

Equipe de Desenvolvedores:

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**Tabela dos 10 melhores resultados obtidos:**

1ª melhor resultado | Alpha 1.0 | GRASP 1024.0 | ILS 16.0 | Index 44

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	973.0	27.52	0.0	808.0	5.9	0.0	763.0	0.0	0.21
n10m2_B	696	1092.0	56.9	0.0	1000.0	43.68	0.0	696.0	0.0	0.2
n15m3_A	1006	1231.0	22.37	0.0	1231.0	22.37	0.0	1006.0	0.0	0.42
n15m3_B	1055	1204.0	14.12	0.0	1204.0	14.12	0.0	1055.0	0.0	0.4
n15m4_A	688	778.0	13.08	0.0	778.0	13.08	0.0	716.0	4.07	0.42
n15m4_B	784	1118.0	42.6	0.0	1117.0	42.47	0.0	794.0	1.28	0.42
n29m4_A	1459	2061.0	41.26	0.0	1925.0	31.94	0.0	1400.0	-4.04	1.38
n29m4_B	1527	1718.0	12.51	0.0	1718.0	12.51	0.0	1501.0	-1.7	1.38
n29m6_A	1101	1542.0	40.05	0.0	1542.0	40.05	0.0	1034.0	-6.09	1.37
n29m6_B	1043	1451.0	39.12	0.0	1451.0	39.12	0.0	1051.0	0.77	1.43
n40m5_A	447	490.0	9.62	0.0	490.0	9.62	0.0	429.0	-4.03	2.67
n40m5_B	581	662.0	13.94	0.0	662.0	13.94	0.0	558.0	-3.96	2.84
n52m5_A	7070	9418.0	33.21	0.0	9418.0	33.21	0.0	6612.0	-6.48	4.44
n52m5_B	6924	8918.0	28.8	0.0	8918.0	28.8	0.0	6760.0	-2.37	4.35
n450m16_A	4750	7751.0	63.18	0.0	7526.0	58.44	0.0	5244.0	10.4	680.13
n500m10_A	5608	8094.0	44.33	0.0	7867.0	40.28	0.0	6056.0	7.99	580.97

2ª melhor resultado | Alpha 1.0 | GRASP 1024.0 | ILS 32.0 | Index 70

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	1377.0	80.47	0.0	1099.0	44.04	0.0	763.0	0.0	0.2
n10m2_B	696	1005.0	44.4	0.0	723.0	3.88	0.0	696.0	0.0	0.19
n15m3_A	1006	1307.0	29.92	0.0	1085.0	7.85	0.0	1006.0	0.0	0.29
n15m3_B	1055	1630.0	54.5	0.0	1145.0	8.53	0.0	1055.0	0.0	0.3
n15m4_A	688	1649.0	139.68	0.0	1036.0	50.58	0.0	688.0	0.0	0.29
n15m4_B	784	2017.0	157.27	0.0	1563.0	99.36	0.0	786.0	0.26	0.41
n29m4_A	1459	2426.0	66.28	0.0	1522.0	4.32	0.0	1398.0	-4.18	0.64
n29m4_B	1527	2159.0	41.39	0.0	1612.0	5.57	0.0	1490.0	-2.42	0.65
n29m6_A	1101	1660.0	50.77	0.0	1414.0	28.43	0.0	1034.0	-6.09	0.64
n29m6_B	1043	2173.0	108.34	0.0	1648.0	58.01	0.0	1057.0	1.34	0.65
n40m5_A	447	859.0	92.17	0.0	622.0	39.15	0.0	433.0	-3.13	1.0
n40m5_B	581	945.0	62.65	0.0	601.0	3.44	0.0	574.0	-1.2	1.02
n52m5_A	7070	12950.0	83.17	0.0	8745.0	23.69	0.0	6554.0	-7.3	1.5
n52m5_B	6924	14795.0	113.68	0.0	10577.0	52.76	0.0	6775.0	-2.15	1.43
n450m16_A	4750	9601.0	102.13	0.0	8675.0	82.63	0.0	5444.0	14.61	191.15
n500m10_A	5608	11976.0	113.55	0.0	8124.0	44.86	0.0	6159.0	9.83	308.23

