

Programa BAUPRES. Propiedad de Baupres Ingeniería.

FLECHAS EN LOS CENTROS DE LOS VANOS Y ACCIONES SOBRE LOS APOYOS
 TODOS LOS VALORES SON OBTENIDOS CON LAS CARGAS CARACTERISTICAS
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HIPOTESIS I : Peso propio de la estructura, resto de la carga
 permanente y pretensado final
 HIPOTESIS II : HIPOTESIS I + acciones debidas a las sobrecargas
 HIPOTESIS III: HIPOTESIS II + acciones debidas a la temperatura
 y a los asientos diferenciales de los apoyos

FLECHAS EN LOS CENTROS DE LOS VANOS					GIROS DE LOS APOYOS EN LA HIPOTESIS I			
VAN	HIPOTE-	HIPOTESIS II		HIPOTESIS III		APOY	FLEXION	TORSION
	SIS I	MAXIMA	MINIMA	MAXIMA	MINIMA			
	cm	cm	cm	cm	cm		Radianes	Radianes
1	-1.038	-0.720	-1.216	-0.781	-1.277	1	-0.0012167	0.0000000
2	-0.473	0.034	-0.778	0.077	-0.734	2	0.0008736	0.0000000
3	-0.489	0.051	-0.842	0.059	-0.833	3	0.0002901	0.0000000
4	-0.471	0.080	-0.829	0.101	-0.808	4	0.0003021	0.0000000
5	-0.530	0.010	-0.881	0.018	-0.874	5	0.0002778	0.0000000
6	-0.324	0.178	-0.628	0.225	-0.582	6	0.0003619	0.0000000
7	-0.673	-0.359	-0.853	-0.419	-0.913	7	0.0000568	0.0000000
						8	0.0009577	0.0000000

GIROS DE LOS APOYOS EN LA HIPOTESIS II

APO	MAXIMO A FLEXION		MINIMO A FLEXION		MAXIMO A TORSION		MINIMO A TORSION	
	GIRO A	ACOMP A	GIRO A	ACOMP A	GIRO A	ACOMP A	GIRO A	ACOMP A
	FLEXION	TORSION	FLEXION	TORSION	TORSION	FLEXION	TORSION	FLEXION
	Radianes	Radianes	Radianes	Radianes	Radianes	Radianes	Radianes	Radianes
1	-0.000886	0.000000	-0.001366	0.000000	0.000000	-0.001217	0.000000	-0.001217
2	0.001157	0.000000	0.000605	0.000000	0.000000	0.000874	0.000000	0.000874
3	0.000622	0.000000	-0.000048	0.000000	0.000000	0.000290	0.000000	0.000290
4	0.000653	0.000000	-0.000049	0.000000	0.000000	0.000302	0.000000	0.000302
5	0.000627	0.000000	-0.000074	0.000000	0.000000	0.000278	0.000000	0.000278
6	0.000696	0.000000	0.000029	0.000000	0.000000	0.000362	0.000000	0.000362
7	0.000324	0.000000	-0.000221	0.000000	0.000000	0.000057	0.000000	0.000057
8	0.001109	0.000000	0.000626	0.000000	0.000000	0.000958	0.000000	0.000958

GIROS DE LOS APOYOS EN LA HIPOTESIS III

APO	MAXIMO A FLEXION		MINIMO A FLEXION		MAXIMO A TORSION		MINIMO A TORSION	
	GIRO A FLEXION	ACOMP A TORSION	GIRO A FLEXION	ACOMP A TORSION	GIRO A TORSION	ACOMP A FLEXION	GIRO A TORSION	ACOMP A FLEXION
	Radianes	Radianes	Radianes	Radianes	Radianes	Radianes	Radianes	Radianes
1	-0.001014	0.000000	-0.001493	0.000000	0.000000	-0.001344	0.000000	-0.001344
2	0.001194	0.000000	0.000643	0.000000	0.000000	0.000911	0.000000	0.000911
3	0.000611	0.000000	-0.000059	0.000000	0.000000	0.000279	0.000000	0.000279
4	0.000657	0.000000	-0.000044	0.000000	0.000000	0.000306	0.000000	0.000306
5	0.000622	0.000000	-0.000079	0.000000	0.000000	0.000273	0.000000	0.000273
6	0.000709	0.000000	0.000042	0.000000	0.000000	0.000375	0.000000	0.000375
7	0.000281	0.000000	-0.000263	0.000000	0.000000	0.000014	0.000000	0.000014
8	0.001236	0.000000	0.000753	0.000000	0.000000	0.001084	0.000000	0.001084

