Starting matlabpool using the 'local' configuration ... connected to 8 labs.

Best Mean Stall

Generation f-count f(x) f(x) Generations

1 200 22.39 6.978e+009 0

2 300 22.39 6.859e+009 1

3 400 22.39 6.858e+009 2

4 500 22.39 4.069e+007 3

5 600 22.39 4.119e+007 4

Optimization terminated: maximum number of generations exceeded.

Switching to the hybrid optimization algorithm (FMINSEARCH).

Iteration Func-count min f(x) Procedure

0 1 22.3884

1 5 22.3884 initial simplex

2 6 22.3884 reflect

3 8 22.3884 contract inside

4 10 22.3884 contract outside

5 12 22.3884 contract inside

6 14 22.3884 contract inside

7 16 22.3884 contract inside

8 18 22.3884 contract inside

9 20 22.3884 contract inside

10 22 22.3884 contract outside

11 24 22.3884 contract inside

12 25 22.3884 reflect

13 27 22.3884 contract inside

14 29 22.3884 contract inside

15 31 22.3884 contract inside

16 33 22.3884 contract inside

17 35 22.3884 contract inside

18 37 22.3884 contract inside

19 39 22.3884 contract inside

20 41 22.3884 contract inside

21 43 22.3884 contract inside

22 45 22.3884 contract inside

23 47 22.3884 contract inside

24 49 22.3884 contract inside

25 51 22.3884 contract inside

26 53 22.3884 contract inside

27 55 22.3884 contract inside

28 57 22.3884 contract inside

29 59 22.3884 contract inside

30 61 22.3884 contract inside

31 62 22.3884 reflect

32 63 22.3884 reflect

33 65 22.3884 contract inside

34 67 22.3884 contract inside

35 69 22.3884 contract inside

36 71 22.3884 contract inside

37 73 22.3884 contract inside

38 75 22.3884 contract inside

39 77 22.3884 contract inside

40 79 22.3691 reflect

41 80 22.3691 reflect

42 81 22.3691 reflect

43 83 22.3691 contract inside

44 85 22.3691 contract inside

45 87 22.3691 contract inside

46 89 22.3691 contract inside

47 91 22.3691 contract inside

48 93 22.3684 contract inside

49 95 22.3684 contract inside

50 97 22.3662 reflect

51 99 22.3625 reflect

52 101 22.3625 contract inside

53 102 22.3625 reflect

54 104 22.3625 contract inside

55 106 22.3625 contract inside

56 108 22.3625 contract inside

57 109 22.3625 reflect

58 111 22.3625 contract inside

59 113 22.3611 reflect

60 115 22.3611 contract inside

61 116 22.3611 reflect

62 118 22.3611 contract inside

63 120 22.3611 contract inside

64 122 22.3611 contract inside

65 124 22.3611 contract inside

66 126 22.361 reflect

67 128 22.3609 reflect

68 129 22.3609 reflect

69 131 22.3601 reflect

70 133 22.3601 contract inside

71 135 22.3598 reflect

72 137 22.3598 contract inside

73 138 22.3598 reflect

74 140 22.3598 contract inside

75 142 22.3595 reflect

76 143 22.3595 reflect

77 145 22.3595 contract inside

78 147 22.3595 reflect

79 149 22.3595 contract inside

80 151 22.3592 reflect

81 153 22.3592 contract inside

82 154 22.3592 reflect

83 156 22.3592 contract inside

84 157 22.3592 reflect

85 159 22.3592 contract inside

86 161 22.3592 contract inside

87 163 22.3592 contract inside

88 164 22.3592 reflect

89 166 22.3592 contract inside

90 168 22.3592 contract inside

91 170 22.3592 contract inside

92 172 22.3592 reflect

93 174 22.3592 contract inside

94 176 22.3591 expand

95 178 22.3591 contract outside

96 180 22.3591 reflect

97 182 22.3591 reflect

98 183 22.3591 reflect

99 185 22.3591 reflect

100 187 22.3591 contract inside

101 189 22.3591 contract inside

102 190 22.3591 reflect

103 191 22.3591 reflect

104 193 22.359 expand

105 194 22.359 reflect

106 196 22.359 contract inside

107 198 22.359 reflect

108 200 22.3589 expand

109 202 22.3589 contract inside

110 204 22.3589 reflect

111 205 22.3589 reflect

112 207 22.3589 expand

113 208 22.3589 reflect

114 210 22.3588 expand

115 212 22.3588 contract inside

116 213 22.3588 reflect

117 214 22.3588 reflect

118 216 22.3588 reflect

119 218 22.3587 expand

120 220 22.3587 contract inside

121 221 22.3587 reflect