3ª melhor resultado | Alpha 1.0 | GRASP 1024.0 | ILS 16.0 | Index 69

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	1199.0	57.14	0.0	983.0	28.83	0.0	763.0	0.0	0.13
n10m2_B	696	1064.0	52.87	0.0	760.0	9.2	0.0	696.0	0.0	0.13
n15m3_A	1006	1726.0	71.57	0.0	1110.0	10.34	0.0	1006.0	0.0	0.21
n15m3_B	1055	2114.0	100.38	0.0	1966.0	86.35	0.0	1056.0	0.09	0.19
n15m4_A	688	1374.0	99.71	0.0	1208.0	75.58	0.0	699.0	1.6	0.19
n15m4_B	784	1586.0	102.3	0.0	1043.0	33.04	0.0	786.0	0.26	0.26
n29m4_A	1459	2528.0	73.27	0.0	2110.0	44.62	0.0	1398.0	-4.18	0.41
n29m4_B	1527	2650.0	73.54	0.0	1891.0	23.84	0.0	1490.0	-2.42	0.4
n29m6_A	1101	1687.0	53.22	0.0	1231.0	11.81	0.0	1034.0	-6.09	0.38
n29m6_B	1043	2113.0	102.59	0.0	1542.0	47.84	0.0	1107.0	6.14	0.4
n40m5_A	447	729.0	63.09	0.0	661.0	47.87	0.0	433.0	-3.13	0.63
n40m5_B	581	1033.0	77.8	0.0	823.0	41.65	0.0	574.0	-1.2	0.62
n52m5_A	7070	12596.0	78.16	0.0	7629.0	7.91	0.0	6554.0	-7.3	0.94
n52m5_B	6924	11547.0	66.77	0.0	8103.0	17.03	0.0	6751.0	-2.5	0.96
n450m16_A	4750	8479.0	78.51	0.0	6481.0	36.44	0.0	5367.0	12.99	139.36
n500m10_A	5608	11762.0	109.74	0.0	6921.0	23.41	0.0	6201.0	10.57	228.09

4ª melhor resultado | Alpha 1.0 | GRASP 512.0 | ILS 8.0 | Index 36

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	1064.0	39.45	0.0	886.0	16.12	0.0	763.0	0.0	0.11
n10m2_B	696	845.0	21.41	0.0	741.0	6.47	0.0	696.0	0.0	0.08
n15m3_A	1006	1279.0	27.14	0.0	1279.0	27.14	0.0	1024.0	1.79	0.14
n15m3_B	1055	1396.0	32.32	0.0	1366.0	29.48	0.0	1056.0	0.09	0.15
n15m4_A	688	1001.0	45.49	0.0	1001.0	45.49	0.0	731.0	6.25	0.15
n15m4_B	784	1129.0	44.01	0.0	1107.0	41.2	0.0	794.0	1.28	0.14
n29m4_A	1459	2231.0	52.91	0.0	2200.0	50.79	0.0	1401.0	-3.98	0.45
n29m4_B	1527	1920.0	25.74	0.0	1920.0	25.74	0.0	1491.0	-2.36	0.47
n29m6_A	1101	1173.0	6.54	0.0	1173.0	6.54	0.0	1063.0	-3.45	0.44
n29m6_B	1043	1826.0	75.07	0.0	1826.0	75.07	0.0	1045.0	0.19	0.49
n40m5_A	447	587.0	31.32	0.0	587.0	31.32	0.0	440.0	-1.57	0.88
n40m5_B	581	1022.0	75.9	0.0	885.0	52.32	0.0	558.0	-3.96	0.91
n52m5_A	7070	9580.0	35.5	0.0	9580.0	35.5	0.0	6587.0	-6.83	1.43
n52m5_B	6924	9559.0	38.06	0.0	9220.0	33.16	0.0	6616.0	-4.45	1.4
n450m16_A	4750	8620.0	81.47	0.0	8210.0	72.84	0.0	5623.0	18.38	219.8
n500m10_A	5608	8322.0	48.4	0.0	8162.0	45.54	0.0	6031.0	7.54	183.11