ACCIONES SOBRE LOS APOYOS EN LA HIPOTESIS I

APO	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL
	m.T	m.T	T
1	-0.004	0.000	597.375
2	0.027	0.000	1713.193
3	0.051	0.000	1824.715
4	0.029	0.000	1827.615
5	0.033	0.000	1812.234
6	0.021	0.000	1864.879
7	0.021	0.000	1661.719
8	0.012	0.000	627.923

ACCIONES SOBRE LOS APOYOS EN LA HIPOTESIS II . MAXIMO Y MINIMO FLECTOR

APO	MAXIMO MOMENTO FLECTOR ACOMPAÑANTES			MINIMO MOMENTO FLECTOR ACOMPAÑANTES		
	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL
	m.T	m.T	T	m.T	m.T	T
1	-0.003	-492.842	736.943	-0.005	-251.980	656.576
2	0.029	-348.768	1843.716	0.023	-915.146	2077.071
3	0.054	-772.919	2095.005	0.050	-631.087	2054.205
4	0.031	-441.945	1963.482	0.024	-1232.121	2290.152
5	0.036	-661.128	2044.132	0.029	-699.820	2059.724
6	0.023	-482.150	2029.246	0.017	-1043.370	2247.453
7	0.024	-747.562	1936.330	0.017	-566.702	1902.075
8	0.015	-200.331	670.225	0.010	-430.737	747.537

ACCIONES SOBRE LOS APOYOS EN LA HIPOTESIS II . MAXIMO Y MINIMO TORSOR

APO	MAXIMO MOMENTO TORSOR ACOMPAÑANTES			MINIMO MOMENTO TORSOR ACOMPAÑANTES		
	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL
	m.T	m.T	T	m.T	m.T	T
1	666.500	-0.003	801.605	-666.500	-0.003	801.605
2	1303.210	0.025	2240.320	-1303.210	0.025	2240.320
3	1453.865	0.052	2391.920	-1453.865	0.052	2391.920
4	1453.865	0.026	2395.464	-1453.865	0.026	2395.464
5	1453.865	0.032	2380.030	-1453.865	0.032	2380.030
6	1453.865	0.019	2431.532	-1453.865	0.019	2431.532
7	1322.004	0.020	2196.618	-1322.004	0.020	2196.618
8	673.051	0.011	837.527	-673.051	0.011	837.527

ACCIONES SOBRE LOS APOYOS EN LA HIPOTESIS II . MAXIMA Y MINIMA ACCION VERTICAL

APO	MAXIMA ACCION VERTICAL ACOMPAÑANTES			MINIMA ACCION VERTICAL ACOMPAÑANTES		
	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR
	T	m.T	m.T	T	m.T	m.T
1	811.614	-0.003	-666.500	555.250	-0.004	0.000
2	2253.019	0.025	-1303.210	1659.527	0.027	0.000
3	2404.201	0.052	-1453.865	1744.628	0.052	0.000
4	2414.809	0.026	-1453.865	1736.075	0.029	0.000
5	2399.476	0.032	-1453.865	1720.915	0.033	0.000
6	2443.844	0.019	-1453.865	1784.306	0.021	0.000
7	2209.459	0.020	-1322.004	1607.158	0.022	0.000
8	847.766	0.012	-673.051	584.561	0.013	0.000

ACCIONES SOBRE LOS APOYOS EN LA HIPOTESIS III. MAXIMO Y MINIMO FLECTOR

APO	MAXIMO MOMENTO FLECTOR ACOMPAÑANTES			MINIMO MOMENTO FLECTOR ACOMPAÑANTES		
	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL
	m.T	m.T	T	m.T	m.T	T
1	-0.004	-492.842	754.548	-0.006	-251.980	674.181
2	0.029	-348.768	1822.789	0.023	-915.146	2056.144
3	0.054	-772.919	2099.214	0.050	-631.087	2058.414
4	0.031	-441.945	1962.635	0.025	-1232.121	2289.305
5	0.036	-661.128	2043.082	0.029	-699.820	2058.674
6	0.023	-482.150	2034.004	0.017	-1043.370	2252.212
7	0.023	-747.562	1914.571	0.017	-566.702	1880.316
8	0.014	-200.331	688.252	0.009	-430.737	765.564