122 223 22.3587 contract inside

123 224 22.3587 reflect

124 226 22.3586 expand

125 228 22.3584 expand

126 229 22.3584 reflect

127 231 22.3583 expand

128 233 22.3579 expand

129 234 22.3579 reflect

130 236 22.3575 expand

131 238 22.3569 expand

132 239 22.3569 reflect

133 241 22.356 expand

134 243 22.3547 expand

135 244 22.3547 reflect

136 246 22.3531 expand

137 248 22.3505 expand

138 249 22.3505 reflect

139 251 22.3476 expand

140 253 22.3434 expand

141 254 22.3434 reflect

142 256 22.3392 expand

143 258 22.3354 expand

144 259 22.3354 reflect

145 261 22.3351 reflect

146 262 22.3351 reflect

147 264 22.3351 contract outside

148 266 22.3351 contract inside

149 268 22.335 contract inside

150 269 22.335 reflect

151 271 22.335 contract inside

152 273 22.335 contract inside

153 275 22.335 contract inside

154 277 22.335 contract outside

155 278 22.335 reflect

156 280 22.3349 contract inside

157 281 22.3349 reflect

158 283 22.3349 contract inside

159 285 22.3349 expand

160 287 22.3349 expand

161 289 22.3348 expand

162 291 22.3348 contract inside

163 292 22.3348 reflect

164 294 22.3347 expand

165 295 22.3347 reflect

166 297 22.3345 expand

167 298 22.3345 reflect

168 300 22.3342 expand

169 301 22.3342 reflect

170 303 22.3339 expand

171 304 22.3339 reflect

172 306 22.3333 expand

173 308 22.3327 expand

174 309 22.3327 reflect

175 311 22.3317 expand

176 313 22.3306 expand

177 315 22.329 expand

178 317 22.3271 expand

179 319 22.3253 expand

180 321 22.3218 expand

181 323 22.3207 reflect

182 325 22.3207 contract inside

183 327 22.3207 contract inside

184 329 22.3207 contract inside

185 331 22.3181 expand

186 333 22.3181 contract inside

187 335 22.3172 reflect

188 337 22.3172 contract inside

189 339 22.3154 expand

190 341 22.3107 expand

191 343 22.306 expand

192 345 22.3002 expand

193 346 22.3002 reflect

194 348 22.2939 reflect

195 350 22.289 expand

196 352 22.2788 expand

197 354 22.2788 contract inside

198 355 22.2788 reflect

199 357 22.2746 expand

200 358 22.2746 reflect

201 359 22.2746 reflect

202 361 22.2746 contract inside

203 363 22.2746 contract inside

204 365 22.2746 contract inside

205 367 22.2746 contract inside

206 369 22.2746 contract inside

207 371 22.2726 reflect

208 373 22.2726 contract inside

209 375 22.2726 contract inside

210 376 22.2726 reflect

211 377 22.2726 reflect

212 378 22.2726 reflect

213 380 22.2716 reflect

214 382 22.2716 contract inside

215 384 22.2716 contract inside

216 386 22.2716 contract inside

217 388 22.2716 contract inside

218 390 22.2716 reflect

219 392 22.2716 contract inside

220 394 22.2712 reflect

221 395 22.2712 reflect

222 397 22.2712 contract inside

223 399 22.2712 contract inside

224 400 22.2712 reflect

225 402 22.2712 contract inside

226 404 22.2712 contract inside

227 406 22.2709 expand

228 408 22.2708 reflect

229 410 22.2703 expand

230 411 22.2703 reflect

231 413 22.2697 expand

232 415 22.2695 reflect

233 417 22.2678 expand

234 418 22.2678 reflect

235 420 22.2665 expand

236 422 22.2648 expand

237 424 22.2613 expand

238 425 22.2613 reflect

239 427 22.2553 expand

240 429 22.2489 expand

241 430 22.2489 reflect

242 432 22.2385 expand

243 434 22.2338 reflect

244 436 22.2161 expand

245 437 22.2161 reflect

246 439 22.2161 contract inside

247 440 22.2161 reflect

248 441 22.2161 reflect

249 443 22.1818 expand

250 444 22.1818 reflect

251 445 22.1818 reflect

252 446 22.1818 reflect

253 447 22.1818 reflect

254 449 22.139 expand

255 450 22.139 reflect

256 451 22.139 reflect

257 452 22.139 reflect

258 454 22.1102 expand

259 456 22.0933 expand

260 458 22.0397 expand

261 459 22.0397 reflect

262 461 22.0397 contract outside

263 462 22.0397 reflect

264 464 22.0329 reflect

265 466 22.0001 expand

266 468 22.0001 contract outside

267 470 22.0001 contract inside

