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

Best Mean Stall

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

1 200 20.86 1.288e+008 0

2 300 20.86 1.136e+006 1

3 400 20.86 8531 2

4 500 20.86 3650 3

5 600 20.86 2533 4

Optimization terminated: maximum number of generations exceeded.

Switching to the hybrid optimization algorithm (FMINSEARCH).

Iteration Func-count min f(x) Procedure

0 1 20.856

1 5 20.856 initial simplex

2 6 20.856 reflect

3 8 20.856 contract inside

4 10 20.856 contract outside

5 12 20.856 contract inside

6 14 20.856 contract inside

7 16 20.856 contract inside

8 18 20.856 contract inside

9 19 20.856 reflect

10 21 20.856 contract inside

11 23 20.856 contract inside

12 25 20.856 contract inside

13 27 20.856 contract inside

14 29 20.856 contract inside

15 31 20.856 contract inside

16 33 20.856 contract inside

17 35 20.856 contract inside

18 37 20.856 contract inside

19 39 20.856 contract inside

20 41 20.856 contract inside

21 43 20.856 contract inside

22 45 20.856 contract inside

23 46 20.856 reflect

24 48 20.856 contract inside

25 50 20.8026 contract inside

26 52 20.8026 contract inside

27 54 20.8026 contract inside

28 55 20.8026 reflect

29 57 20.7223 contract inside

30 59 20.7223 contract inside

31 61 20.7121 contract inside

32 63 20.7121 contract inside

33 65 20.6457 reflect

34 67 20.6457 contract outside

35 69 20.6457 contract inside

36 70 20.6457 reflect

37 72 20.6457 contract inside

38 74 20.6457 contract inside

39 75 20.6457 reflect

40 77 20.6457 contract inside

41 79 20.6457 contract inside

42 80 20.6457 reflect

43 81 20.6457 reflect

44 82 20.6457 reflect

45 84 20.6457 contract inside

46 86 20.6457 contract inside

47 88 20.6457 contract inside

48 90 20.6432 reflect

49 92 20.6432 contract inside

50 94 20.643 contract inside

51 96 20.6394 contract inside

52 98 20.6394 contract inside

53 100 20.6394 contract inside

54 102 20.6386 contract inside

55 104 20.6341 reflect

56 106 20.6341 contract inside

57 108 20.6341 contract outside

58 109 20.6341 reflect

59 111 20.6339 reflect

60 112 20.6339 reflect

61 113 20.6339 reflect

62 115 20.6339 contract inside

63 117 20.6327 contract inside

64 119 20.6313 reflect

65 121 20.6313 contract inside

66 123 20.6313 contract inside

67 124 20.6313 reflect

68 126 20.6313 contract inside

69 127 20.6313 reflect

70 129 20.6313 contract inside

71 131 20.6313 contract inside

72 133 20.631 reflect

73 135 20.631 contract inside

74 137 20.631 contract outside

75 138 20.631 reflect

76 140 20.631 contract inside

77 142 20.631 contract inside

78 144 20.631 contract inside

79 146 20.631 contract outside

80 148 20.631 contract inside

81 149 20.631 reflect

82 151 20.631 contract inside

83 153 20.6309 expand

84 154 20.6309 reflect

85 156 20.6309 contract inside

86 158 20.6307 expand

87 159 20.6307 reflect

88 161 20.6307 contract inside

89 163 20.6307 contract inside

90 165 20.6307 contract outside

91 167 20.6307 contract inside

92 169 20.6307 contract inside

93 170 20.6307 reflect

94 172 20.6307 reflect

95 173 20.6307 reflect

96 175 20.6307 contract inside

97 177 20.6307 contract inside

98 179 20.6307 contract inside

99 181 20.6307 contract inside

100 183 20.6307 contract inside

101 185 20.6307 contract inside

102 187 20.6307 contract inside

103 188 20.6307 reflect

104 190 20.6306 expand

105 191 20.6306 reflect

106 193 20.6306 reflect

107 195 20.6306 contract inside

108 196 20.6306 reflect

109 198 20.6306 contract inside

110 199 20.6306 reflect

111 201 20.6306 contract inside

112 203 20.6306 contract inside

113 205 20.6306 contract inside

114 207 20.6306 contract inside

115 209 20.6306 contract inside

116 211 20.6306 reflect

117 213 20.6306 contract inside