ACCIONES SOBRE LOS APOYOS EN LA HIPOTESIS III. MAXIMO Y MINIMO TORSOR

APO	MAXIMO MOMENTO TORSOR ACOMPAÑANTES			MINIMO MOMENTO TORSOR ACOMPAÑANTES		
	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL
	m.T	m.T	T	m.T	m.T	T
1	666.500	-0.005	819.210	-666.500	-0.005	819.210
2	1303.210	0.025	2219.393	-1303.210	0.025	2219.393
3	1453.865	0.052	2396.129	-1453.865	0.052	2396.129
4	1453.865	0.026	2394.616	-1453.865	0.026	2394.616
5	1453.865	0.032	2378.979	-1453.865	0.032	2378.979
6	1453.865	0.019	2436.291	-1453.865	0.019	2436.291
7	1322.004	0.019	2174.859	-1322.004	0.019	2174.859
8	673.051	0.010	855.554	-673.051	0.010	855.554

ACCIONES SOBRE LOS APOYOS EN LA HIPOTESIS III. MAXIMA Y MINIMA ACCION VERTICAL

APO	MAXIMA ACCION VERTICAL ACOMPAÑANTES			MINIMA ACCION VERTICAL ACOMPAÑANTES		
	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR
	T	m.T	m.T	T	m.T	m.T
1	829.219	-0.005	-666.500	572.855	-0.005	0.000
2	2232.092	0.025	-1303.210	1638.600	0.027	0.000
3	2408.410	0.052	-1453.865	1748.837	0.052	0.000
4	2413.962	0.026	-1453.865	1735.227	0.030	0.000
5	2398.426	0.032	-1453.865	1719.864	0.033	0.000
6	2448.603	0.019	-1453.865	1789.065	0.021	0.000
7	2187.700	0.019	-1322.004	1585.399	0.021	0.000
8	865.793	0.011	-673.051	602.588	0.012	0.000

CALCULO DE REACCIONES CON HIPOTESIS PONDERADAS

HIPOTESIS DE CALCULO NUMERO : 1

COEFICIENTES DE PONDERACION DE LAS ACCIONES

Peso propio	=	1.000
Carga permanente	=	1.000
Sobrecarga	=	0.000
Pretensado final	=	1.000
Gradiente térmico	=	0.000
Asientos de apoyos	=	0.000

APO	MAXIMO MOMENTO FLECTOR (+)			MINIMO MOMENTO FLECTOR (-)		
	ACOMPAÑANTES			ACOMPAÑANTES		
	MOMENTO FLECTOR m.T	MOMENTO TORSOR m.T	ACCION VERTICAL T	MOMENTO FLECTOR m.T	MOMENTO TORSOR m.T	ACCION VERTICAL T
1	-0.004	0.000	597.375	-0.004	0.000	597.375
2	0.027	0.000	1713.193	0.027	0.000	1713.193
3	0.051	0.000	1824.715	0.051	0.000	1824.715
4	0.029	0.000	1827.615	0.029	0.000	1827.615
5	0.033	0.000	1812.234	0.033	0.000	1812.234
6	0.021	0.000	1864.879	0.021	0.000	1864.879
7	0.021	0.000	1661.719	0.021	0.000	1661.719
8	0.012	0.000	627.923	0.012	0.000	627.923

APO	MAXIMO MOMENTO TORSOR (+)			MINIMO MOMENTO TORSOR (-)		
	ACOMPAÑANTES			ACOMPAÑANTES		
	MOMENTO TORSOR m.T	MOMENTO FLECTOR m.T	ACCION VERTICAL T	MOMENTO TORSOR m.T	MOMENTO FLECTOR m.T	ACCION VERTICAL T
1	0.000	-0.004	597.375	0.000	-0.004	597.375
2	0.000	0.027	1713.193	0.000	0.027	1713.193
3	0.000	0.051	1824.715	0.000	0.051	1824.715
4	0.000	0.029	1827.615	0.000	0.029	1827.615
5	0.000	0.033	1812.234	0.000	0.033	1812.234
6	0.000	0.021	1864.879	0.000	0.021	1864.879
7	0.000	0.021	1661.719	0.000	0.021	1661.719
8	0.000	0.012	627.923	0.000	0.012	627.923

