>> matlabpool open local1 12

Starting matlabpool using the 'local1' configuration ... connected to 12 labs.

Best Mean Stall

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

1 200 8.825 8190 0

2 300 8.825 7936 1

3 400 8.825 7642 2

4 500 8.825 7193 3

5 600 8.825 6474 4

6 700 8.825 6312 5

7 800 8.825 5957 6

8 900 8.825 6067 7

9 1000 8.825 8447 8

10 1100 8.825 1.053e+004 9

11 1200 8.825 7725 10

12 1300 8.825 7027 11

13 1400 8.825 8325 12

14 1500 8.185 4939 0

15 1600 8.185 4216 0

16 1700 8.185 4259 1

17 1800 5.921 7892 0

18 1900 5.921 4928 0

19 2000 5.921 1.261e+004 1

20 2100 5.921 6.158e+004 2

21 2200 5.921 2.694e+004 3

22 2300 5.921 3264 4

23 2400 5.921 3514 5

24 2500 5.921 2891 6

25 2600 5.921 2849 7

26 2700 5.921 2919 8

27 2800 5.921 2568 9

28 2900 5.921 2261 10

29 3000 5.921 2329 11

30 3100 5.921 2362 12

31 3200 5.921 2237 13

Optimization terminated: stop requested from plot function.

Switching to the hybrid optimization algorithm (FMINSEARCH).