118 215 20.6306 contract outside

119 217 20.6306 contract inside

120 218 20.6306 reflect

121 220 20.6306 contract inside

122 222 20.6306 contract inside

123 224 20.6306 contract inside

124 226 20.6306 reflect

125 228 20.6306 contract inside

126 230 20.6306 contract inside

127 232 20.6306 contract inside

128 233 20.6306 reflect

129 235 20.6306 contract inside

130 237 20.6306 expand

131 239 20.6306 expand

132 241 20.6306 contract inside

133 242 20.6306 reflect

134 243 20.6306 reflect

135 244 20.6306 reflect

136 246 20.6306 expand

137 248 20.6306 expand

138 250 20.6306 contract inside

139 251 20.6306 reflect

140 253 20.6306 expand

141 254 20.6306 reflect

142 256 20.6306 expand

143 258 20.6306 expand

144 259 20.6306 reflect

145 261 20.6306 expand

146 263 20.6306 expand

147 264 20.6306 reflect

148 266 20.6305 expand

149 268 20.6305 expand

150 269 20.6305 reflect

151 271 20.6304 expand

152 273 20.6303 expand

153 274 20.6303 reflect

154 276 20.6302 expand

155 278 20.63 expand

156 279 20.63 reflect

157 281 20.6298 expand

158 283 20.6294 expand

159 284 20.6294 reflect

160 286 20.6289 expand

161 288 20.6282 expand

162 289 20.6282 reflect

163 291 20.6273 expand

164 293 20.6261 expand

165 294 20.6261 reflect

166 296 20.6249 expand

167 298 20.624 expand

168 299 20.624 reflect

169 301 20.6239 reflect

170 302 20.6239 reflect

171 304 20.6239 contract inside

172 306 20.6239 contract inside

173 308 20.6239 contract outside

174 310 20.6239 contract inside

175 312 20.6239 contract inside

176 314 20.6239 contract inside

177 316 20.6239 contract inside

178 317 20.6239 reflect

179 319 20.6239 reflect

180 321 20.6239 contract inside

181 323 20.6239 contract inside

182 324 20.6239 reflect

183 326 20.6239 contract inside

184 328 20.6239 expand

185 330 20.6239 expand

186 331 20.6239 reflect

187 333 20.6239 expand

188 335 20.6239 expand

189 336 20.6239 reflect

190 338 20.6238 expand

191 340 20.6238 expand

192 341 20.6238 reflect

193 342 20.6238 reflect

194 344 20.6237 expand

195 346 20.6236 expand

196 347 20.6236 reflect

197 349 20.6235 expand

198 351 20.6233 expand

199 352 20.6233 reflect

200 354 20.623 expand

201 356 20.6226 expand

202 357 20.6226 reflect

203 359 20.6223 expand

204 361 20.622 reflect

205 363 20.622 contract inside

206 364 20.622 reflect

207 366 20.622 contract inside

208 368 20.622 contract inside

209 370 20.622 contract inside

210 372 20.622 contract inside

211 373 20.622 reflect

212 375 20.6216 expand

213 377 20.6216 reflect

214 379 20.6216 contract inside

215 381 20.6213 expand

216 382 20.6213 reflect

217 384 20.6213 contract inside

218 386 20.6212 reflect

219 388 20.6209 expand

220 390 20.6207 expand

221 392 20.6204 expand

222 394 20.6204 expand

223 395 20.6204 reflect

224 396 20.6204 reflect

225 397 20.6204 reflect

226 399 20.6204 contract inside

227 401 20.6204 contract inside

228 403 20.6204 contract inside

229 405 20.6204 contract outside

230 407 20.6203 reflect

231 409 20.6203 contract inside

232 411 20.6203 contract inside

233 413 20.6202 expand

234 414 20.6202 reflect

235 416 20.6202 contract inside

236 417 20.6202 reflect

237 419 20.6202 contract inside

238 421 20.6202 contract inside

239 423 20.6202 contract inside

240 425 20.6202 contract inside

241 427 20.6202 contract inside

242 429 20.6202 reflect

243 431 20.6202 contract inside

244 432 20.6202 reflect

245 434 20.6202 contract outside

246 436 20.6202 contract inside

247 438 20.6202 contract inside

248 439 20.6202 reflect

249 441 20.6202 contract inside

250 443 20.6202 contract inside

251 444 20.6202 reflect

252 446 20.6202 reflect

253 448 20.6202 contract inside

254 449 20.6202 reflect

255 451 20.6202 contract inside