268 472 21.9925 reflect

269 473 21.9925 reflect

270 475 21.9629 expand

271 477 21.9629 contract inside

272 479 21.9321 expand

273 481 21.9239 reflect

274 483 21.8827 expand

275 484 21.8827 reflect

276 486 21.881 reflect

277 488 21.8373 expand

278 490 21.8373 contract inside

279 492 21.8373 contract outside

280 494 21.8091 expand

281 496 21.7502 expand

282 497 21.7502 reflect

283 499 21.6962 expand

284 501 21.6962 contract inside

285 503 21.6514 expand

286 504 21.6514 reflect

287 506 21.6247 expand

288 508 21.6247 contract inside

289 510 21.6247 contract outside

290 511 21.6247 reflect

291 512 21.6247 reflect

292 514 21.6051 reflect

293 516 21.6051 contract inside

294 518 21.5952 reflect

295 520 21.5803 contract inside

296 522 21.5593 reflect

297 524 21.5593 contract outside

298 525 21.5593 reflect

299 527 21.5593 contract inside

300 529 21.5514 reflect

301 531 21.5427 contract inside

302 532 21.5427 reflect

303 534 21.5427 contract outside

304 535 21.5427 reflect

305 536 21.5427 reflect

306 538 21.5427 contract inside

307 540 21.5303 contract inside

308 542 21.5303 contract inside

309 544 21.5285 reflect

310 546 21.5285 contract inside

311 548 21.5285 contract inside

312 549 21.5285 reflect

313 551 21.5207 expand

314 552 21.5207 reflect

315 554 21.5207 contract inside

316 556 21.5051 expand

317 558 21.4959 expand

318 559 21.4959 reflect

319 561 21.4846 expand

320 563 21.4801 reflect

321 564 21.4801 reflect

322 565 21.4801 reflect

323 567 21.475 reflect

324 568 21.475 reflect

325 570 21.475 contract inside

326 572 21.4735 reflect

327 574 21.4629 expand

328 576 21.4569 expand

329 577 21.4569 reflect

330 579 21.4563 reflect

331 581 21.4525 reflect

332 582 21.4525 reflect

333 584 21.4502 contract inside

334 586 21.437 reflect

335 588 21.437 contract inside

336 590 21.437 contract inside

337 592 21.437 contract inside

338 593 21.437 reflect

339 595 21.4365 reflect

340 597 21.4342 contract outside

341 599 21.4342 contract inside

342 601 21.4269 expand

343 603 21.4196 expand

344 604 21.4196 reflect

345 606 21.4112 expand

346 607 21.4112 reflect

347 609 21.4041 expand

348 611 21.3883 expand

349 612 21.3883 reflect

350 614 21.3682 expand

351 615 21.3682 reflect

352 616 21.3682 reflect

353 618 21.3576 expand

354 620 21.3576 contract outside

355 621 21.3576 reflect

356 623 21.3573 contract outside

357 624 21.3573 reflect

358 626 21.3573 contract inside

359 628 21.3523 contract outside

360 630 21.3523 contract inside

361 632 21.3464 expand

362 633 21.3464 reflect

363 634 21.3464 reflect

364 636 21.3428 reflect

365 638 21.3428 contract inside

366 640 21.3382 reflect

367 642 21.3382 contract outside

368 644 21.3308 expand

369 646 21.3272 reflect

370 647 21.3272 reflect

371 648 21.3272 reflect

372 650 21.3186 reflect

373 652 21.3186 contract outside

374 654 21.3123 expand

375 656 21.3123 contract inside

376 658 21.3123 contract inside

377 659 21.3123 reflect

378 661 21.3081 reflect

379 663 21.3027 expand

380 664 21.3027 reflect

381 666 21.3027 contract outside

382 668 21.2929 expand

383 669 21.2929 reflect

384 670 21.2929 reflect

385 672 21.2869 expand

386 674 21.2869 contract outside

387 676 21.2869 contract inside

388 677 21.2869 reflect

389 678 21.2869 reflect

390 680 21.2762 reflect

391 681 21.2762 reflect

392 683 21.2762 contract inside

393 685 21.2746 contract inside

394 687 21.2746 contract outside

395 689 21.2733 contract inside

396 690 21.2733 reflect

397 692 21.2702 reflect

398 694 21.2702 contract inside

399 695 21.2702 reflect

400 697 21.2667 reflect

401 699 21.2667 contract outside

402 701 21.2664 reflect

403 703 21.2664 contract inside

404 705 21.2663 reflect

405 707 21.2663 contract outside

406 709 21.2634 expand

407 711 21.263 reflect

408 712 21.263 reflect

409 714 21.2612 expand

