZADAS:
NBR-6118/2003 - PROJETO E EXECUCAO DE OBRAS DE CONCRETO ARMADO
NBR-6120/1980 - CARGAS PARA O CALCULO DE ESTRUTURAS DE EDIFICACOES

EXECUCAO:
- TODAS AS INTERFERENCIAS DO PROJETO ESTRUTURAL COM OS DEMAIS PROJETOS, ASSIM COMO AS COTAS E OS NIVEIS DAS FORMAS,DEVERAO SER VERIFICADAS E ACEITAS PELO RESPONSAVEL TECNICO DA OBRA OU PELO RESPONSAVEL PELA COMPATIBILIZACAO.

NOTA:
- SO UTILIZAR O PROJETO SE ESTIVER PLOTADO COLORIDO.
- NAO USAMOS VIGA DE TRAVAMENTO. UTILIZAR CONTRA PISO ARMADO (MINIMO 10cm)

FCK= 35 MPa
EC = 28 GPa (MODULO DE ELASTICIDADE SECANTE AOS 28 DIAS).
A/C = 0,65 (FATOR AGUA CIMENTO)

Elem	Fz	Fx	Fy	Mx	My
P150A	182	-1	-2	5	-1
P163A	8	0	0	0	1
P157A	73	-1	-1	-1	P157A
P152A	129	-1	-1	-1	P152A
P310	180	0	1	0	P310
P303	368	0	4	0	P303
P304	398	0	4	-1	0
P305	393	0	4	-1	0
P306	429	0	5	-4	0
P307	439	0	5	-4	0
P309	214	-1	1	-1	P309
P313	1436	-3	5	248	-124
P311	843	1	4	7	-1
P312	1	0	5	-2	1
P314	1	0	5	-2	1
P315	758	-1	6	-3	-1
P316	893	-1	3	0	-1
P318	1	0	1	-1	0
P301	584	1	-2	8	1
P302	1	0	1	0	1
P320	775	0	5	-4	0
P321	652	0	-13	9	0
P324	550	0	-5	5	-1
P325	79	-3	-15	79	23
P326	1	0	1	0	1
P327	1	0	1	-2	1
P328	292	1	-1	-1	P328
P329	1	0	1	0	1
P330	178	0	0	0	1
P331	1	0	1	0	1
P332	35	0	0	0	0
P333	47	0	-1	0	1
P334	133	0	-1	0	1
P335	87	0	0	0	1
P336	30	0	0	0	0
P337	1	0	1	0	1
P338	32	0	-1	0	1
P339	37	0	-3	0	1
P340	11	0	0	0	1
P341	1	0	1	0	1
P342	12	0	0	0	1
P343	3	0	0	0	0

Elem	Fz	Fx	Fy	Mx	My
P150A	-2	0	-4	20	0
P163A	18	0	1	0	0
P157A	-16	0	1	-4	0
P152A	-16	0	1	-4	0
P310	113	0	-4	16	0
P303	66	0	3	-25	0
P304	18	0	4	-25	0
P305	23	0	5	-25	0
P306	30	0	2	-14	0
P307	32	0	2	-14	0
P309	84	0	2	-18	0
P313	1	0	1	0	1
P311	-31	0	7	-63	0
P312	-4	0	8	-45	0
P314	1	0	1	0	1
P315	-58	0	8	-95	0
P316	-14	0	5	-45	0
P318	-18	0	4	-35	0
P301	-64	0	5	-33	0
P302	-30	0	5	-33	0
P320	1	0	1	0	1
P321	7	0	7	-36	0
P324	15	0	6	-25	0
P325	14	0	1	-2	0
P326	-34	-8	25	-251	135
P327	1	0	1	0	1
P328	-14	0	1	-2	0
P329	19	0	7	-17	0
P330	-41	0	6	-15	0
P331	-13	-1	0	-1	0
P332	1	0	1	0	1
P333	-5	-1	0	-1	0
P334	-19	0	1	-3	0
P335	-16	0	1	-2	0
P336	1	0	1	0	1
P337	1	0	1	0	1
P338	-1	0	1	-2	0
P339	-1	0	1	-2	0
P340	-1	-2	0	-1	0
P341	-4	-2	0	-1	0
P342	1	0	1	-3	0
P343	-5	-1	0	0	0