256 453 20.6202 contract inside

257 455 20.6202 contract inside

258 456 20.6202 reflect

259 458 20.6202 contract inside

260 460 20.6202 contract inside

261 462 20.6202 contract outside

262 464 20.6202 reflect

263 466 20.6202 contract inside

264 468 20.6202 contract inside

265 470 20.6202 contract inside

266 472 20.6202 contract inside

267 474 20.6202 reflect

268 476 20.6202 contract inside

269 478 20.6202 expand

270 480 20.6202 contract inside

271 482 20.6202 contract inside

272 484 20.6202 contract inside

273 486 20.6202 reflect

274 488 20.6202 reflect

275 490 20.6202 contract inside

276 491 20.6202 reflect

277 493 20.6202 contract inside

278 495 20.6202 reflect

279 497 20.6202 contract inside

280 499 20.6202 contract inside

281 501 20.6202 contract inside

282 503 20.6202 reflect

283 504 20.6202 reflect

284 506 20.6202 contract inside

285 508 20.6202 reflect

286 509 20.6202 reflect

287 511 20.6202 reflect

288 513 20.6202 contract inside

289 515 20.6202 contract inside

290 517 20.6202 contract inside

291 519 20.6202 contract inside

292 520 20.6202 reflect

293 522 20.6202 contract inside

294 524 20.6202 expand

295 526 20.6202 contract inside

296 527 20.6202 reflect

297 529 20.6202 contract inside

298 531 20.6202 contract inside

299 533 20.6202 contract inside

300 534 20.6202 reflect

301 536 20.6202 contract inside

302 538 20.6202 expand

303 540 20.6202 contract inside

304 541 20.6202 reflect

305 543 20.6202 reflect

306 545 20.6202 contract inside

307 547 20.6202 expand

308 548 20.6202 reflect

309 550 20.6202 reflect

310 552 20.6202 expand

311 553 20.6202 reflect

312 554 20.6202 reflect

313 556 20.6202 expand

314 558 20.6202 expand

315 559 20.6202 reflect

316 561 20.6202 expand

317 563 20.6202 expand

318 564 20.6202 reflect

319 566 20.6202 expand

320 568 20.6202 expand

321 569 20.6202 reflect

322 571 20.6202 expand

323 573 20.6202 expand

324 574 20.6202 reflect

325 576 20.6202 expand

326 577 20.6202 reflect

327 579 20.6202 expand

328 580 20.6202 reflect

329 582 20.6202 expand

330 584 20.6202 expand

331 585 20.6202 reflect

332 587 20.6202 expand

333 588 20.6202 reflect

334 590 20.6202 expand

335 591 20.6202 reflect

336 593 20.6202 contract inside

337 595 20.6202 expand

338 597 20.6202 expand

339 598 20.6202 reflect

340 600 20.6201 expand

341 602 20.6201 expand

342 603 20.6201 reflect

343 605 20.6201 expand

344 607 20.62 expand

345 608 20.62 reflect

346 610 20.62 expand

347 612 20.6198 expand

348 613 20.6198 reflect

349 615 20.6197 expand

350 617 20.6195 expand

351 619 20.6192 expand

352 620 20.6192 reflect

353 622 20.6186 expand

354 624 20.6181 expand

355 625 20.6181 reflect

356 627 20.617 expand

357 629 20.616 expand

358 631 20.6159 reflect

359 632 20.6159 reflect

360 634 20.6159 contract inside

361 635 20.6159 reflect

362 637 20.6159 contract inside

363 639 20.6159 contract outside

364 641 20.6156 reflect

365 643 20.6156 contract inside

366 645 20.6156 contract inside

367 646 20.6156 reflect

368 648 20.6153 expand

369 650 20.6153 contract inside

370 652 20.615 expand

371 654 20.6144 expand

372 656 20.6144 contract inside

373 658 20.614 expand

374 659 20.614 reflect

375 661 20.613 expand

376 663 20.6121 expand

377 664 20.6121 reflect

378 666 20.612 expand

379 668 20.6106 expand

380 670 20.6105 reflect

381 672 20.6105 contract inside

382 673 20.6105 reflect

383 675 20.6082 expand

384 676 20.6082 reflect

385 677 20.6082 reflect

386 679 20.6056 expand

387 681 20.6024 expand

388 682 20.6024 reflect

389 684 20.602 reflect

390 685 20.602 reflect

391 687 20.602 contract inside

392 689 20.5969 expand

393 691 20.5969 contract inside

394 693 20.5932 expand

395 694 20.5932 reflect