Iteration Func-count min f(x) Procedure

0 1 5.92143

1 11 5.6189 initial simplex

2 12 5.6189 reflect

3 14 5.6189 contract inside

4 15 5.6189 reflect

5 17 5.6189 contract inside

6 18 5.6189 reflect

7 19 5.6189 reflect

8 21 5.6189 contract inside

9 23 5.6189 contract inside

10 25 5.6189 contract inside

11 27 5.6189 contract inside

12 29 5.6189 contract inside

13 30 5.6189 reflect

14 32 5.6189 contract inside

15 33 5.6189 reflect

16 35 5.6189 contract inside

17 37 5.6189 contract inside

18 39 5.6189 contract inside

19 41 5.6189 contract inside

20 43 5.6189 contract inside

21 45 5.6189 contract inside

22 47 5.6189 contract inside

23 49 5.6189 contract inside

24 51 5.6189 contract inside

25 53 5.6189 contract inside

26 55 5.6189 contract inside

27 57 5.6189 contract inside

28 59 5.6189 contract inside

29 61 5.6189 contract inside

30 63 5.6189 contract inside

31 65 5.6189 contract inside

32 67 5.6189 contract inside

33 69 5.6189 contract inside

34 71 5.6189 contract inside

35 73 5.6189 contract inside

36 75 5.6189 contract inside

37 77 5.6189 contract inside

38 79 5.6189 contract inside

39 81 5.6189 contract inside

40 83 5.6189 contract inside

41 85 5.6189 contract inside

42 87 5.6189 contract inside

43 89 5.6189 contract outside

44 91 5.6189 contract inside

45 93 5.6189 contract inside

46 95 5.6189 contract inside

47 97 5.6189 contract inside

48 99 5.6189 contract inside

49 101 5.6189 contract inside

50 103 5.6189 contract inside

51 105 5.6189 contract inside

52 107 5.39676 contract inside

53 108 5.39676 reflect

54 110 5.39676 contract inside

55 112 5.39676 contract inside

56 114 5.37621 contract inside

57 116 5.35278 contract inside

58 118 5.32136 contract inside

59 120 5.27621 contract inside

60 122 5.27621 contract outside

61 124 5.20721 contract inside

62 126 5.17286 contract inside

63 128 5.17286 contract inside

64 130 5.10242 contract inside

65 132 5.06731 contract inside

66 134 5.02107 contract inside

67 135 5.02107 reflect

68 137 5.02107 contract inside

69 139 5.02107 contract inside

70 141 5.02107 contract inside

71 143 5.00013 contract inside

72 145 5.00013 contract inside

73 147 4.96744 contract inside

74 149 4.94647 contract inside

75 151 4.94137 contract outside

76 153 4.93446 contract inside

77 155 4.91052 contract inside

78 157 4.91052 contract inside

79 159 4.89531 contract inside

80 161 4.89531 contract inside

81 163 4.88811 contract inside

82 165 4.88025 contract inside

83 166 4.88025 reflect

84 168 4.86716 contract inside

85 170 4.86716 contract inside

86 172 4.85738 contract inside

87 174 4.85048 contract inside

88 176 4.85048 contract outside

89 178 4.84487 contract inside

90 180 4.84487 contract inside

91 182 4.84031 contract inside

92 184 4.83866 contract inside

93 186 4.83257 contract inside

94 188 4.82623 contract inside

95 190 4.82067 contract inside

96 191 4.82067 reflect

97 193 4.81936 contract inside

98 195 4.81557 contract inside

99 197 4.81557 contract inside

100 199 4.81407 contract inside

101 200 4.81407 reflect

102 202 4.81407 contract inside

103 204 4.81351 contract inside

104 206 4.81045 contract inside

105 208 4.81045 contract inside

106 210 4.80786 contract inside

107 212 4.80377 contract inside

108 214 4.80015 contract inside

109 215 4.80015 reflect

110 217 4.80015 contract inside

111 219 4.80015 contract inside

112 221 4.79968 contract inside

113 223 4.79825 contract inside

114 224 4.79825 reflect

115 226 4.79825 contract inside

116 228 4.79825 contract inside

117 230 4.79825 contract inside

118 232 4.79786 contract inside

119 234 4.79639 contract inside

120 236 4.79397 contract inside

121 238 4.79228 contract inside

122 239 4.79228 reflect

123 241 4.79228 contract inside

124 243 4.79228 contract inside

125 245 4.79228 contract inside

126 247 4.79215 contract inside

127 249 4.79215 contract inside

128 251 4.79164 contract inside

129 253 4.79113 contract inside

130 254 4.79113 reflect

131 256 4.79095 contract inside

132 258 4.79095 contract inside

133 260 4.78983 contract inside

134 262 4.78983 contract outside

135 264 4.78927 contract inside

136 266 4.78927 contract inside

137 268 4.78927 contract inside

138 270 4.78922 contract inside

139 272 4.78922 contract inside

140 274 4.78894 contract inside

141 276 4.78871 contract inside

142 278 4.78844 contract inside

143 280 4.7883 contract outside

144 282 4.78824 contract inside

145 284 4.78813 contract inside

146 286 4.78798 contract inside

147 288 4.78779 contract inside

148 289 4.78779 reflect

149 291 4.78779 contract inside

150 293 4.78779 contract inside