410 716 21.258 expand

411 717 21.258 reflect

412 718 21.258 reflect

413 720 21.2559 reflect

414 721 21.2559 reflect

415 723 21.2525 expand

416 725 21.2525 contract outside

417 726 21.2525 reflect

418 728 21.2525 reflect

419 730 21.252 reflect

420 732 21.2421 expand

421 733 21.2421 reflect

422 734 21.2421 reflect

423 735 21.2421 reflect

424 736 21.2421 reflect

425 738 21.2421 contract inside

426 740 21.2415 contract inside

427 742 21.2415 contract inside

428 744 21.2415 contract outside

429 746 21.2415 contract inside

430 748 21.2412 reflect

431 750 21.2412 contract inside

432 752 21.2373 expand

433 753 21.2373 reflect

434 754 21.2373 reflect

435 756 21.2356 expand

436 757 21.2356 reflect

437 759 21.2331 expand

438 761 21.2305 expand

439 762 21.2305 reflect

440 764 21.2282 expand

441 766 21.2282 contract outside

442 767 21.2282 reflect

443 768 21.2282 reflect

444 770 21.2231 expand

445 771 21.2231 reflect

446 772 21.2231 reflect

447 774 21.2231 contract inside

448 775 21.2231 reflect

449 776 21.2231 reflect

450 778 21.2179 expand

451 779 21.2179 reflect

452 780 21.2179 reflect

453 781 21.2179 reflect

454 782 21.2179 reflect

455 784 21.2166 contract inside

456 786 21.2125 expand

457 788 21.2125 reflect

458 790 21.2125 contract inside

459 792 21.2089 expand

460 793 21.2089 reflect

461 794 21.2089 reflect

462 796 21.2057 expand

463 797 21.2057 reflect

464 799 21.2046 reflect

465 800 21.2046 reflect

466 802 21.2046 contract inside

467 803 21.2046 reflect

468 805 21.2046 contract inside

469 807 21.2046 contract outside

470 809 21.2044 reflect

471 811 21.2018 expand

472 812 21.2018 reflect

473 814 21.2018 contract inside

474 815 21.2018 reflect

475 816 21.2018 reflect

476 818 21.2002 contract inside

477 819 21.2002 reflect

478 820 21.2002 reflect

479 822 21.1988 expand

480 824 21.1979 expand

481 826 21.1979 contract inside

482 828 21.1974 expand

483 829 21.1974 reflect

484 831 21.1942 expand

485 832 21.1942 reflect

486 833 21.1942 reflect

487 835 21.1942 contract outside

488 837 21.1892 expand

489 838 21.1892 reflect

490 839 21.1892 reflect

491 841 21.1854 expand

492 843 21.1838 expand

493 845 21.1838 contract inside

494 847 21.1838 contract outside

495 849 21.1819 expand

496 850 21.1819 reflect

497 852 21.1814 reflect

498 854 21.1814 contract inside

499 856 21.1814 contract inside

500 858 21.1792 reflect

501 860 21.1792 contract inside

502 862 21.1786 reflect

503 863 21.1786 reflect

504 864 21.1786 reflect

505 866 21.1733 expand

506 868 21.1733 contract outside

507 870 21.1733 contract inside

508 871 21.1733 reflect

509 872 21.1733 reflect

510 874 21.1733 contract outside

511 876 21.1708 expand

512 877 21.1708 reflect

513 878 21.1708 reflect

514 880 21.1708 contract outside

515 882 21.1708 contract inside

516 884 21.1703 expand

517 886 21.1687 expand

518 887 21.1687 reflect

519 889 21.1668 expand

520 890 21.1668 reflect

521 892 21.1651 expand

522 894 21.1651 contract inside

523 896 21.1651 contract inside

524 897 21.1651 reflect

525 899 21.1644 reflect

526 900 21.1644 reflect

527 902 21.1634 expand

528 904 21.1634 contract inside

529 906 21.1616 expand

530 907 21.1616 reflect

531 909 21.1596 reflect

532 911 21.1596 contract inside

533 912 21.1596 reflect

534 914 21.1596 contract inside

535 915 21.1596 reflect

536 917 21.1593 reflect

537 918 21.1593 reflect

538 920 21.1588 reflect

539 922 21.1588 contract inside

540 924 21.1588 contract inside

541 926 21.1582 reflect

542 927 21.1582 reflect

543 929 21.1576 expand

544 930 21.1576 reflect

545 931 21.1576 reflect

546 933 21.1563 expand

547 934 21.1563 reflect

548 936 21.1556 expand

549 937 21.1556 reflect

550 939 21.1556 contract outside

551 941 21.1546 reflect

552 943 21.1527 expand

553 944 21.1527 reflect

554 945 21.1527 reflect