5ª melhor resultado | Alpha 0.85 | GRASP 700.0 | ILS 150.0 | Index 88

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	938.0	22.94	0.0	792.0	3.8	0.0	763.0	0.0	0.42
n10m2_B	696	1101.0	58.19	0.0	745.0	7.04	0.0	696.0	0.0	0.42
n15m3_A	1006	1792.0	78.13	0.0	1334.0	32.6	0.0	1020.0	1.39	0.66
n15m3_B	1055	1572.0	49.0	0.0	1132.0	7.3	0.0	1055.0	0.0	0.65
n15m4_A	688	1836.0	166.86	0.0	1120.0	62.79	0.0	697.0	1.31	0.65
n15m4_B	784	1457.0	85.84	0.0	988.0	26.02	0.0	786.0	0.26	0.97
n29m4_A	1459	2823.0	93.49	0.0	2205.0	51.13	0.0	1399.0	-4.11	1.77
n29m4_B	1527	2135.0	39.82	0.0	1740.0	13.95	0.0	1504.0	-1.51	1.77
n29m6_A	1101	2133.0	93.73	0.0	1686.0	53.13	0.0	1037.0	-5.81	1.46
n29m6_B	1043	2636.0	152.73	0.0	2049.0	96.45	0.0	1064.0	2.01	1.49
n40m5_A	447	1056.0	136.24	0.0	761.0	70.25	0.0	435.0	-2.68	2.27
n40m5_B	581	1200.0	106.54	0.0	801.0	37.87	0.0	567.0	-2.41	2.33
n52m5_A	7070	13074.0	84.92	0.0	9876.0	39.69	0.0	6731.0	-4.79	3.36
n52m5_B	6924	10683.0	54.29	0.0	8251.0	19.17	0.0	6690.0	-3.38	3.65
n450m16_A	4750	8512.0	79.2	0.0	6995.0	47.26	0.0	5279.0	11.14	395.94
n500m10_A	5608	10095.0	80.01	0.0	7171.0	27.87	0.0	6283.0	12.04	568.02

6ª melhor resultado | Alpha 1.0 | GRASP 1024.0 | ILS 17.0 | Index 77

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	1499.0	96.46	0.0	1072.0	40.5	0.0	763.0	0.0	0.12
n10m2_B	696	1594.0	129.02	0.0	1160.0	66.67	0.0	696.0	0.0	0.13
n15m3_A	1006	1723.0	71.27	0.0	1358.0	34.99	0.0	1021.0	1.49	0.27
n15m3_B	1055	2116.0	100.57	0.0	1797.0	70.33	0.0	1058.0	0.28	0.21
n15m4_A	688	1455.0	111.48	0.0	1455.0	111.48	0.0	704.0	2.33	0.2
n15m4_B	784	1513.0	92.98	0.0	1211.0	54.46	0.0	784.0	0.0	0.41
n29m4_A	1459	2177.0	49.21	0.0	1660.0	13.78	0.0	1422.0	-2.54	0.61
n29m4_B	1527	2498.0	63.59	0.0	1900.0	24.43	0.0	1504.0	-1.51	0.66
n29m6_A	1101	2270.0	106.18	0.0	1505.0	36.69	0.0	1022.0	-7.18	1.02
n29m6_B	1043	2176.0	108.63	0.0	1542.0	47.84	0.0	1057.0	1.34	0.8
n40m5_A	447	783.0	75.17	0.0	615.0	37.58	0.0	429.0	-4.03	0.9
n40m5_B	581	942.0	62.13	0.0	822.0	41.48	0.0	565.0	-2.75	1.43
n52m5_A	7070	13741.0	94.36	0.0	10765.0	52.26	0.0	6703.0	-5.19	3.48
n52m5_B	6924	14449.0	108.68	0.0	12241.0	76.79	0.0	6665.0	-3.74	3.02
n450m16_A	4750	8368.0	76.17	0.0	6880.0	44.84	0.0	5366.0	12.97	817.09
n500m10_A	5608	11334.0	102.1	0.0	7553.0	34.68	0.0	6252.0	11.48	287.83