APO	MAXIMA ACCION VERTICAL (+)			MINIMA ACCION VERTICAL (-)		
	ACOMPAÑANTES			ACOMPAÑANTES		
	ACCION VERTICAL m.T	MOMENTO FLECTOR m.T	MOMENTO TORSOR T	ACCION VERTICAL m.T	MOMENTO FLECTOR m.T	MOMENTO TORSOR T
1	597.375	-0.004	0.000	597.375	-0.004	0.000
2	1713.193	0.027	0.000	1713.193	0.027	0.000
3	1824.715	0.051	0.000	1824.715	0.051	0.000
4	1827.615	0.029	0.000	1827.615	0.029	0.000
5	1812.234	0.033	0.000	1812.234	0.033	0.000
6	1864.879	0.021	0.000	1864.879	0.021	0.000
7	1661.719	0.021	0.000	1661.719	0.021	0.000
8	627.923	0.012	0.000	627.923	0.012	0.000

APOY	MAXIMO GIRO A FLEXION (+)		MINIMO GIRO A FLEXION (-)	
	ACOMPAÑANTE		ACOMPAÑANTE	
	GIRO A FLEXION Radianes	A TORSION Radianes	GIRO A FLEXION Radianes	A TORSION Radianes
1	-0.0012166896	0.0000000000	-0.0012166896	0.0000000000
2	0.0008735835	0.0000000000	0.0008735835	0.0000000000
3	0.0002900962	0.0000000000	0.0002900962	0.0000000000
4	0.0003021306	0.0000000000	0.0003021306	0.0000000000
5	0.0002777742	0.0000000000	0.0002777742	0.0000000000

6	0.0003618658	0.0000000000	0.0003618658	0.0000000000
7	0.0000567534	0.0000000000	0.0000567534	0.0000000000
8	0.0009577450	0.0000000000	0.0009577450	0.0000000000

APOY	MAXIMO GIRO A TORSION (+)		MINIMO GIRO A TORSION (-)	
	ACOMPAÑANTE		ACOMPAÑANTE	
	GIRO A TORSION	A FLEXION	GIRO A TORSION	A FLEXION
	Radianes	Radianes	Radianes	Radianes

1	0.0000000000	-0.0012166896	0.0000000000	-0.0012166896
2	0.0000000000	0.0008735835	0.0000000000	0.0008735835
3	0.0000000000	0.0002900962	0.0000000000	0.0002900962
4	0.0000000000	0.0003021306	0.0000000000	0.0003021306
5	0.0000000000	0.0002777742	0.0000000000	0.0002777742
6	0.0000000000	0.0003618658	0.0000000000	0.0003618658
7	0.0000000000	0.0000567534	0.0000000000	0.0000567534
8	0.0000000000	0.0009577450	0.0000000000	0.0009577450

FLECHAS EN LOS CENTROS DE LOS VANOS

VAN	MAXIMA	MINIMA
	cm	cm

1	-1.038	-1.038
2	-0.473	-0.473
3	-0.489	-0.489
4	-0.471	-0.471
5	-0.530	-0.530
6	-0.324	-0.324
7	-0.673	-0.673

CALCULO DE REACCIONES CON HIPOTESIS PONDERADAS

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HIPOTESIS DE CALCULO NUMERO : 2

COEFICIENTES DE PONDERACION DE LAS ACCIONES

Peso propio	=	1.000
Carga permanente	=	1.000
Sobrecarga	=	1.000
Pretensado final	=	1.000
Gradiente térmico	=	0.600
Asientos de apoyos	=	0.000

APO	MAXIMO MOMENTO FLECTOR (+) ACOMPAÑANTES			MINIMO MOMENTO FLECTOR (-) ACOMPAÑANTES		
	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL
	m.T	m.T	T	m.T	m.T	T
1	-0.004	-492.842	747.506	-0.006	-251.980	667.139
2	0.029	-348.768	1831.160	0.023	-915.146	2064.514
3	0.054	-772.919	2097.530	0.050	-631.087	2056.730
4	0.031	-441.945	1962.974	0.025	-1232.121	2289.644
5	0.036	-661.128	2043.502	0.029	-699.820	2059.094
6	0.023	-482.150	2032.101	0.017	-1043.370	2250.308
7	0.024	-747.562	1923.275	0.017	-566.702	1889.020
8	0.014	-200.331	681.041	0.010	-430.737	758.353