Elem	Fz	Fx	Fy	Mx	My
P150A	0	0	0	-1	1
P163A	0	0	0	-1	1
P157A	1	0	0	0	1
P152A	1	0	0	0	1
P310	62	0	1	-8	0
P303	-62	0	0	0	1
P304	-3	0	0	-1	1
P305	8	0	0	-1	1
P306	5	0	0	-1	1
P307	-5	0	0	-1	1
P309	0	0	0	-1	0
P313	115	-20	0	-209	430
P311	0	0	-1	3	-2
P312	1	0	1	-2	2
P314	1	0	1	-2	2
P315	-84	-1	0	-3	-2
P316	-1	-1	-1	-4	-2
P318	0	0	0	-1	1
P301	6	0	0	-1	1
P302	6	0	0	-1	1
P320	5	0	0	-1	1
P321	-8	0	0	-1	1
P324	1	0	1	-2	1
P325	-5	0	0	-2	-4
P326	2	-4	-1	0	8
P327	1	0	1	-2	1
P328	7	0	-2	4	1
P329	1	0	0	-2	4
P330	0	0	0	0	8
P331	-5	0	0	-1	0
P332	6	0	0	0	1
P333	6	-1	0	0	1
P334	19	-1	0	0	1
P335	16	0	-1	0	0
P336	1	0	0	0	1
P337	1	0	0	0	1
P338	1	-2	0	0	5
P339	1	-2	1	0	5
P340	1	0	0	0	7
P341	1	0	0	0	6
P342	1	0	0	0	6
P343	1	0	0	0	3

Elem	Fz	Fx	Fy	Mx	My
P150A	0	0	0	-1	1
P163A	0	0	0	-1	1
P157A	1	0	0	0	1
P152A	1	0	0	0	1
P310	62	0	1	-8	0
P303	-62	0	0	0	1
P304	-3	0	0	-1	1
P305	8	0	0	-1	1
P306	5	0	0	-1	1
P307	-5	0	0	-1	1
P309	0	0	0	-1	0
P313	115	-20	0	-209	430
P311	0	0	-1	3	-2
P312	1	0	1	-2	2
P314	1	0	1	-2	2
P315	-84	-1	0	-3	-2
P316	-1	-1	-1	-4	-2
P318	0	0	0	-1	1
P301	6	0	0	-1	1
P302	6	0	0	-1	1
P320	5	0	0	-1	1
P321	-8	0	0	-1	1
P324	1	0	1	-2	1
P325	-5	0	0	-2	-4
P326	2	-4	-1	0	8
P327	1	0	1	-2	1
P328	7	0	-2	4	1
P329	1	0	0	-2	4
P330	0	0	0	0	8
P331	-5	0	0	-1	0
P332	6	0	0	0	1
P333	6	-1	0	0	1
P334	19	-1	0	0	1
P335	16	0	-1	0	0
P336	1	0	0	0	1
P337	1	0	0	0	1
P338	1	-2	0	0	5
P339	1	-2	1	0	5
P340	1	0	0	0	7
P341	1	0	0	0	6
P342	1	0	0	0	6
P343	1	0	0	0	3