151 295 4.78771 contract inside

152 297 4.78771 contract inside

153 299 4.7876 contract inside

154 301 4.78743 contract inside

155 303 4.78732 contract inside

156 304 4.78732 reflect

157 306 4.78732 contract inside

158 308 4.78727 contract inside

159 310 4.7872 contract inside

160 311 4.7872 reflect

161 313 4.7872 contract inside

162 314 4.7872 reflect

163 316 4.78715 contract inside

164 317 4.78715 reflect

165 319 4.78715 contract inside

166 321 4.78715 contract inside

167 323 4.78715 contract inside

168 325 4.78711 contract inside

169 327 4.78701 contract inside

170 329 4.78701 contract outside

171 331 4.78699 contract inside

172 333 4.78697 contract inside

173 335 4.78694 contract inside

174 337 4.78694 contract inside

175 339 4.78693 contract inside

176 341 4.7869 contract inside

177 342 4.7869 reflect

178 344 4.7869 contract inside

179 346 4.7869 contract inside

180 348 4.7869 contract inside

181 350 4.78686 contract inside

182 352 4.78684 contract inside

183 354 4.78682 contract inside

184 355 4.78682 reflect

185 357 4.78682 contract inside

186 359 4.78682 contract inside

187 361 4.78681 contract inside

188 363 4.78681 contract inside

189 365 4.78681 contract inside

190 367 4.7868 contract inside

191 369 4.7868 contract inside

192 371 4.78679 contract inside

193 373 4.78677 contract outside

194 375 4.78677 contract inside

195 377 4.78676 contract inside

196 379 4.78675 contract inside

197 380 4.78675 reflect

198 382 4.78675 contract inside

199 384 4.78675 contract inside

200 386 4.78675 contract outside

201 388 4.78675 contract inside

202 389 4.78675 reflect

203 391 4.78675 contract inside

204 393 4.78675 contract inside

205 395 4.78675 contract inside

206 397 4.78674 contract inside

207 399 4.78674 contract outside

208 401 4.78674 contract inside

209 403 4.78673 contract inside

210 405 4.78673 contract inside

211 407 4.78673 contract inside

212 409 4.78673 contract inside

213 411 4.78673 contract inside

214 413 4.78673 contract inside

215 415 4.78673 contract inside

216 417 4.78673 contract outside

217 419 4.78673 contract inside

218 421 4.78672 contract inside

219 423 4.78672 contract inside

220 424 4.78672 reflect

221 426 4.78672 contract inside

222 428 4.78672 contract inside

223 430 4.78672 contract inside

224 432 4.78672 contract inside

225 434 4.78672 contract inside

226 436 4.78672 contract inside

227 438 4.78672 contract inside

228 440 4.78672 contract inside

229 441 4.78672 reflect

230 443 4.78672 contract inside

231 445 4.78672 contract inside

232 447 4.78672 contract inside

233 449 4.78672 contract inside

234 451 4.78672 contract inside

235 453 4.78672 contract inside

236 455 4.78672 contract inside

237 456 4.78672 reflect

238 458 4.78672 contract inside

239 460 4.78672 contract inside

240 462 4.78672 contract inside

241 464 4.78671 contract inside

242 466 4.78671 contract inside

243 468 4.78671 contract inside

244 469 4.78671 reflect

245 471 4.78671 contract inside

246 473 4.78671 contract inside

247 475 4.78671 contract inside

248 477 4.78671 contract inside

249 479 4.78671 contract inside

250 481 4.78671 contract inside

251 483 4.78671 contract inside

252 484 4.78671 reflect

253 486 4.78671 contract inside

254 488 4.78671 contract inside

255 490 4.78671 contract inside

256 492 4.78671 contract inside

257 494 4.78671 contract inside

258 495 4.78671 reflect

259 497 4.78671 contract inside

260 499 4.78671 contract inside

261 501 4.78671 contract inside

262 503 4.78671 contract inside

263 505 4.78671 contract inside

264 507 4.78671 contract inside

265 509 4.78671 contract inside

266 511 4.78671 contract inside

267 512 4.78671 reflect

268 514 4.78671 contract inside

269 516 4.78671 contract inside

270 518 4.78671 contract inside

271 519 4.78671 reflect

272 521 4.78671 contract inside

273 523 4.78671 contract inside

274 525 4.78671 contract inside

275 527 4.78671 contract inside

276 529 4.78671 contract inside

277 531 4.78671 contract inside

278 533 4.78671 contract inside

279 535 4.78671 contract inside

280 536 4.78671 reflect

281 538 4.78671 contract inside

282 540 4.78671 contract inside

283 542 4.78671 contract inside

284 543 4.78671 reflect

285 545 4.78671 contract inside

286 547 4.78671 contract inside

287 549 4.78671 contract inside

288 551 4.78671 contract inside

289 553 4.78671 contract inside

290 555 4.78671 contract inside

291 557 4.78671 contract inside

292 559 4.78671 contract inside

293 560 4.78671 reflect

294 562 4.78671 contract inside

295 564 4.78671 contract inside

296 566 4.78671 contract inside