555 946 21.1527 reflect

556 947 21.1527 reflect

557 949 21.1526 contract inside

558 951 21.1521 reflect

559 953 21.1521 contract inside

560 955 21.1521 contract outside

561 957 21.1502 expand

562 958 21.1502 reflect

563 959 21.1502 reflect

564 961 21.1499 reflect

565 962 21.1499 reflect

566 964 21.1492 contract inside

567 966 21.1492 contract inside

568 967 21.1492 reflect

569 969 21.1492 reflect

570 971 21.1481 expand

571 972 21.1481 reflect

572 974 21.1481 contract inside

573 976 21.1481 contract inside

574 978 21.1477 expand

575 979 21.1477 reflect

576 981 21.1472 expand

577 983 21.1472 contract inside

578 984 21.1472 reflect

579 986 21.1463 expand

580 988 21.1459 expand

581 989 21.1459 reflect

582 991 21.1448 expand

583 993 21.1448 contract inside

584 995 21.144 reflect

585 997 21.144 contract inside

586 999 21.144 contract outside

587 1000 21.144 reflect

588 1002 21.1438 expand

589 1004 21.143 reflect

590 1006 21.1419 expand

591 1007 21.1419 reflect

592 1008 21.1419 reflect

593 1009 21.1419 reflect

594 1011 21.1417 reflect

595 1013 21.1417 contract inside

596 1015 21.1415 contract inside

597 1017 21.1415 contract outside

598 1019 21.1405 expand

599 1020 21.1405 reflect

600 1021 21.1405 reflect

601 1023 21.1405 contract inside

602 1024 21.1405 reflect

603 1026 21.1391 expand

604 1028 21.1391 contract inside

605 1030 21.1391 contract inside

606 1031 21.1391 reflect

607 1033 21.1391 contract inside

608 1034 21.1391 reflect

609 1035 21.1391 reflect

610 1037 21.1391 contract inside

611 1038 21.1391 reflect

612 1039 21.1391 reflect

613 1040 21.1391 reflect

614 1042 21.1391 contract inside

615 1043 21.1391 reflect

616 1045 21.1386 expand

617 1046 21.1386 reflect

618 1048 21.1382 expand

619 1049 21.1382 reflect

620 1051 21.1379 reflect

621 1052 21.1379 reflect

622 1054 21.1378 reflect

623 1056 21.1378 contract inside

624 1058 21.1377 expand

625 1060 21.137 expand

626 1061 21.137 reflect

627 1063 21.1368 expand

628 1064 21.1368 reflect

629 1066 21.1361 reflect

630 1068 21.1361 contract inside

631 1069 21.1361 reflect

632 1071 21.1361 reflect

633 1073 21.1361 contract inside

634 1075 21.1359 reflect

635 1076 21.1359 reflect

636 1078 21.1356 reflect

637 1080 21.1356 contract inside

638 1082 21.1352 expand

639 1083 21.1352 reflect

640 1085 21.1346 expand

641 1086 21.1346 reflect

642 1087 21.1346 reflect

643 1088 21.1346 reflect

644 1090 21.1345 contract outside

645 1092 21.1337 expand

646 1094 21.1337 contract inside

647 1095 21.1337 reflect

648 1096 21.1337 reflect

649 1098 21.1337 reflect

650 1099 21.1337 reflect

651 1101 21.1336 reflect

652 1103 21.1328 expand

653 1105 21.1328 contract inside

654 1106 21.1328 reflect

655 1108 21.1328 contract inside

656 1110 21.1327 reflect

657 1112 21.1327 contract outside

658 1114 21.1324 expand

659 1116 21.1324 contract inside

660 1117 21.1324 reflect

661 1119 21.1321 expand

662 1120 21.1321 reflect

663 1121 21.1321 reflect

664 1122 21.1321 reflect

665 1124 21.1321 contract outside

666 1126 21.1319 reflect

667 1128 21.1318 reflect

668 1130 21.1318 contract inside

669 1132 21.1317 expand

670 1134 21.1315 expand

671 1135 21.1315 reflect

672 1137 21.1314 reflect

673 1138 21.1314 reflect

674 1140 21.1311 expand

675 1141 21.1311 reflect

676 1142 21.1311 reflect

677 1144 21.1309 reflect

678 1145 21.1309 reflect

679 1147 21.1309 contract inside

680 1149 21.1302 expand

681 1150 21.1302 reflect

682 1151 21.1302 reflect

683 1153 21.1302 contract inside

684 1155 21.1302 contract inside

685 1156 21.1302 reflect

686 1157 21.1302 reflect

687 1159 21.1298 expand

688 1161 21.1294 reflect

689 1163 21.1294 contract inside

690 1165 21.1294 reflect

691 1166 21.1294 reflect

692 1168 21.1292 contract inside

693 1170 21.1291 reflect

694 1172 21.1291 contract inside