7ª melhor resultado | Alpha 0.9 | GRASP 1024.0 | ILS 16.0 | Index 82

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	1389.0	82.04	0.0	811.0	6.29	0.0	763.0	0.0	0.1
n10m2_B	696	1476.0	112.07	0.0	697.0	0.14	0.0	696.0	0.0	0.1
n15m3_A	1006	1388.0	37.97	0.0	1176.0	16.9	0.0	1007.0	0.1	0.16
n15m3_B	1055	1950.0	84.83	0.0	1660.0	57.35	0.0	1054.0	-0.09	0.16
n15m4_A	688	1226.0	78.2	0.0	980.0	42.44	0.0	697.0	1.31	0.15
n15m4_B	784	1375.0	75.38	0.0	911.0	16.2	0.0	794.0	1.28	0.21
n29m4_A	1459	2421.0	65.94	0.0	1931.0	32.35	0.0	1399.0	-4.11	0.33
n29m4_B	1527	3306.0	116.5	0.0	3068.0	100.92	0.0	1488.0	-2.55	0.35
n29m6_A	1101	1776.0	61.31	0.0	1398.0	26.98	0.0	1034.0	-6.09	0.34
n29m6_B	1043	1919.0	83.99	0.0	1687.0	61.74	0.0	1046.0	0.29	0.33
n40m5_A	447	865.0	93.51	0.0	476.0	6.49	0.0	441.0	-1.34	0.52
n40m5_B	581	849.0	46.13	0.0	700.0	20.48	0.0	562.0	-3.27	0.51
n52m5_A	7070	14464.0	104.58	0.0	8944.0	26.51	0.0	6620.0	-6.36	0.82
n52m5_B	6924	11522.0	66.41	0.0	7996.0	15.48	0.0	6713.0	-3.05	0.89
n450m16_A	4750	8256.0	73.81	0.0	6557.0	38.04	0.0	5414.0	13.98	148.73
n500m10_A	5608	10050.0	79.21	0.0	6922.0	23.43	0.0	6289.0	12.14	241.01

8ª melhor resultado | Alpha 0.9 | GRASP 500.0 | ILS 100.0 | Index 75

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	1201.0	57.4	0.0	1151.0	50.85	0.0	763.0	0.0	0.21
n10m2_B	696	1079.0	55.03	0.0	797.0	14.51	0.0	696.0	0.0	0.21
n15m3_A	1006	2374.0	135.98	0.0	1637.0	62.72	0.0	1006.0	0.0	0.41
n15m3_B	1055	2764.0	161.99	0.0	1644.0	55.83	0.0	1055.0	0.0	0.57
n15m4_A	688	1613.0	134.45	0.0	845.0	22.82	0.0	688.0	0.0	0.34
n15m4_B	784	1433.0	82.78	0.0	1076.0	37.24	0.0	786.0	0.26	0.46
n29m4_A	1459	2587.0	77.31	0.0	1671.0	14.53	0.0	1388.0	-4.87	0.73
n29m4_B	1527	3240.0	112.18	0.0	2212.0	44.86	0.0	1500.0	-1.77	0.92
n29m6_A	1101	1879.0	70.66	0.0	1684.0	52.95	0.0	1042.0	-5.36	0.7
n29m6_B	1043	2459.0	135.76	0.0	2090.0	100.38	0.0	1050.0	0.67	1.28
n40m5_A	447	817.0	82.77	0.0	648.0	44.97	0.0	437.0	-2.24	2.55
n40m5_B	581	970.0	66.95	0.0	715.0	23.06	0.0	567.0	-2.41	1.45
n52m5_A	7070	13363.0	89.01	0.0	8651.0	22.36	0.0	6438.0	-8.94	2.92
n52m5_B	6924	15345.0	121.62	0.0	8493.0	22.66	0.0	6860.0	-0.92	3.74
n450m16_A	4750	8633.0	81.75	0.0	7315.0	54.0	0.0	5465.0	15.05	359.84
n500m10_A	5608	10010.0	78.5	0.0	7081.0	26.27	0.0	6284.0	12.05	302.91