APO	MAXIMO MOMENTO TORSOR (+) ACOMPAÑANTES			MINIMO MOMENTO TORSOR (-) ACOMPAÑANTES		
	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL
	m.T	m.T	T	m.T	m.T	T
1	666.500	-0.004	812.168	-666.500	-0.004	812.168
2	1303.210	0.025	2227.764	-1303.210	0.025	2227.764
3	1453.865	0.052	2394.446	-1453.865	0.052	2394.446
4	1453.865	0.026	2394.956	-1453.865	0.026	2394.956
5	1453.865	0.032	2379.400	-1453.865	0.032	2379.400
6	1453.865	0.019	2434.388	-1453.865	0.019	2434.388
7	1322.004	0.020	2183.562	-1322.004	0.020	2183.562
8	673.051	0.011	848.343	-673.051	0.011	848.343

APO	MAXIMA ACCION VERTICAL (+) ACOMPAÑANTES			MINIMA ACCION VERTICAL (-) ACOMPAÑANTES		
	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR
	m.T	m.T	T	m.T	m.T	T
1	822.177	-0.004	-666.500	565.813	-0.005	0.000
2	2240.463	0.025	-1303.210	1646.971	0.027	0.000
3	2406.726	0.052	-1453.865	1747.153	0.052	0.000
4	2414.301	0.026	-1453.865	1735.566	0.030	0.000
5	2398.845	0.032	-1453.865	1720.285	0.033	0.000
6	2446.700	0.019	-1453.865	1787.162	0.021	0.000
7	2196.404	0.019	-1322.004	1594.103	0.021	0.000
8	858.582	0.011	-673.051	595.378	0.012	0.000

APOY	MAXIMO GIRO A FLEXION (+) ACOMPAÑANTE		MINIMO GIRO A FLEXION (-) ACOMPAÑANTE	
	GIRO A FLEXION Radianes	A TORSION Radianes	GIRO A FLEXION Radianes	A TORSION Radianes
	1	-0.0009625370	0.0000000000	-0.0014422809
2	0.0011792681	0.0000000000	0.0006278693	0.0000000000
3	0.0006150883	0.0000000000	-0.0000548820	0.0000000000
4	0.0006552854	0.0000000000	-0.0000459849	0.0000000000
5	0.0006238450	0.0000000000	-0.0000769182	0.0000000000
6	0.0007038540	0.0000000000	0.0000365021	0.0000000000
7	0.0002982959	0.0000000000	-0.0002464139	0.0000000000
8	0.0011851816	0.0000000000	0.0007022356	0.0000000000

APOY	MAXIMO GIRO A TORSION (+)		MINIMO GIRO A TORSION (-)	
	ACOMPAÑANTE		ACOMPAÑANTE	
	GIRO A TORSION Radianes	A FLEXION Radianes	GIRO A TORSION Radianes	A FLEXION Radianes
1	0.0000000000	-0.0012932915	0.0000000000	-0.0012932915
2	0.0000000000	0.0008963204	0.0000000000	0.0008963204
3	0.0000000000	0.0002832894	0.0000000000	0.0002832894
4	0.0000000000	0.0003046981	0.0000000000	0.0003046981
5	0.0000000000	0.0002750370	0.0000000000	0.0002750370
6	0.0000000000	0.0003694735	0.0000000000	0.0003694735
7	0.0000000000	0.0000312165	0.0000000000	0.0000312165
8	0.0000000000	0.0010336840	0.0000000000	0.0010336840

FLECHAS EN LOS CENTROS DE LOS VANOS

VAN	MAXIMA cm	MINIMA cm
1	-0.757	-1.253
2	0.060	-0.752
3	0.056	-0.837
4	0.093	-0.817
5	0.015	-0.877
6	0.206	-0.600
7	-0.395	-0.889

CALCULO DE REACCIONES CON HIPOTESIS PONDERADAS

HIPOTESIS DE CALCULO NUMERO : 3

COEFICIENTES DE PONDERACION DE LAS ACCIONES

Peso propio	=	1.350
Carga permanente	=	1.350
Sobrecarga	=	1.500
Pretensado final	=	1.000
Gradiente térmico	=	0.900
Asientos de apoyos	=	0.000

APO	MAXIMO MOMENTO FLECTOR (+)			MINIMO MOMENTO FLECTOR (-)		
	ACOMPAÑANTES			ACOMPAÑANTES		
	MOMENTO FLECTOR m.T	MOMENTO TORSOR m.T	ACCION VERTICAL T	MOMENTO FLECTOR m.T	MOMENTO TORSOR m.T	ACCION VERTICAL T
1	-0.002	-739.263	1004.936	-0.005	-377.970	884.386
2	0.038	-523.153	2515.812	0.030	-1372.720	2865.844
3	0.051	-1159.379	2873.566	0.045	-946.630	2812.366
4	0.029	-662.917	2669.678	0.019	-1848.182	3159.683