396 695 20.5932 reflect

397 697 20.5887 expand

398 698 20.5887 reflect

399 699 20.5887 reflect

400 700 20.5887 reflect

401 702 20.5887 contract inside

402 704 20.5834 expand

403 705 20.5834 reflect

404 706 20.5834 reflect

405 708 20.5805 expand

406 710 20.5744 expand

407 712 20.5744 contract inside

408 713 20.5744 reflect

409 715 20.5708 expand

410 716 20.5708 reflect

411 718 20.5669 reflect

412 719 20.5669 reflect

413 721 20.5657 reflect

414 723 20.5657 contract inside

415 725 20.5634 reflect

416 726 20.5634 reflect

417 728 20.5634 contract inside

418 730 20.5629 contract outside

419 732 20.5629 contract outside

420 734 20.5598 expand

421 735 20.5598 reflect

422 737 20.5598 contract inside

423 738 20.5598 reflect

424 740 20.5598 contract inside

425 741 20.5598 reflect

426 743 20.557 expand

427 744 20.557 reflect

428 745 20.557 reflect

429 747 20.5541 expand

430 748 20.5541 reflect

431 750 20.5541 contract inside

432 752 20.5517 expand

433 754 20.5517 contract inside

434 755 20.5517 reflect

435 757 20.5483 expand

436 758 20.5483 reflect

437 760 20.5478 reflect

438 761 20.5478 reflect

439 763 20.5451 reflect

440 765 20.5451 contract outside

441 766 20.5451 reflect

442 767 20.5451 reflect

443 768 20.5451 reflect

444 770 20.5451 contract outside

445 772 20.5435 expand

446 774 20.5421 reflect

447 776 20.5417 reflect

448 778 20.5406 expand

449 779 20.5406 reflect

450 781 20.5405 reflect

451 783 20.539 reflect

452 785 20.539 contract outside

453 787 20.5372 reflect

454 789 20.5364 reflect

455 791 20.5364 contract outside

456 792 20.5364 reflect

457 794 20.5364 contract inside

458 796 20.5364 contract inside

459 798 20.5364 contract inside

460 800 20.5361 contract inside

461 802 20.5361 contract inside

462 804 20.535 expand

463 805 20.535 reflect

464 807 20.535 contract inside

465 808 20.535 reflect

466 810 20.5345 expand

467 812 20.5333 expand

468 813 20.5333 reflect

469 814 20.5333 reflect

470 816 20.5331 reflect

471 817 20.5331 reflect

472 819 20.5326 expand

473 821 20.5312 reflect

474 822 20.5312 reflect

475 824 20.5299 reflect

476 825 20.5299 reflect

477 827 20.5299 contract inside

478 829 20.5299 contract outside

479 831 20.5293 reflect

480 833 20.5291 expand

481 835 20.5278 reflect

482 836 20.5278 reflect

483 838 20.5275 reflect

484 840 20.5275 contract outside

485 841 20.5275 reflect

486 843 20.5267 reflect

487 845 20.5255 expand

488 847 20.5255 contract inside

489 848 20.5255 reflect

490 850 20.5236 expand

491 851 20.5236 reflect

492 853 20.5225 expand

493 855 20.5225 contract inside

494 856 20.5225 reflect

495 858 20.5225 contract inside

496 860 20.5201 expand

497 861 20.5201 reflect

498 863 20.5183 expand

499 865 20.5183 contract outside

500 866 20.5183 reflect

501 868 20.518 reflect

502 870 20.518 contract inside

503 872 20.5156 expand

504 873 20.5156 reflect

505 875 20.5156 contract inside

506 877 20.5149 reflect

507 878 20.5149 reflect

508 880 20.5126 expand

509 882 20.5126 contract outside

510 883 20.5126 reflect

511 884 20.5126 reflect

512 886 20.5117 reflect

513 888 20.5116 reflect

514 890 20.5111 contract outside

515 892 20.5103 expand

516 894 20.5078 expand

517 895 20.5078 reflect

518 897 20.5077 reflect

519 899 20.5077 contract inside

520 901 20.5077 contract inside

521 903 20.5077 contract inside

522 905 20.5077 contract inside

523 907 20.5071 reflect

524 908 20.5071 reflect

525 910 20.5071 contract outside

526 912 20.5054 expand

527 913 20.5054 reflect

528 914 20.5054 reflect

529 916 20.5054 contract inside

530 918 20.5038 expand

531 920 20.5038 contract outside

532 921 20.5038 reflect

533 923 20.5025 expand

534 924 20.5025 reflect

535 925 20.5025 reflect

536 927 20.5017 expand