297 567 4.78671 reflect

298 569 4.78671 contract inside

299 571 4.78671 contract inside

300 573 4.78671 contract inside

301 575 4.78671 contract inside

302 577 4.78671 contract inside

303 579 4.78671 contract inside

304 581 4.78671 contract inside

305 582 4.78671 reflect

306 584 4.78671 contract inside

307 586 4.78671 contract inside

308 588 4.78671 contract inside

309 590 4.78671 contract inside

310 591 4.78671 reflect

311 593 4.78671 contract inside

312 595 4.78671 contract inside

313 597 4.78671 contract inside

314 599 4.78671 contract inside

315 601 4.78671 contract inside

316 603 4.78671 contract inside

317 605 4.78671 contract inside

318 607 4.78671 contract inside

319 608 4.78671 reflect

320 610 4.78671 contract inside

321 612 4.78671 contract inside

322 614 4.78671 contract inside

323 616 4.78671 contract inside

324 618 4.78671 contract inside

325 620 4.78671 contract inside

326 621 4.78671 reflect

327 623 4.78671 contract inside

328 625 4.78671 contract inside

329 627 4.78671 contract inside

330 629 4.78671 contract inside

331 631 4.78671 contract inside

332 633 4.78671 contract inside

333 634 4.78671 reflect

334 636 4.78671 contract inside

335 637 4.78671 reflect

336 639 4.78671 contract inside

337 641 4.78671 contract inside

338 642 4.78671 reflect

339 644 4.78671 contract inside

340 646 4.78671 contract outside

341 648 4.78671 contract inside

342 650 4.78671 contract inside

343 652 4.78671 contract inside

344 654 4.78671 contract inside

345 656 4.78671 contract inside

346 658 4.78671 contract inside

347 659 4.78671 reflect

348 661 4.78671 contract inside

349 663 4.78671 contract inside

350 665 4.78671 contract inside

351 667 4.78671 contract inside

352 668 4.78671 reflect

353 669 4.78671 reflect

354 671 4.78671 contract inside

355 673 4.78671 contract inside

356 674 4.78671 reflect

357 676 4.78671 contract inside

358 678 4.78671 contract inside

359 680 4.78671 contract inside

360 682 4.78671 contract inside

361 684 4.78671 contract inside

362 686 4.78671 contract inside

363 688 4.78671 contract inside

364 690 4.78671 contract outside

365 692 4.78671 contract inside

366 694 4.78671 contract inside

367 696 4.78671 contract inside

368 698 4.78671 contract inside

369 700 4.78671 contract inside

370 702 4.78671 contract outside

371 704 4.78671 contract inside

372 706 4.78671 contract inside

373 708 4.78671 contract inside

374 710 4.78671 contract inside

375 712 4.78671 contract inside

376 714 4.78671 contract inside

377 715 4.78671 reflect

378 717 4.78671 contract inside

379 719 4.78671 contract inside

380 721 4.78671 contract inside

381 723 4.78671 contract inside

382 725 4.78671 contract inside

383 727 4.78671 contract inside

384 728 4.78671 reflect

385 730 4.78671 contract inside

386 732 4.78671 contract outside

387 734 4.78671 contract inside

388 735 4.78671 reflect

389 737 4.78671 contract inside

390 739 4.78671 contract inside

391 740 4.78671 reflect

392 742 4.78671 contract inside

393 744 4.78671 contract inside

394 746 4.78671 contract inside

395 748 4.78671 contract inside

396 750 4.78671 contract inside

397 752 4.78671 contract inside

398 753 4.78671 reflect

399 754 4.78671 reflect

400 756 4.78671 contract inside

401 758 4.78671 contract inside

402 760 4.78671 contract inside

403 761 4.78671 reflect

404 763 4.78671 contract inside

405 765 4.78671 contract inside

406 766 4.78671 reflect

407 768 4.78671 contract outside

408 770 4.78671 contract outside

409 772 4.78671 contract inside

410 774 4.78671 contract inside

411 776 4.78671 contract outside

412 778 4.78671 contract inside

413 780 4.78671 contract inside

414 782 4.78671 contract inside

415 784 4.78671 contract inside

416 786 4.78671 contract inside

417 787 4.78671 reflect

418 788 4.78671 reflect

419 790 4.78671 contract inside

420 792 4.78671 contract inside

421 794 4.78671 contract inside

422 795 4.78671 reflect

423 797 4.78671 contract outside

424 799 4.78671 contract inside

425 801 4.78671 contract inside

426 802 4.78671 reflect

427 804 4.78671 contract outside

428 806 4.78671 contract inside

429 808 4.78671 contract inside

430 810 4.78671 contract outside

431 812 4.78671 contract inside

432 813 4.78671 reflect

433 815 4.78671 contract inside

434 817 4.78671 contract inside

435 819 4.78671 contract inside

436 821 4.78671 contract inside

437 822 4.78671 reflect

438 823 4.78671 reflect

439 825 4.78671 contract inside

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442 831 4.78671 reflect

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446 838 4.78671 contract inside

