

05 Comonfort-SMA ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
0	317,929.40	2,312,291.19	215.37	0.00
1	317,462.02	2,311,632.79	218.88	807.43
2	317,432.62	2,311,600.58	225.64	851.04
3	315,468.92	2,309,886.62	230.34	3,457.53
4	315,410.74	2,309,840.83	233.69	3,531.57
5	315,060.44	2,309,600.89	234.22	3,956.16
6	315,013.92	2,309,565.64	232.28	4,014.52
7	314,748.46	2,309,356.05	227.29	4,352.76
8	314,684.76	2,309,287.44	207.92	4,446.37
9	314,478.06	2,308,390.37	192.15	5,366.95
10	314,426.45	2,308,132.89	188.80	5,629.55
11	314,394.56	2,307,842.39	190.67	5,921.79
12	314,182.50	2,307,055.28	207.03	6,736.97
13	314,089.90	2,306,940.88	219.01	6,884.15
14	313,604.97	2,306,342.70	219.97	7,654.20
15	313,332.41	2,306,028.21	218.41	8,070.36
16	313,140.61	2,305,763.30	199.54	8,397.42
17	313,137.60	2,305,709.19	189.36	8,451.61
18	313,118.61	2,305,640.94	205.99	8,522.46
19	313,059.85	2,305,561.33	207.62	8,621.41
20	313,040.75	2,305,505.25	193.71	8,680.65
21	313,019.05	2,305,361.81	185.76	8,825.72
22	313,013.08	2,305,244.81	184.92	8,942.88
23	312,961.87	2,304,822.71	188.11	9,368.07
24	312,957.26	2,304,794.58	188.92	9,396.58
25	312,883.22	2,304,301.82	180.79	9,894.87
26	312,889.80	2,304,248.03	162.65	9,949.06
27	313,074.54	2,303,896.51	161.06	10,346.17
28	313,119.70	2,303,644.55	167.57	10,602.14
29	313,136.96	2,303,578.74	169.28	10,670.18
30	313,140.13	2,303,551.94	181.25	10,697.16
31	313,134.64	2,303,518.28	201.48	10,731.26
32	313,117.96	2,303,493.25	211.91	10,761.34
33	313,100.85	2,303,463.78	196.24	10,795.43
34	313,091.48	2,303,235.05	183.14	11,024.35
35	313,089.27	2,303,202.81	194.29	11,056.66
36	313,081.75	2,303,186.44	205.24	11,074.67
37	313,056.58	2,303,134.41	206.57	11,132.48
38	313,048.02	2,303,117.85	192.04	11,151.11
39	313,048.90	2,303,102.41	171.75	11,166.58
40	313,057.89	2,303,064.21	170.29	11,205.83
41	313,060.67	2,303,038.54	179.23	11,231.65
42	313,058.37	2,303,010.20	188.16	11,260.08
43	313,051.05	2,302,974.82	195.20	11,296.21
44	313,002.93	2,302,832.71	198.48	11,446.24
45	312,930.87	2,302,614.18	199.99	11,676.34
46	312,900.34	2,302,537.59	194.77	11,758.80
47	312,896.98	2,302,513.09	188.94	11,783.52
48	312,863.97	2,302,327.36	195.23	11,972.17
49	312,786.93	2,302,120.04	197.29	12,193.33
50	312,752.53	2,301,984.10	191.67	12,333.56