537 929 20.5017 contract outside

538 931 20.5007 expand

539 933 20.4992 expand

540 934 20.4992 reflect

541 936 20.4992 contract inside

542 938 20.4974 expand

543 939 20.4974 reflect

544 940 20.4974 reflect

545 942 20.4974 contract outside

546 944 20.4967 reflect

547 945 20.4967 reflect

548 946 20.4967 reflect

549 948 20.4967 contract inside

550 949 20.4967 reflect

551 951 20.4962 contract inside

552 952 20.4962 reflect

553 954 20.4956 expand

554 956 20.4952 reflect

555 958 20.4952 contract inside

556 960 20.4942 expand

557 962 20.4942 contract outside

558 963 20.4942 reflect

559 965 20.4942 contract outside

560 966 20.4942 reflect

561 968 20.4939 reflect

562 970 20.4939 contract inside

563 972 20.4938 reflect

564 974 20.4937 contract outside

565 976 20.4935 expand

566 978 20.4934 reflect

567 979 20.4934 reflect

568 981 20.4932 reflect

569 982 20.4932 reflect

570 984 20.4929 contract inside

571 986 20.4929 contract outside

572 988 20.4929 reflect

573 990 20.4927 reflect

574 992 20.4923 expand

575 994 20.4923 contract inside

576 995 20.4923 reflect

577 996 20.4923 reflect

578 998 20.4916 expand

579 999 20.4916 reflect

580 1000 20.4916 reflect

581 1001 20.4916 reflect

582 1003 20.4915 expand

583 1005 20.4907 expand

584 1006 20.4907 reflect

585 1008 20.4902 reflect

586 1009 20.4902 reflect

587 1011 20.4901 contract outside

588 1013 20.4901 contract inside

589 1014 20.4901 reflect

590 1016 20.4898 reflect

591 1018 20.4898 contract outside

592 1020 20.4898 contract inside

593 1022 20.4898 contract outside

594 1024 20.4898 reflect

595 1025 20.4898 reflect

596 1027 20.4896 reflect

597 1028 20.4896 reflect

598 1030 20.4892 expand

599 1032 20.4892 contract inside

600 1033 20.4892 reflect

601 1035 20.4891 reflect

602 1037 20.4888 reflect

603 1039 20.4886 expand

604 1040 20.4886 reflect

605 1041 20.4886 reflect

606 1043 20.4881 expand

607 1044 20.4881 reflect

608 1045 20.4881 reflect

609 1047 20.4881 contract inside

610 1049 20.4878 expand

611 1050 20.4878 reflect

612 1051 20.4878 reflect

613 1053 20.4876 reflect

614 1055 20.4868 expand

615 1056 20.4868 reflect

616 1057 20.4868 reflect

617 1058 20.4868 reflect

618 1060 20.4863 reflect

619 1062 20.4863 contract inside

620 1064 20.4863 contract outside

621 1066 20.4859 expand

622 1068 20.4859 contract outside

623 1070 20.4859 contract inside

624 1072 20.4853 expand

625 1074 20.4853 contract inside

626 1075 20.4853 reflect

627 1076 20.4853 reflect

628 1078 20.485 expand

629 1079 20.485 reflect

630 1081 20.485 contract inside

631 1083 20.4848 expand

632 1085 20.4848 contract outside

633 1087 20.4846 reflect

634 1089 20.4846 contract inside

635 1090 20.4846 reflect

636 1092 20.4845 reflect

637 1094 20.4845 contract inside

638 1096 20.4845 contract inside

639 1097 20.4845 reflect

640 1099 20.4843 expand

641 1101 20.4843 contract inside

642 1103 20.4841 reflect

643 1105 20.4841 contract inside

644 1107 20.4841 contract inside

645 1109 20.4841 reflect

646 1110 20.4841 reflect

647 1112 20.4841 contract inside

648 1114 20.4841 contract inside

649 1116 20.4841 contract inside

650 1118 20.4841 reflect

651 1120 20.484 reflect

652 1122 20.484 contract inside

653 1124 20.484 contract inside

654 1126 20.484 contract inside

655 1128 20.484 reflect

656 1130 20.484 contract inside

657 1131 20.484 reflect

658 1133 20.484 contract inside

659 1135 20.484 contract inside

660 1137 20.4839 expand

661 1138 20.4839 reflect

662 1139 20.4839 reflect

663 1141 20.4839 contract inside

664 1142 20.4839 reflect

665 1144 20.4839 reflect

666 1146 20.4839 contract inside

667 1148 20.4839 contract inside

668 1149 20.4839 reflect

669 1150 20.4839 reflect

670 1152 20.4839 contract inside