447 839 4.78671 reflect

448 841 4.78671 contract inside

449 843 4.78671 contract inside

450 845 4.78671 reflect

451 846 4.78671 reflect

452 847 4.78671 reflect

453 849 4.78671 contract inside

454 850 4.78671 reflect

455 852 4.78671 contract inside

456 854 4.78671 contract inside

457 856 4.78671 contract inside

458 858 4.78671 contract inside

459 870 4.78671 shrink

460 871 4.78671 reflect

461 872 4.78671 reflect

462 874 4.78671 contract inside

463 876 4.78671 contract inside

464 878 4.78671 contract inside

465 879 4.78671 reflect

466 880 4.78671 reflect

467 882 4.78671 reflect

468 884 4.78671 expand

469 886 4.78671 contract inside

470 888 4.78671 contract inside

471 889 4.78671 reflect

472 890 4.78671 reflect

473 891 4.78671 reflect

474 893 4.78671 reflect

475 895 4.78671 contract inside

476 897 4.78671 contract inside

477 899 4.78671 contract inside

478 900 4.78671 reflect

479 902 4.78671 contract inside

480 904 4.78671 reflect

481 906 4.78671 contract inside

482 908 4.78671 contract inside

483 910 4.78671 contract inside

484 912 4.78671 expand

485 924 4.78671 shrink

486 925 4.78671 reflect

487 926 4.78671 reflect

488 927 4.78671 reflect

489 928 4.78671 reflect

490 930 4.78671 contract inside

491 931 4.78671 reflect

492 932 4.78671 reflect

493 934 4.78671 contract inside

494 936 4.78671 expand

495 937 4.78671 reflect

496 938 4.78671 reflect

497 939 4.78671 reflect

498 940 4.78671 reflect

499 942 4.78671 expand

500 943 4.78671 reflect

501 945 4.78671 contract inside

502 946 4.78671 reflect

503 947 4.78671 reflect

504 948 4.78671 reflect

505 950 4.78671 reflect

506 952 4.78671 contract inside

507 954 4.78671 expand

508 955 4.78671 reflect

509 956 4.78671 reflect

510 958 4.78671 contract inside

511 960 4.78671 contract inside

512 962 4.78671 contract inside

513 964 4.78671 contract inside

514 965 4.78671 reflect

515 967 4.78671 contract inside

516 968 4.78671 reflect

517 969 4.78671 reflect

518 971 4.78671 contract inside

519 973 4.78671 contract inside

520 975 4.78671 contract inside

521 977 4.78671 reflect

522 978 4.78671 reflect

523 980 4.78671 expand

524 982 4.78671 contract inside

525 984 4.78671 contract inside

526 985 4.78671 reflect

527 986 4.78671 reflect

528 988 4.78671 contract inside

529 990 4.78671 contract inside

530 991 4.78671 reflect

531 992 4.78671 reflect

532 993 4.78671 reflect

533 995 4.78671 expand

534 997 4.78671 contract inside

535 998 4.78671 reflect

536 999 4.78671 reflect

537 1011 4.78671 shrink

538 1012 4.78671 reflect

539 1014 4.78671 expand

540 1015 4.78671 reflect

541 1016 4.78671 reflect

542 1017 4.78671 reflect

543 1018 4.78671 reflect

544 1020 4.78671 expand

545 1021 4.78671 reflect

546 1022 4.78671 reflect

547 1024 4.78671 contract inside

548 1025 4.78671 reflect

549 1027 4.78671 expand

550 1028 4.78671 reflect

551 1029 4.78671 reflect

552 1030 4.78671 reflect

553 1032 4.78671 expand

554 1033 4.78671 reflect

555 1035 4.78671 contract inside

556 1036 4.78671 reflect

557 1037 4.78671 reflect

558 1039 4.78671 expand

559 1040 4.78671 reflect

560 1042 4.78671 contract inside

561 1044 4.78671 contract inside

562 1046 4.78671 contract inside

563 1048 4.78671 contract inside

564 1050 4.78671 contract inside

565 1052 4.78671 contract inside

566 1054 4.78671 contract inside

567 1055 4.78671 reflect

568 1056 4.78671 reflect

569 1057 4.78671 reflect

570 1058 4.78671 reflect

571 1060 4.78671 expand

572 1061 4.78671 reflect

573 1062 4.78671 reflect

574 1064 4.78671 expand