695 1174 21.1291 expand

696 1176 21.129 reflect

697 1178 21.1285 expand

698 1180 21.1285 contract inside

699 1181 21.1285 reflect

700 1182 21.1285 reflect

701 1184 21.1285 contract inside

702 1186 21.1283 reflect

703 1188 21.128 expand

704 1189 21.128 reflect

705 1190 21.128 reflect

706 1191 21.128 reflect

707 1193 21.1276 reflect

708 1195 21.1271 expand

709 1196 21.1271 reflect

710 1198 21.1271 contract inside

711 1199 21.1271 reflect

712 1201 21.1271 contract outside

713 1203 21.1268 expand

714 1204 21.1268 reflect

715 1205 21.1268 reflect

716 1207 21.1268 contract inside

717 1209 21.1264 expand

718 1210 21.1264 reflect

719 1211 21.1264 reflect

720 1212 21.1264 reflect

721 1213 21.1264 reflect

722 1215 21.1264 reflect

723 1217 21.1262 contract inside

724 1219 21.1259 expand

725 1220 21.1259 reflect

726 1222 21.1257 expand

727 1224 21.1257 contract inside

728 1225 21.1257 reflect

729 1227 21.1254 reflect

730 1228 21.1254 reflect

731 1230 21.1254 contract inside

732 1231 21.1254 reflect

733 1233 21.1254 contract inside

734 1235 21.1254 contract outside

735 1236 21.1254 reflect

736 1238 21.1254 expand

737 1240 21.1252 expand

738 1242 21.1252 contract inside

739 1244 21.1252 contract inside

740 1246 21.1252 contract inside

741 1248 21.1252 reflect

742 1249 21.1252 reflect

743 1251 21.125 expand

744 1253 21.1246 expand

745 1254 21.1246 reflect

746 1255 21.1246 reflect

747 1256 21.1246 reflect

748 1257 21.1246 reflect

749 1259 21.1246 contract inside

750 1261 21.1245 expand

751 1263 21.1242 reflect

752 1265 21.1242 contract outside

753 1266 21.1242 reflect

754 1268 21.1242 reflect

755 1269 21.1242 reflect

756 1270 21.1242 reflect

757 1272 21.124 contract inside

758 1274 21.1238 expand

759 1275 21.1238 reflect

760 1276 21.1238 reflect

761 1277 21.1238 reflect

762 1279 21.1238 contract inside

763 1281 21.1236 expand

764 1282 21.1236 reflect

765 1283 21.1236 reflect

766 1285 21.1236 contract inside

767 1286 21.1236 reflect

768 1287 21.1236 reflect

769 1289 21.1235 expand

770 1291 21.1235 contract inside

771 1293 21.1235 reflect

772 1295 21.1233 expand

773 1297 21.1231 expand

774 1298 21.1231 reflect

775 1299 21.1231 reflect

776 1301 21.1231 reflect

777 1303 21.123 contract inside

778 1304 21.123 reflect

779 1306 21.1228 expand

780 1308 21.1228 contract inside

781 1310 21.1228 expand

782 1311 21.1228 reflect

783 1313 21.1227 reflect

784 1315 21.1226 contract inside

785 1317 21.1226 contract inside

786 1319 21.1224 expand

787 1321 21.1224 contract inside

788 1322 21.1224 reflect

789 1324 21.1224 contract inside

790 1326 21.1223 reflect

791 1327 21.1223 reflect

792 1329 21.1222 expand

793 1331 21.1222 contract outside

794 1333 21.1222 contract inside

795 1335 21.1221 expand

796 1337 21.1221 reflect

797 1339 21.1217 expand

798 1340 21.1217 reflect

799 1342 21.1217 contract outside

800 1343 21.1217 reflect

801 1344 21.1217 reflect

802 1346 21.1215 expand

803 1347 21.1215 reflect

804 1348 21.1215 reflect

805 1350 21.1215 contract inside

806 1351 21.1215 reflect

807 1353 21.1214 reflect

808 1355 21.1212 expand

809 1356 21.1212 reflect

810 1358 21.121 reflect

811 1360 21.121 reflect

812 1361 21.121 reflect

813 1363 21.1207 expand

814 1364 21.1207 reflect

815 1365 21.1207 reflect

816 1367 21.1207 contract inside

817 1368 21.1207 reflect

818 1370 21.1206 reflect

819 1371 21.1206 reflect

820 1373 21.1206 contract inside

821 1374 21.1206 reflect

822 1375 21.1206 reflect

823 1377 21.1202 expand

824 1379 21.1202 contract inside

825 1381 21.1202 contract inside

826 1382 21.1202 reflect

827 1384 21.1202 contract inside

828 1385 21.1202 reflect

829 1386 21.1202 reflect

830 1388 21.1202 contract inside

831 1390 21.1202 contract inside

832 1391 21.1202 reflect

833 1392 21.1202 reflect

834 1394 21.12 expand