671 1154 20.4839 contract inside

672 1156 20.4839 contract inside

673 1158 20.4839 contract inside

674 1160 20.4839 contract inside

675 1162 20.4839 contract outside

676 1164 20.4839 contract inside

677 1165 20.4839 reflect

678 1167 20.4839 reflect

679 1168 20.4839 reflect

680 1170 20.4839 contract inside

681 1172 20.4839 contract inside

682 1173 20.4839 reflect

683 1175 20.4839 reflect

684 1177 20.4839 contract inside

685 1178 20.4839 reflect

686 1180 20.4839 reflect

687 1182 20.4839 contract inside

688 1184 20.4839 contract inside

689 1186 20.4839 reflect

690 1187 20.4839 reflect

691 1189 20.4839 contract inside

692 1190 20.4839 reflect

693 1192 20.4839 contract inside

694 1194 20.4839 expand

695 1196 20.4839 contract inside

696 1197 20.4839 reflect

697 1198 20.4839 reflect

698 1200 20.4839 contract outside

699 1202 20.4839 contract inside

700 1203 20.4839 reflect

701 1204 20.4839 reflect

702 1205 20.4839 reflect

703 1207 20.4839 expand

704 1209 20.4839 reflect

705 1211 20.4839 reflect

706 1213 20.4839 contract inside

707 1215 20.4839 contract inside

708 1217 20.4839 contract inside

709 1219 20.4839 contract inside

710 1221 20.4839 contract inside

711 1222 20.4839 reflect

712 1224 20.4839 contract inside

713 1226 20.4839 contract inside

714 1228 20.4839 contract inside

715 1230 20.4839 contract inside

716 1231 20.4839 reflect

717 1233 20.4839 contract inside

718 1235 20.4839 contract inside

719 1237 20.4839 contract inside

720 1239 20.4839 contract inside

721 1241 20.4839 reflect

722 1243 20.4839 contract outside

723 1244 20.4839 reflect

724 1246 20.4839 contract inside

725 1247 20.4839 reflect

726 1249 20.4839 contract inside

727 1251 20.4839 contract outside

728 1253 20.4839 reflect

729 1255 20.4839 contract inside

730 1257 20.4839 contract inside

731 1259 20.4839 contract inside

732 1261 20.4839 contract inside

733 1262 20.4839 reflect

734 1264 20.4839 reflect

735 1266 20.4839 contract outside

736 1268 20.4839 expand

737 1270 20.4839 contract inside

738 1272 20.4839 reflect

739 1274 20.4839 reflect

740 1276 20.4839 reflect

741 1278 20.4839 contract inside

742 1280 20.4839 reflect

743 1282 20.4839 expand

744 1284 20.4839 reflect

745 1286 20.4839 contract inside

746 1287 20.4839 reflect

747 1289 20.4839 reflect

748 1291 20.4839 contract inside

749 1292 20.4839 reflect

750 1294 20.4839 reflect

751 1296 20.4839 expand

752 1298 20.4839 contract inside

753 1300 20.4839 contract inside

754 1301 20.4839 reflect

755 1303 20.4839 contract inside

756 1305 20.4839 contract inside

757 1307 20.4839 contract inside

758 1309 20.4839 contract inside

759 1310 20.4839 reflect

760 1312 20.4839 reflect

761 1314 20.4839 contract inside

762 1316 20.4839 contract inside

763 1317 20.4839 reflect

764 1319 20.4839 reflect

765 1321 20.4839 contract inside

766 1323 20.4839 contract inside

767 1325 20.4839 contract inside

768 1327 20.4839 contract inside

769 1329 20.4839 contract inside

770 1330 20.4839 reflect

771 1331 20.4839 reflect

772 1333 20.4839 contract inside

773 1335 20.4839 contract inside

774 1337 20.4839 contract inside

775 1339 20.4839 contract inside

776 1341 20.4839 reflect

777 1343 20.4839 contract inside

778 1345 20.4839 contract inside

779 1347 20.4839 contract inside

780 1349 20.4839 reflect

781 1350 20.4839 reflect

782 1352 20.4839 contract inside

783 1354 20.4839 reflect

784 1356 20.4839 contract inside

785 1358 20.4839 contract inside

786 1360 20.4839 contract inside

787 1362 20.4839 contract inside

788 1364 20.4839 contract inside

789 1366 20.4839 contract inside

790 1368 20.4839 contract inside

791 1370 20.4839 contract inside

792 1372 20.4839 reflect

793 1374 20.4839 contract outside