575 1065 4.78671 reflect

576 1067 4.78671 contract inside

577 1068 4.78671 reflect

578 1069 4.78671 reflect

579 1070 4.78671 reflect

580 1072 4.78671 reflect

581 1074 4.78671 reflect

582 1076 4.78671 contract inside

583 1078 4.78671 contract inside

584 1079 4.78671 reflect

585 1081 4.78671 contract inside

586 1083 4.78671 expand

587 1084 4.78671 reflect

588 1086 4.78671 contract inside

589 1088 4.78671 contract inside

590 1090 4.78671 contract inside

591 1092 4.78671 contract inside

592 1094 4.78671 contract inside

593 1096 4.78671 contract inside

594 1097 4.78671 reflect

595 1098 4.78671 reflect

596 1099 4.78671 reflect

597 1101 4.78671 contract inside

598 1102 4.78671 reflect

599 1104 4.78671 contract inside

600 1106 4.78671 expand

601 1107 4.78671 reflect

602 1108 4.78671 reflect

603 1110 4.78671 expand

604 1111 4.78671 reflect

605 1112 4.78671 reflect

606 1114 4.78671 contract inside

607 1116 4.78671 contract inside

608 1117 4.78671 reflect

609 1118 4.78671 reflect

610 1120 4.78671 reflect

611 1122 4.78671 expand

612 1123 4.78671 reflect

613 1124 4.78671 reflect

614 1125 4.78671 reflect

615 1127 4.78671 expand

616 1128 4.78671 reflect

617 1129 4.78671 reflect

618 1130 4.78671 reflect

619 1132 4.78671 expand

620 1133 4.78671 reflect

621 1134 4.78671 reflect

622 1136 4.78671 contract inside

623 1137 4.78671 reflect

624 1138 4.78671 reflect

625 1140 4.78671 reflect

626 1142 4.78671 contract inside

627 1144 4.78671 contract inside

628 1145 4.78671 reflect

629 1146 4.78671 reflect

630 1148 4.78671 expand

631 1150 4.78671 contract inside

632 1151 4.78671 reflect

633 1153 4.78671 contract inside

634 1155 4.78671 contract inside

635 1157 4.78671 contract inside

636 1159 4.78671 contract inside

637 1161 4.78671 contract inside

638 1163 4.78671 contract inside

639 1165 4.78671 contract inside

640 1167 4.78671 contract inside

641 1169 4.78671 contract inside

642 1171 4.78671 contract inside

643 1173 4.78671 contract inside

644 1175 4.78671 contract inside

645 1177 4.78671 contract inside

646 1179 4.78671 contract inside

647 1181 4.78671 contract inside

648 1183 4.78671 contract inside

649 1185 4.78671 contract inside

650 1187 4.78671 contract inside

651 1189 4.78671 contract inside

652 1191 4.78671 contract inside

653 1193 4.78671 contract inside

654 1195 4.78671 contract inside

655 1196 4.78671 reflect

656 1197 4.78671 reflect

657 1198 4.78671 reflect

658 1199 4.78671 reflect

659 1200 4.78671 reflect

660 1212 4.78671 shrink

661 1213 4.78671 reflect

662 1215 4.78671 reflect

663 1217 4.78671 contract outside

664 1219 4.78671 contract inside

665 1221 4.78671 contract inside

666 1222 4.78671 reflect

667 1223 4.78671 reflect

668 1225 4.78671 contract inside

669 1227 4.78671 contract inside

670 1229 4.78671 contract inside

671 1231 4.78671 reflect

672 1232 4.78671 reflect

673 1234 4.78671 reflect

674 1236 4.78671 contract inside

675 1238 4.78671 reflect

676 1239 4.78671 reflect

677 1241 4.78671 reflect

678 1243 4.78671 contract inside

679 1244 4.78671 reflect

680 1246 4.78671 expand

681 1247 4.78671 reflect

682 1249 4.78671 contract inside

683 1250 4.78671 reflect

684 1252 4.78671 contract inside

685 1253 4.78671 reflect

686 1254 4.78671 reflect

687 1255 4.78671 reflect

688 1257 4.78671 expand

689 1258 4.78671 reflect

690 1259 4.78671 reflect

691 1260 4.78671 reflect

692 1262 4.78671 expand

693 1263 4.78671 reflect

694 1264 4.78671 reflect

695 1265 4.78671 reflect

696 1266 4.78671 reflect

697 1268 4.78671 expand

698 1269 4.78671 reflect