5	0.036	-991.692	2794.240	0.025	-1049.731	2817.627
6	0.018	-723.225	2765.389	0.009	-1565.056	3092.700
7	0.026	-1121.342	2667.531	0.016	-850.052	2616.149
8	0.015	-300.497	897.700	0.009	-646.106	1013.667

APO	MAXIMO MOMENTO TORSOR (+) ACOMPAÑANTES			MINIMO MOMENTO TORSOR (-) ACOMPAÑANTES		
	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL	MOMENTO TORSOR	MOMENTO FLECTOR	ACCION VERTICAL
	m.T	m.T	T	m.T	m.T	T
1	999.750	-0.003	1101.929	-999.750	-0.003	1101.929
2	1954.816	0.033	3110.718	-1954.816	0.033	3110.718
3	2180.798	0.048	3318.939	-2180.798	0.048	3318.939
4	2180.798	0.021	3317.650	-2180.798	0.021	3317.650
5	2180.798	0.030	3298.086	-2180.798	0.030	3298.086
6	2180.798	0.012	3368.819	-2180.798	0.012	3368.819
7	1983.006	0.020	3057.963	-1983.006	0.020	3057.963
8	1009.576	0.010	1148.652	-1009.576	0.010	1148.652

APO	MAXIMA ACCION VERTICAL (+) ACOMPAÑANTES			MINIMA ACCION VERTICAL (-) ACOMPAÑANTES		
	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR	ACCION VERTICAL	MOMENTO FLECTOR	MOMENTO TORSOR
	m.T	m.T	T	m.T	m.T	T
1	1116.942	-0.003	-999.750	732.396	-0.003	0.000
2	3129.766	0.033	-1954.816	2239.529	0.036	0.000
3	3337.360	0.048	-2180.798	2348.000	0.048	0.000
4	3346.668	0.021	-2180.798	2328.567	0.026	0.000
5	3327.254	0.030	-2180.798	2309.413	0.031	0.000
6	3387.288	0.012	-2180.798	2397.980	0.015	0.000
7	3077.225	0.020	-1983.006	2173.774	0.023	0.000
8	1164.011	0.011	-1009.576	769.204	0.013	0.000

APOY	MAXIMO GIRO A FLEXION (+) ACOMPAÑANTE		MINIMO GIRO A FLEXION (-) ACOMPAÑANTE	
	GIRO A FLEXION Radianes	A TORSION Radianes	GIRO A FLEXION Radianes	A TORSION Radianes
	1	-0.0005477740	0.0000000000	-0.0012673900
2	0.0012744807	0.0000000000	0.0004473825	0.0000000000
3	0.0006210512	0.0000000000	-0.0003839041	0.0000000000
4	0.0006781666	0.0000000000	-0.0003737389	0.0000000000
5	0.0006349727	0.0000000000	-0.0004161722	0.0000000000
6	0.0007377418	0.0000000000	-0.0002632860	0.0000000000
7	0.0001933811	0.0000000000	-0.0006236835	0.0000000000
8	0.0010053122	0.0000000000	0.0002808933	0.0000000000

APOY	MAXIMO GIRO A TORSION (+) ACOMPAÑANTE		MINIMO GIRO A TORSION (-) ACOMPAÑANTE	
	GIRO A TORSION Radianes	A FLEXION Radianes	GIRO A TORSION Radianes	A FLEXION Radianes
	1	0.0000000000	-0.0010439056	0.0000000000
2	0.0000000000	0.0008500590	0.0000000000	0.0008500590
3	0.0000000000	0.0001233529	0.0000000000	0.0001233529

4	0.0000000000	0.0001522856	0.0000000000	0.0001522856
5	0.0000000000	0.0001117607	0.0000000000	0.0001117607
6	0.0000000000	0.0002361711	0.0000000000	0.0002361711
7	0.0000000000	-0.0002072380	0.0000000000	-0.0002072380
8	0.0000000000	0.0007780660	0.0000000000	0.0007780660

FLECHAS EN LOS CENTROS DE LOS VANOS

VAN	MAXIMA	MINIMA
	cm	cm

1	-0.380	-1.124
2	0.722	-0.495
3	0.719	-0.620
4	0.773	-0.591
5	0.667	-0.670
6	0.912	-0.298
7	-0.012	-0.753