9ª melhor resultado | Alpha 0.9 | GRASP 1024.0 | ILS 16.0 | Index 68

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	1034.0	35.52	0.0	778.0	1.97	0.0	763.0	0.0	0.13
n10m2_B	696	1425.0	104.74	0.0	841.0	20.83	0.0	696.0	0.0	0.13
n15m3_A	1006	2218.0	120.48	0.0	1213.0	20.58	0.0	1020.0	1.39	0.21
n15m3_B	1055	1807.0	71.28	0.0	1331.0	26.16	0.0	1056.0	0.09	0.19
n15m4_A	688	2135.0	210.32	0.0	1741.0	153.05	0.0	688.0	0.0	0.18
n15m4_B	784	1135.0	44.77	0.0	1102.0	40.56	0.0	794.0	1.28	0.24
n29m4_A	1459	3039.0	108.29	0.0	1922.0	31.73	0.0	1402.0	-3.91	0.41
n29m4_B	1527	2389.0	56.45	0.0	2268.0	48.53	0.0	1501.0	-1.7	0.42
n29m6_A	1101	1946.0	76.75	0.0	1571.0	42.69	0.0	1020.0	-7.36	0.39
n29m6_B	1043	2163.0	107.38	0.0	1604.0	53.79	0.0	1082.0	3.74	0.39
n40m5_A	447	845.0	89.04	0.0	845.0	89.04	0.0	440.0	-1.57	0.62
n40m5_B	581	1007.0	73.32	0.0	697.0	19.97	0.0	565.0	-2.75	0.62
n52m5_A	7070	10713.0	51.53	0.0	8177.0	15.66	0.0	6693.0	-5.33	0.94
n52m5_B	6924	19364.0	179.66	0.0	14314.0	106.73	0.0	6751.0	-2.5	0.94
n450m16_A	4750	7147.0	50.46	0.0	6491.0	36.65	0.0	5435.0	14.42	140.66
n500m10_A	5608	9664.0	72.33	0.0	7274.0	29.71	0.0	6161.0	9.86	218.42

10ª melhor resultado | Alpha 1.0 | GRASP 1024.0 | ILS 16.0 | Index 46

INSTANCIA	OPT	VALOR_CONST	GAP_CONST	TEMPO_CONST	VALOR_VND	GAP_VND	TEMPO_VND	VALOR_META	GAP_META	TEMPO_META
n10m2_A	763	921.0	20.71	0.0	921.0	20.71	0.0	763.0	0.0	0.21
n10m2_B	696	735.0	5.6	0.0	735.0	5.6	0.0	696.0	0.0	0.2
n15m3_A	1006	1331.0	32.31	0.0	1259.0	25.15	0.0	1021.0	1.49	0.43
n15m3_B	1055	1271.0	20.47	0.0	1271.0	20.47	0.0	1055.0	0.0	0.45
n15m4_A	688	1270.0	84.59	0.0	1270.0	84.59	0.0	694.0	0.87	0.44
n15m4_B	784	927.0	18.24	0.0	927.0	18.24	0.0	789.0	0.64	0.45
n29m4_A	1459	1689.0	15.76	0.0	1608.0	10.21	0.0	1386.0	-5.0	1.46
n29m4_B	1527	1716.0	12.38	0.0	1716.0	12.38	0.0	1478.0	-3.21	1.51
n29m6_A	1101	1872.0	70.03	0.0	1872.0	70.03	0.0	1052.0	-4.45	1.48
n29m6_B	1043	2233.0	114.09	0.0	2233.0	114.09	0.0	1063.0	1.92	1.52
n40m5_A	447	582.0	30.2	0.0	536.0	19.91	0.0	436.0	-2.46	2.73
n40m5_B	581	808.0	39.07	0.0	797.0	37.18	0.0	562.0	-3.27	2.89
n52m5_A	7070	10183.0	44.03	0.0	9578.0	35.47	0.0	6733.0	-4.77	4.57
n52m5_B	6924	9523.0	37.54	0.0	9523.0	37.54	0.0	6662.0	-3.78	5.57
n450m16_A	4750	8659.0	82.29	0.0	7360.0	54.95	0.0	5620.0	18.32	1108.03
n500m10_A	5608	7094.0	26.5	0.0	6686.0	19.22	0.0	6090.0	8.59	755.94