699 1270 4.78671 reflect

700 1271 4.78671 reflect

701 1273 4.78671 contract inside

702 1275 4.78671 expand

703 1277 4.78671 contract inside

704 1278 4.78671 reflect

705 1279 4.78671 reflect

706 1281 4.78671 contract inside

707 1283 4.78671 contract inside

708 1284 4.78671 reflect

709 1286 4.78671 contract inside

710 1287 4.78671 reflect

711 1289 4.78671 reflect

712 1291 4.78671 expand

713 1293 4.78671 contract inside

714 1295 4.78671 contract inside

715 1296 4.78671 reflect

716 1297 4.78671 reflect

717 1298 4.78671 reflect

718 1300 4.78671 expand

719 1301 4.78671 reflect

720 1302 4.78671 reflect

721 1304 4.78671 contract inside

722 1305 4.78671 reflect

723 1307 4.78671 expand

724 1308 4.78671 reflect

725 1309 4.78671 reflect

726 1311 4.78671 contract inside

727 1313 4.78671 contract inside

728 1314 4.78671 reflect

729 1316 4.78671 expand

730 1317 4.78671 reflect

731 1318 4.78671 reflect

732 1319 4.78671 reflect

733 1321 4.78671 contract inside

734 1323 4.78671 contract inside

735 1325 4.78671 expand

736 1326 4.78671 reflect

737 1327 4.78671 reflect

738 1329 4.78671 contract inside

739 1331 4.78671 contract inside

740 1332 4.78671 reflect

741 1333 4.78671 reflect

742 1335 4.78671 expand

743 1336 4.78671 reflect

744 1337 4.78671 reflect

745 1338 4.78671 reflect

746 1340 4.78671 reflect

747 1342 4.78671 expand

748 1343 4.78671 reflect

749 1344 4.78671 reflect

750 1345 4.78671 reflect

751 1347 4.78671 contract inside

752 1348 4.78671 reflect

753 1350 4.78671 expand

754 1351 4.78671 reflect

755 1352 4.78671 reflect

756 1354 4.78671 reflect

757 1356 4.78671 contract inside

758 1358 4.78671 contract inside

759 1359 4.78671 reflect

760 1361 4.78671 contract inside

761 1363 4.78671 contract inside

762 1365 4.78671 contract inside

763 1366 4.78671 reflect

764 1368 4.78671 contract inside

765 1370 4.78671 contract inside

766 1372 4.78671 contract inside

767 1374 4.78671 expand

768 1376 4.78671 contract inside

769 1378 4.78671 contract inside

770 1380 4.78671 contract inside

771 1382 4.78671 contract inside

772 1384 4.78671 contract inside

773 1386 4.78671 contract inside

774 1388 4.78671 contract inside

775 1390 4.78671 contract inside

776 1392 4.78671 contract inside

777 1394 4.78671 contract inside

778 1396 4.78671 contract inside

779 1398 4.78671 contract inside

780 1400 4.78671 contract inside

781 1402 4.78671 contract inside

782 1404 4.78671 contract inside

783 1406 4.78671 contract inside

784 1408 4.78671 contract inside

785 1410 4.78671 contract inside

786 1412 4.78671 contract inside

787 1414 4.78671 contract inside

788 1416 4.78671 contract inside

789 1418 4.78671 contract inside

790 1420 4.78671 contract inside

791 1421 4.78671 reflect

792 1423 4.78671 contract inside

793 1424 4.78671 reflect

794 1426 4.78671 contract inside

795 1428 4.78671 contract inside

796 1430 4.78671 contract inside

797 1432 4.78671 contract inside

798 1434 4.78671 contract inside

799 1436 4.78671 contract inside

800 1438 4.78671 contract inside

801 1439 4.78671 reflect

802 1441 4.78671 contract inside

803 1442 4.78671 reflect

804 1443 4.78671 reflect

805 1444 4.78671 reflect

806 1445 4.78671 reflect

807 1457 4.78671 shrink

808 1458 4.78671 reflect

809 1460 4.78671 reflect

810 1461 4.78671 reflect

811 1463 4.78671 reflect

812 1464 4.78671 reflect

813 1465 4.78671 reflect

814 1467 4.78671 reflect

815 1469 4.78671 expand

816 1470 4.78671 reflect

817 1471 4.78671 reflect

818 1473 4.78671 contract inside

819 1475 4.78671 contract inside