835 1395 21.12 reflect

836 1396 21.12 reflect

837 1398 21.1198 expand

838 1399 21.1198 reflect

839 1401 21.1196 expand

840 1403 21.1193 expand

841 1404 21.1193 reflect

842 1405 21.1193 reflect

843 1407 21.1193 contract inside

844 1409 21.1191 expand

845 1410 21.1191 reflect

846 1412 21.1188 expand

847 1413 21.1188 reflect

848 1414 21.1188 reflect

849 1416 21.1188 contract inside

850 1418 21.1188 contract inside

851 1420 21.1188 contract inside

852 1421 21.1188 reflect

853 1423 21.1187 reflect

854 1424 21.1187 reflect

855 1425 21.1187 reflect

856 1427 21.1187 contract inside

857 1428 21.1187 reflect

858 1430 21.1185 reflect

859 1431 21.1185 reflect

860 1433 21.1185 contract inside

861 1434 21.1185 reflect

862 1436 21.1185 reflect

863 1438 21.1185 contract inside

864 1440 21.1185 reflect

865 1441 21.1185 reflect

866 1443 21.1184 reflect

867 1445 21.1183 expand

868 1447 21.1183 contract inside

869 1449 21.1182 reflect

870 1451 21.1181 expand

871 1453 21.1181 contract inside

872 1454 21.1181 reflect

873 1455 21.1181 reflect

874 1457 21.1181 reflect

875 1458 21.1181 reflect

876 1460 21.1179 expand

877 1462 21.1179 contract outside

878 1464 21.1179 contract inside

879 1465 21.1179 reflect

880 1466 21.1179 reflect

881 1467 21.1179 reflect

882 1469 21.1178 expand

883 1471 21.1177 expand

884 1473 21.1177 contract inside

885 1474 21.1177 reflect

886 1475 21.1177 reflect

887 1477 21.1176 reflect

888 1478 21.1176 reflect

889 1479 21.1176 reflect

890 1481 21.1175 expand

891 1483 21.1175 contract inside

892 1484 21.1175 reflect

893 1485 21.1175 reflect

894 1486 21.1175 reflect

895 1488 21.1173 expand

896 1489 21.1173 reflect

897 1490 21.1173 reflect

898 1491 21.1173 reflect

899 1492 21.1173 reflect

900 1493 21.1173 reflect

901 1495 21.1172 expand

902 1497 21.1172 contract inside

903 1498 21.1172 reflect

904 1500 21.1171 expand

905 1502 21.1171 contract inside

906 1504 21.1171 contract inside

907 1505 21.1171 reflect

908 1506 21.1171 reflect

909 1508 21.117 expand

910 1509 21.117 reflect

911 1511 21.117 contract inside

912 1512 21.117 reflect

913 1514 21.117 contract outside

914 1516 21.1169 reflect

915 1518 21.1167 expand

916 1520 21.1167 expand

917 1521 21.1167 reflect

918 1522 21.1167 reflect

919 1523 21.1167 reflect

920 1524 21.1167 reflect

921 1526 21.1167 contract inside

922 1528 21.1167 contract inside

923 1530 21.1167 contract inside

924 1531 21.1167 reflect

925 1533 21.1166 reflect

926 1534 21.1166 reflect

927 1536 21.1166 contract inside

928 1537 21.1166 reflect

929 1539 21.1165 reflect

930 1540 21.1165 reflect

931 1542 21.1165 contract inside

932 1544 21.1165 contract inside

933 1545 21.1165 reflect

934 1546 21.1165 reflect

935 1548 21.1165 expand

936 1549 21.1165 reflect

937 1551 21.1165 contract outside

938 1553 21.1165 contract inside

939 1554 21.1165 reflect

940 1556 21.1164 expand

941 1558 21.1164 contract inside

942 1559 21.1164 reflect

943 1560 21.1164 reflect

944 1562 21.1164 contract inside

945 1563 21.1164 reflect

946 1565 21.1164 expand

947 1567 21.1164 expand

948 1568 21.1164 reflect

949 1570 21.1164 reflect

950 1571 21.1164 reflect

951 1573 21.1163 expand

952 1575 21.1163 contract inside

953 1576 21.1163 reflect

954 1578 21.1163 contract inside

955 1579 21.1163 reflect

956 1581 21.1162 expand

957 1582 21.1162 reflect

958 1584 21.1162 reflect

959 1586 21.1161 expand

960 1588 21.1161 contract outside

961 1590 21.1161 contract inside

962 1592 21.1161 expand

963 1593 21.1161 reflect

964 1594 21.1161 reflect

965 1595 21.1161 reflect

966 1597 21.116 reflect

967 1599 21.116 contract outside

968 1601 21.116 reflect

Exiting: Maximum number of function evaluations has been exceeded

- increase MaxFunEvals option.

Current function value: 21.116003

FMINSEARCH terminated.