794 1375 20.4839 reflect

795 1376 20.4839 reflect

796 1378 20.4839 contract inside

797 1380 20.4839 reflect

798 1382 20.4839 contract inside

799 1384 20.4839 reflect

800 1386 20.4839 contract inside

801 1388 20.4839 contract outside

802 1390 20.4839 contract inside

803 1392 20.4839 contract inside

804 1393 20.4839 reflect

805 1394 20.4839 reflect

806 1395 20.4839 reflect

807 1397 20.4839 contract inside

808 1398 20.4839 reflect

809 1400 20.4839 contract inside

810 1402 20.4839 contract outside

811 1403 20.4839 reflect

812 1404 20.4839 reflect

813 1406 20.4839 contract inside

814 1407 20.4839 reflect

815 1413 20.4839 shrink

816 1415 20.4839 reflect

817 1416 20.4839 reflect

818 1417 20.4839 reflect

819 1423 20.4839 shrink

820 1425 20.4839 contract outside

821 1426 20.4839 reflect

822 1432 20.4839 shrink

823 1434 20.4839 contract inside

824 1436 20.4839 reflect

825 1442 20.4839 shrink

826 1443 20.4839 reflect

827 1444 20.4839 reflect

828 1446 20.4839 expand

829 1452 20.4839 shrink

830 1453 20.4839 reflect

831 1455 20.4839 reflect

832 1456 20.4839 reflect

833 1458 20.4839 reflect

834 1459 20.4839 reflect

835 1461 20.4839 reflect

836 1463 20.4839 contract inside

837 1465 20.4839 contract inside

838 1466 20.4839 reflect

839 1467 20.4839 reflect

840 1473 20.4839 shrink

841 1475 20.4839 reflect

842 1477 20.4839 reflect

843 1478 20.4839 reflect

844 1480 20.4839 contract outside

845 1486 20.4839 shrink

846 1487 20.4839 reflect

847 1488 20.4839 reflect

848 1494 20.4839 shrink

849 1495 20.4839 reflect

850 1497 20.4839 contract inside

851 1499 20.4839 reflect

852 1505 20.4839 shrink

853 1506 20.4839 reflect

854 1508 20.4839 contract outside

855 1510 20.4839 contract inside

856 1512 20.4839 contract inside

857 1518 20.4839 shrink

858 1519 20.4839 reflect

859 1525 20.4839 shrink

860 1527 20.4839 reflect

861 1529 20.4839 contract inside

Optimization terminated:

the current x satisfies the termination criteria using OPTIONS.TolX of 1.000000e-015

and F(X) satisfies the convergence criteria using OPTIONS.TolFun of 1.000000e-015

FMINSEARCH terminated.

**x =[2.4370,0.9626,0.3574,0.0000]; % fval =20.4839;**

exitflag =0

output =

problemtype: 'unconstrained'

rngstate: [1x1 struct]

generations: 5

funccount: 2129

message: [1x274 char]

population =

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3564 0.1304

2.4530 0.9720 0.3658 0.0878

0.9631 0.2499 1.0921 0.0878

2.4530 -0.3132 0.3658 0.4745

2.4530 0.9720 0.3658 0.0610

2.4530 1.4136 0.5093 0.1616

2.5497 0.9135 0.4119 0.3310

2.6303 0.9720 0.3658 0.0878

2.4530 0.9720 0.5403 0.0878

2.4530 1.7580 0.7434 0.5997

0.2889 0.9935 0.6530 -0.7462

2.0465 1.1351 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.8577

2.4530 0.9720 0.3658 0.0878

1.1864 0.6225 0.3658 1.5253

2.4530 0.9720 0.5410 0.4146

1.0560 -0.3681 0.3659 0.2385

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.0558

2.4530 0.9720 0.5330 0.0878

2.4530 0.9720 0.7667 0.0878

1.4708 1.0939 0.9763 0.0610

0.9777 0.1825 0.3658 0.0878

2.4893 0.5955 0.5403 1.0148

2.4530 0.1878 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4885 2.0703 0.5986 0.1021

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

0.7512 0.9720 0.3658 0.2385

2.4530 0.9578 0.3658 0.1304

1.4708 0.9578 0.9763 0.2511

2.4997 0.9578 0.6530 0.0878

2.4530 0.9720 0.7434 0.1129

2.5866 0.8437 0.2298 0.2021

2.4530 0.9720 0.3658 0.0878

2.2993 0.9720 0.3658 -0.0551

2.4530 0.9720 0.7434 0.4553

0.9088 0.9720 0.3658 0.0878

2.9847 0.3768 0.3658 0.1304

2.4530 1.1493 0.9153 0.0878

0.6154 0.9720 0.3658 0.0878

1.1864 0.9720 0.3658 0.3404

2.4530 0.9135 -0.0658 0.1450

2.4530 0.9720 0.3658 0.0878

1.2482 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.7966 0.9720 0.3658 0.0878