05 Comonfort-SMA ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
51	312,745.77	2,301,942.10	182.14	12,376.10
52	312,753.51	2,301,850.91	184.00	12,467.62
53	312,742.09	2,301,800.83	183.18	12,518.99
54	312,758.84	2,301,653.27	162.55	12,667.50
55	312,775.19	2,301,623.07	161.62	12,701.83
56	312,827.48	2,301,266.49	175.33	13,062.22
57	312,831.52	2,301,032.53	190.74	13,296.22
58	312,815.19	2,300,993.03	184.73	13,338.96
59	312,939.55	2,300,454.16	163.10	13,892.00
60	312,963.07	2,300,392.24	147.46	13,958.24
61	312,971.58	2,300,383.51	109.77	13,970.43
62	312,998.62	2,300,386.44	88.14	13,997.62
63	313,032.31	2,300,384.99	111.33	14,031.34
64	313,049.01	2,300,370.88	179.24	14,053.21
65	313,017.80	2,300,343.05	233.34	14,095.02
66	312,967.05	2,300,311.82	244.63	14,154.62
67	312,840.67	2,300,267.98	266.98	14,288.38
68	312,824.84	2,300,271.66	293.09	14,304.63
69	312,779.88	2,300,300.97	305.64	14,358.30
70	312,716.63	2,300,350.72	317.46	14,438.77
71	312,686.28	2,300,396.99	325.27	14,494.11
72	312,642.98	2,300,456.15	308.31	14,567.42
73	312,632.68	2,300,460.48	254.05	14,578.59
74	312,611.88	2,300,431.06	209.21	14,614.62
75	312,567.74	2,300,327.88	201.66	14,726.85
76	312,550.69	2,300,281.42	193.00	14,776.34
77	312,542.68	2,300,203.18	190.54	14,854.98
78	312,463.60	2,299,912.79	206.83	15,155.94
79	312,423.77	2,299,862.58	231.11	15,220.04
80	312,342.44	2,299,822.56	245.70	15,310.68
81	312,116.22	2,299,729.34	208.61	15,555.35
82	312,143.94	2,299,578.17	164.59	15,709.05
83	312,250.14	2,299,293.10	152.92	16,013.25
84	312,482.94	2,298,944.48	140.03	16,432.46
85	312,690.48	2,298,745.46	130.47	16,720.01
86	313,166.20	2,298,385.24	130.38	17,316.72
87	313,405.98	2,298,156.72	137.02	17,647.96
88	313,555.19	2,297,976.20	143.58	17,882.16
89	313,814.55	2,297,580.73	146.93	18,355.09
90	313,872.03	2,297,491.82	138.94	18,460.96
91	313,963.66	2,297,412.83	127.50	18,581.94
92	314,065.97	2,297,343.18	142.52	18,705.71
93	314,079.49	2,297,304.38	159.78	18,746.80
94	314,119.48	2,297,201.54	157.24	18,857.14
95	314,389.54	2,296,602.69	148.60	19,514.07
96	314,418.02	2,296,566.92	141.15	19,559.79
97	314,559.61	2,296,393.17	132.62	19,783.92
98	314,603.43	2,296,363.14	122.08	19,837.05
99	314,762.26	2,296,272.41	116.67	20,019.97
100	314,884.42	2,296,219.05	109.59	20,153.27
101	315,015.53	2,296,182.50	114.61	20,289.38

05 Comonfort-SMA ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
102	315,089.86	2,296,133.04	126.71	20,378.66
103	315,191.69	2,296,048.24	126.86	20,511.18
104	315,220.47	2,296,028.87	136.75	20,545.87
105	315,307.58	2,295,880.59	138.77	20,717.84
106	315,352.47	2,295,845.54	129.36	20,774.80
107	315,413.11	2,295,793.31	133.59	20,854.83
108	315,485.20	2,295,717.48	142.89	20,959.46
109	315,553.45	2,295,602.36	151.23	21,093.29
110	315,799.18	2,295,117.33	148.14	21,637.02
111	315,883.07	2,295,005.39	156.61	21,776.90
112	315,889.16	2,294,970.58	164.03	21,812.25
113	315,905.55	2,294,930.07	155.51	21,855.94
114	315,988.69	2,294,766.64	149.10	22,039.30
115	316,339.82	2,294,262.16	142.91	22,653.95
116	316,427.76	2,294,154.87	145.33	22,792.67
117	316,471.76	2,294,078.68	144.25	22,880.66
118	316,517.32	2,294,027.17	136.98	22,949.43
119	316,592.92	2,293,950.35	155.21	23,057.20
120	316,686.20	2,292,894.35	178.40	24,117.32
121	316,685.79	2,292,881.55	207.23	24,130.13
122	316,636.61	2,292,843.96	218.94	24,192.03
123	316,615.55	2,292,799.34	196.16	24,241.37
124	316,610.92	2,292,761.94	174.67	24,279.05
125	316,675.74	2,292,558.92	162.29	24,492.17