Elem	Fz	Fx	Fy	Mx	My
P150A	111	-1	0	2	0
P163A	9	1	0	0	0
P157A	66	0	0	0	0
P152A	51	0	0	0	0
P310	253	0	2	-2	1
P303	358	1	4	-2	1
P304	387	0	4	-2	1
P305	362	0	4	-3	1
P306	417	0	2	-14	0
P307	432	0	2	-14	0
P309	215	0	4	-19	0
P313	1395	5	42	-793	41
P311	864	0	6	46	0
P312	1	0	1	0	1
P314	1	0	1	0	1
P315	867	0	6	-45	0
P316	538	0	4	25	1
P318	905	-1	1	19	-2
P301	316	-1	0	22	1
P302	637	-1	-4	27	1
P320	1	0	1	0	1
P321	678	-1	4	-30	0
P324	663	0	-5	-9	1
P325	594	14	-14	102	156
P326	1	0	1	0	1
P327	566	0	-1	0	1
P328	414	-9	-1	7	1
P329	1	0	1	0	1
P330	162	0	0	10	P330
P331	40	0	0	1	P331
P332	48	0	1	0	P332
P333	56	-1	0	1	P333
P334	146	0	1	-2	P334
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	115	-1	3	-18	-1
P163A	1	0	1	0	0
P157A	85	-1	-2	5	-1
P152A	85	-1	-2	5	-1
P310	136	0	2	-2	1
P303	287	0	0	27	0
P304	371	0	0	26	0
P305	347	0	-2	25	0
P306	412	0	1	14	0
P307	423	-1	-1	13	-2
P309	141	-1	-2	21	-1
P313	1478	-17	-25	1188	-64
P311	819	0	-3	73	0
P312	125	-1	4	59	-1
P314	125	-1	4	59	-1
P315	991	0	-4	45	-1
P316	957	-1	0	34	-2
P318	316	-1	-5	22	1
P301	542	1	0	3	2
P302	542	1	0	3	2
P320	678	-1	-5	48	1
P321	569	0	-14	30	1
P324	566	0	-1	0	1
P325	816	8	-38	203	187
P326	1	0	1	0	1
P327	566	-5	-1	-1	1
P328	365	-9	-4	14	1
P329	1	0	1	0	1
P330	177	1	-1	1	4
P331	40	0	0	1	1
P332	47	0	0	1	1
P333	51	1	0	1	1
P334	144	0	1	0	1
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	109	-1	-5	24	-1
P163A	9	1	0	0	0
P157A	65	0	0	0	0
P152A	65	0	0	0	0
P310	136	0	2	-2	1
P303	359	1	4	-2	1
P304	367	0	4	-2	1
P305	352	0	4	-3	1
P306	412	0	2	-14	0
P307	423	-1	-1	-7	-2
P309	136	-1	-2	21	-1
P313	1319	-20	6	478	-167
P311	838	0	-3	72	0
P312	127	0	4	58	-1
P314	127	0	4	58	-1
P315	879	-1	5	-7	-2
P316	862	-1	0	33	-2
P318	818	-1	8	-40	-1
P301	553	0	-1	5	0
P302	553	0	-1	5	0
P320	687	0	-3	7	0
P321	625	-1	-7	4	0
P324	547	0	-3	-1	0
P325	816	8	-38	203	187
P326	1	0	1	0	1
P327	566	-5	-1	-1	1
P328	373	-9	-1	1	2
P329	1	0	1	0	1
P330	165	-3	0	0	10
P331	40	0	0	1	1
P332	47	0	0	1	1
P333	51	1	0	1	1
P334	144	0	1	0	1
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	102	-1	-1	4	-2
P163A	9	1	0	0	0
P157A	73	-1	-1	-1	P157A
P152A	73	-1	-1	-1	P152A
P310	136	0	2	-2	1
P303	281	0	0	27	0
P304	361	0	0	25	0
P305	347	0	-1	25	0
P306	412	0	1	14	0
P307	423	-1	-1	-7	-2
P309	136	-1	-2	20	-1
P313	1330	5	42	-753	41
P311	1037	-1	14	-46	26
P312	154	1	11	-61	1
P314	154	1	11	-61	1
P315	1039	-1	5	-65	0
P316	862	-1	17	-31	1
P318	818	-1	8	-40	-1
P301	366	-1	5	-20	0
P302	515	-1	5	-20	0
P320	678	-1	5	-48	1
P321	697	-1	5	-27	0
P324	572	-1	-17	-1	0
P325	594	14	-14	102	156
P326	1	0	1	0	1
P327	566	0	-1	0	1
P328	295	-9	12	-82	1
P329	1	0	1	0	1
P330	165	-3	0	0	10
P331	40	0	0	1	1
P332	47	0	0	1	1
P333	41	0	0	1	1
P334	144	0	1	0	1
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	115	-1	3	-18	-1
P163A	1	0	1	0	0
P157A	73	-1	-1	-1	P157A
P152A	73	-1	-1	-1	P152A
P310	136	0	2	-2	1
P303	350	0	0	27	0
P304	378	0	0	25	0
P305	385	0	-1	25	0
P306	412	0	1	14	0
P307	423	-1	-1	-7	-2
P309	135	-1	-2	20	-1
P313	1330	5	42	-753	41
P311	799	0	3	8	-2
P312	127	0	4	58	-1
P314	127	0	4	58	-1