2.4530 0.9578 0.3658 0.0878

2.4530 0.9720 0.6319 0.1304

2.4530 0.3084 1.6344 0.1304

0.8359 0.9720 0.3658 0.0610

0.8459 0.5622 0.5403 0.0878

2.4530 0.9720 0.3658 0.0878

0.9855 0.9578 0.0587 0.0878

2.4530 0.9578 0.3658 0.0878

1.0130 0.2349 1.3320 0.3310

0.4393 0.8932 0.3658 0.3315

2.4530 0.9720 0.3658 0.0878

0.9855 0.9720 0.0587 0.1129

1.0608 0.2293 0.5433 0.0072

2.4530 0.9720 0.3658 -0.2532

2.4530 0.9578 0.3658 0.1021

2.4530 0.9720 0.3658 0.0878

2.4285 0.5622 0.2416 1.5351

2.4885 0.9107 0.1473 0.2820

2.4530 0.0723 0.1221 0.0878

2.4893 0.9720 0.3658 -0.1324

2.4530 0.9720 0.3658 0.0878

2.5866 0.8437 0.2298 0.2021

2.4530 0.9578 0.3659 0.2956

2.4893 0.9720 0.3658 0.0878

2.4530 0.5906 -0.4637 0.0777

2.4530 0.4441 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4530 0.9720 0.7434 0.1129

2.4530 0.9720 0.3658 0.0878

2.4530 0.6225 0.5093 0.1616

2.4530 0.6665 0.6563 -0.1888

2.4530 0.9578 -0.2003 0.0571

2.4530 0.9578 0.3658 0.8577

2.3130 -0.3132 0.5330 0.4745

1.0138 -0.2464 -0.0816 0.1543

2.4530 0.9720 0.1221 0.0878

1.5569 0.8526 0.3682 0.5905

1.0560 0.6220 0.3659 0.2385

2.3744 1.4407 0.4031 0.1217

2.4530 0.9720 0.3658 0.0878

2.4997 0.9578 0.8347 -0.0551

1.2378 -0.0138 0.4964 0.3929

0.0334 0.5622 0.2205 0.5273

2.4530 0.3602 0.3658 0.0878

2.4530 0.9720 0.3658 0.0878

2.4530 0.4196 0.3659 0.2956

scores =

1.0e+004 \*

0.0021

0.0021

0.2072

0.0021

0.5232

0.6252

0.0043

0.3721

0.0102

0.0381

0.0350

0.5454

0.9734

0.2342

0.0021

0.3470

0.0021

1.1299

0.0397

0.6179

0.0021

0.0021

0.0047

0.0336

0.0825

0.3074

0.5412

0.6589

0.4107

0.0021

0.8048

0.0021

0.0021

0.5080

0.0094

0.3413

0.0639

0.0752

0.0420

0.0021

0.2493

0.1006

0.4815

0.3104

0.1920

0.5234

0.4468

0.2900

0.0021

0.4270

0.0021

0.0021

0.0756

0.0060

0.0499

0.2804

0.4917

0.5024

0.0021

0.4805

0.0060

0.5162

0.5507

0.0021

0.4806

0.5230

0.1730

0.0071

0.0021

1.0005

0.2599

0.4481

0.1023

0.0021

0.0420

0.0225

0.0091

0.4057

0.3306

0.0021

0.0021

0.0752

0.0021

0.0724

0.1379

0.3051

0.3483

0.6266

0.6078

0.2416

0.5320

0.4785

0.3386

0.0021

0.1477

0.5655

0.7379

0.3574

0.0021

0.3402

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

Caculation finished and the elapsedTime= 22.0458hours

**x =[2.4370,0.9626,0.3574,0.0000]; % fval =20.4839;**

**P\_asterisk =20.4826; L =0.9999; delta = -6.8999e-005; AR =2.9029; Re =157.6046;**

**penaltyfun1 =0.1380; penaltyfun2 =0; penaltyfun5 =0; obj\_function =20.6206;**

**x =[2.4370405e+000 9.6264170e-001 3.5736539e-001 5.3735407e-012];**

**P\_asterisk =20.4839; L =1.0000; delta =-3.6880e-008**

**penaltyfun1 =7.3761e-005; penaltyfun2 =0; penaltyfun5 =0; obj\_function =20.4840;**

**F\_vertical\_to\_horiz\_rms =0.8855; P\_aero\_aver\_to\_inertia\_aver =5.8237;**