**x =[2.6843,0.9882,0.2315,0.1443]; fval =21.1160;**

exitflag =0

output =

problemtype: 'unconstrained'

rngstate: [1x1 struct]

generations: 5

funccount: 2201

message: [1x228 char]

population =

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

2.7184 0.6880 0.4357 0.2958

0.2209 0.6020 0.1416 0.2518

2.8070 0.6541 0.2078 0.2958

2.8499 0.3998 0.1978 0.2958

1.0154 1.0314 0.1416 0.1386

2.4933 0.7900 0.5746 -0.2199

2.9797 1.0314 0.2169 0.0541

0.2785 1.0314 0.4389 0.4897

0.5688 1.0314 0.1416 0.2958

2.8499 1.0314 0.3012 0.2958

2.8499 1.0314 0.1416 0.3226

2.8499 1.0314 0.1416 0.2958

0.0314 0.7622 1.8427 0.2958

2.8499 1.0314 0.1416 0.3243

2.8499 0.6541 0.8759 0.1672

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.4897

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

1.7435 1.0314 0.7038 0.1230

2.4933 1.0314 0.1416 0.7718

2.8499 0.8693 0.1416 0.2958

0.4111 1.0314 1.6603 0.2958

2.8499 1.5850 0.0425 0.2958

0.5688 1.5175 0.6786 0.2958

2.8499 1.0314 1.2034 0.2958

2.7478 0.8920 0.0956 -0.1252

2.8499 1.0314 0.1416 0.2958

2.8499 0.0046 0.1416 -0.3279

2.1576 0.9619 0.1978 0.3909

2.8499 1.0314 0.3111 0.2958

2.8499 0.7317 0.1416 0.1078

0.1660 1.5850 0.0425 0.3896

2.8415 1.1230 0.3111 0.0494

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.8443 0.2958

-0.0119 -0.5753 0.6360 0.2451

1.0763 0.3864 0.1416 0.2958

2.8499 1.0314 0.4389 0.4897

2.8499 0.6541 0.4886 0.2958

1.0763 0.3864 0.8214 -0.0493

2.8499 1.0314 0.1416 0.1078

2.8499 1.0314 0.1416 0.2958

2.8164 0.8033 0.1978 0.4623

2.6690 0.3368 0.7735 0.2958

2.8499 0.4128 0.8443 0.3763

0.9575 1.0314 0.9232 0.2958

2.8499 1.0314 0.1416 0.3644

0.7217 0.0405 0.7716 0.3243

2.7704 1.0314 0.1416 0.2958

2.5337 0.9561 0.1174 -0.0819

2.8499 0.9619 0.1416 0.3993

2.8499 1.0314 0.7303 0.2958

2.8499 1.0314 0.1416 0.2958

1.3565 1.0314 0.1416 0.2451

2.8499 1.0314 0.2967 0.1078

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

2.8499 0.8693 0.4389 0.1672

2.7184 1.0111 0.4357 0.3172

0.9575 0.7750 0.3111 0.4820

2.7390 1.4581 0.1416 0.5512

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

2.8499 0.2290 0.9390 0.2958

2.8499 1.0314 0.1416 0.2958

0.9502 1.0314 0.3354 0.2958

2.8499 1.0314 0.1416 0.2958

3.1602 0.7376 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

2.8499 -0.0718 1.3375 0.8331

2.8499 1.0314 0.1174 0.2958

2.8499 1.0314 1.0350 0.5872

2.8499 1.0314 0.3012 0.6596

2.8499 0.5899 0.1416 0.2958

2.8499 0.2290 0.1416 0.1386

2.8499 1.0314 0.1416 0.2958

2.8499 0.2626 0.1978 0.2920

0.2209 0.6020 0.1416 0.2518

0.1023 0.2535 0.8706 0.2756

3.1632 1.2007 0.1636 0.0636

2.4586 0.7750 0.3111 0.2958

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.9390 0.2958

2.4442 1.1578 0.8122 0.7550

2.8499 1.0314 0.1416 0.2958

2.8499 1.0314 0.1416 0.2958

2.8499 0.9421 0.6443 0.1078

2.8499 1.0314 0.1416 0.2958

3.3220 1.2665 0.2211 0.6860

0.9293 0.5797 0.1416 0.2607

2.9797 0.8298 0.2169 0.0541

2.8499 1.0314 0.1416 0.2958

2.6690 0.8950 0.5453 0.3867

3.0680 0.8421 0.0539 0.3644

3.1602 0.7376 0.1770 0.9891

scores =

1.0e+009 \*

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Sending a stop signal to all the labs ... stopped.

**Caculation finished and the elapsedTime= 23.3117hours;**

**x =[2.6843,0.9882,0.2315,0.1443]; fval =21.1160; AR =2.9506; Re =168.8122;**

**P\_asterisk =21.1179; L =1.0001; delta =7.4645e-005;**

**penaltyfun1 =0.1493; penaltyfun2 =0; penaltyfun5 =0; obj\_function =21.2672;**

**x=[2.6842518e+000 9.8818826e-001 2.3149361e-001 1.4433740e-001];**

**P\_asterisk =21.1160; L =1.0000; delta =5.1549e-008;**

**penaltyfun1 =1.0310e-004; penaltyfun2 =0; penaltyfun5 =0; obj\_function =21.1161;**

**F\_vertical\_to\_horiz\_rms =0.8960; P\_aero\_aver\_to\_inertia\_aver =5.7343;**