P315	854	-1	5	-7	-2
P316	842	-1	17	-31	1
P318	844	-2	4	-8	-4
P301	366	-1	5	-20	0
P302	515	-1	5	-20	0
P320	678	-1	5	-48	1
P321	629	0	-1	-20	1
P324	543	0	-1	-17	-1
P325	724	-8	16	-238	-150
P326	1	0	1	0	1
P327	566	0	-14	30	1
P328	367	-9	5	-9	1
P329	1	0	1	0	1
P330	165	-3	0	0	10
P331	40	0	0	1	1
P332	47	0	0	1	1
P333	41	0	0	1	1
P334	144	0	1	0	1
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	109	-1	-5	24	-1
P163A	9	1	0	0	0
P157A	85	-1	-2	5	-1
P152A	85	-1	-2	5	-1
P310	136	0	2	-2	1
P303	281	0	0	27	0
P304	361	0	0	25	0
P305	347	0	-1	25	0
P306	412	0	1	14	0
P307	423	-1	-1	-7	-2
P309	136	-1	-2	20	-1
P313	1478	-17	-25	1188	-64
P311	1037	-1	14	-46	26
P312	154	1	11	-61	1
P314	154	1	11	-61	1
P315	1039	-1	5	-65	0
P316	862	-1	17	-31	1
P318	818	-1	8	-40	-1
P301	366	-1	5	-20	0
P302	515	-1	5	-20	0
P320	678	-1	5	-48	1
P321	697	-1	5	-27	0
P324	572	-1	-17	-1	0
P325	724	-8	16	-238	-150
P326	1	0	1	0	1
P327	566	0	-14	30	1
P328	373	-9	-1	1	2
P329	1	0	1	0	1
P330	165	-3	0	0	10
P331	40	0	0	1	1
P332	47	0	0	1	1
P333	41	0	0	1	1
P334	144	0	1	0	1
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	109	-1	-5	24	-1
P163A	9	1	0	0	0
P157A	85	-1	-2	5	-1
P152A	85	-1	-2	5	-1
P310	136	0	2	-2	1
P303	281	0	0	27	0
P304	361	0	0	25	0
P305	347	0	-1	25	0
P306	412	0	1	14	0
P307	423	-1	-1	-7	-2
P309	136	-1	-2	20	-1
P313	1330	5	42	-753	41
P311	1037	-1	14	-46	26
P312	154	1	11	-61	1
P314	154	1	11	-61	1
P315	1039	-1	5	-65	0
P316	862	-1	17	-31	1
P318	818	-1	8	-40	-1
P301	366	-1	5	-20	0
P302	515	-1	5	-20	0
P320	678	-1	5	-48	1
P321	697	-1	5	-27	0
P324	572	-1	-17	-1	0
P325	594	14	-14	102	156
P326	1	0	1	0	1
P327	566	0	-14	30	1
P328	295	-9	12	-82	1
P329	1	0	1	0	1
P330	165	-3	0	0	10
P331	40	0	0	1	1
P332	47	0	0	1	1
P333	41	0	0	1	1
P334	144	0	1	0	1
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	102	-1	-1	4	-2
P163A	9	1	0	0	0
P157A	73	-1	-1	-1	P157A
P152A	73	-1	-1	-1	P152A
P310	136	0	2	-2	1
P303	350	0	0	27	0
P304	378	0	0	25	0
P305	385	0	-1	25	0
P306	412	0	1	14	0
P307	423	-1	-1	-7	-2
P309	135	-1	-2	20	-1
P313	1330	5	42	-753	41
P311	799	0	3	8	-2
P312	127	0	4	58	-1
P314	127	0	4	58	-1
P315	854	-1	5	-7	-2
P316	842	-1	17	-31	1
P318	844	-2	4	-8	-4
P301	366	-1	5	-20	0
P302	515	-1	5	-20	0
P320	678	-1	5	-48	1
P321	629	0	-1	-20	1
P324	543	0	-1	-17	-1
P325	724	-8	16	-238	-150
P326	1	0	1	0	1
P327	566	0	-14	30	1
P328	367	-9	5	-9	1
P329	1	0	1	0	1
P330	165	-3	0	0	10
P331	40	0	0	1	1
P332	47	0	0	1	1
P333	41	0	0	1	1
P334	144	0	1	0	1
P335	103	-5	4	2	0
P336	29	0	1	0	1
P337	29	0	1	0	1
P338	29	-1	4	-2	0
P339	33	-1	1	0	2
P340	18	0	5	0	1
P341	13	2	6	0	4
P342	15	4	7	0	7
P343	14	5	10	0	7

Elem	Fz	Fx	Fy	Mx	My
P150A	109	-1	-5	24	-1
P163A	9	1	0	0	0
P157A	85	-1	-2	5	-1
P152A	85	-1	-2	5	-1
P310	136	0	2	-2	1
P303	281	0	0	27	0
P304	361	0	0	25	0
P305	347	0	-1	25	0
P306	412	0	1	14	0
P307	423	-1	-1	-7	-2
P309	136	-1	-2	20	-1
P313	1330	5	42	-753	41
P311	1037	-1	14	-46	26
P312	154	1	11	-61	1
P314	154	1	11	-61	1
P315	1039	-1	5	-65	0
P316	862	-1	17	-31	1
P318	818	-1	8	-40	-1
P301	366	-1	5	-20	0
P302	515	-1	5	-20	0
P320	678	-1	5	-48	1
P321	697	-1	5	-27