820 1477 4.78671 contract inside

821 1478 4.78671 reflect

822 1479 4.78671 reflect

823 1480 4.78671 reflect

824 1482 4.78671 contract inside

825 1483 4.78671 reflect

826 1485 4.78671 contract inside

827 1487 4.78671 contract inside

828 1489 4.78671 expand

829 1491 4.78671 contract inside

830 1493 4.78671 contract inside

831 1494 4.78671 reflect

832 1495 4.78671 reflect

833 1496 4.78671 reflect

834 1498 4.78671 contract inside

835 1510 4.78671 shrink

836 1511 4.78671 reflect

837 1513 4.78671 contract inside

838 1525 4.78671 shrink

839 1526 4.78671 reflect

840 1527 4.78671 reflect

841 1528 4.78671 reflect

842 1529 4.78671 reflect

843 1530 4.78671 reflect

844 1531 4.78671 reflect

845 1533 4.78671 contract outside

846 1535 4.78671 contract outside

847 1536 4.78671 reflect

848 1537 4.78671 reflect

849 1538 4.78671 reflect

850 1539 4.78671 reflect

851 1541 4.78671 contract inside

852 1553 4.78671 shrink

853 1554 4.78671 reflect

854 1555 4.78671 reflect

855 1557 4.78671 contract inside

856 1558 4.78671 reflect

857 1559 4.78671 reflect

858 1561 4.78671 contract outside

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 =[46.6104,1.3076,0.1891,1.2715,2.5103,-1.5169,3.9813,1.96,1.7845,0.0001];**

**fval =4.7867;**

exitflag =-1

output =

problemtype: 'unconstrained'

rngstate: [1x1 struct]

generations: 31

funccount: 4761

message: [1x269 char]

population =

Columns 1 through 6

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

45.6254 1.3090 0.5643 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.1769 1.3090 0.1860 1.2716 2.9124 -1.5167

46.5450 1.3090 0.1860 1.2716 2.2529 -1.5167

46.0443 1.3090 0.1860 1.2716 2.5000 -1.5167

46.4735 1.3090 0.1860 1.2716 2.6044 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 0.9431 2.5000 -1.5167

46.5450 1.5047 0.1860 1.2716 2.9956 -1.4839

46.5450 1.3090 0.1860 0.7764 3.3317 -1.7910

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

47.0777 1.6444 0.4336 2.5625 2.5000 -1.2486

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.1876 1.5475 0.1860 1.2716 2.5477 -1.9331

46.3908 1.3272 -0.0115 0.8227 1.9376 -1.8300

46.4529 1.3090 0.1860 1.1043 2.5000 -1.6627

46.5450 1.3090 -0.4699 1.1704 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.7929 1.5988 -0.4662 1.3071 1.8263 -1.2833

46.0144 1.3090 0.1860 1.0958 2.5000 -0.8961

46.6288 2.1449 0.1860 1.2716 2.5000 -1.5849

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 -0.1083 1.2716 2.8398 -1.5167

45.2294 0.9892 0.1860 2.0477 2.2311 -1.5167

46.0144 1.0331 0.6352 1.2716 2.5000 -1.2415

46.6883 1.3090 0.1860 1.2716 1.6351 -1.5167

46.3008 0.4092 0.3136 1.3388 2.7782 -1.6412

46.5450 1.2505 0.1860 1.3071 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.1148 1.4145 0.0363 0.8789 2.7276 -0.7459

46.3115 1.3090 0.1860 1.2716 2.5000 -1.2083

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.6288 1.2947 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 0.9491 -0.2349 1.1868 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 -0.5219 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.6476 1.4797 0.6833 1.1342 1.9228 -1.3072

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.2505 0.1860 1.2716 2.5000 -1.5167

46.3069 1.9253 0.5793 1.2716 2.5000 -1.5167

46.2332 1.2491 0.4027 1.2716 2.1865 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

45.8172 1.3090 0.1860 2.0297 2.5000 -1.5167

46.5450 1.3090 -0.4699 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.0913 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.4546 1.6677 2.7001 -1.5167

46.5450 2.2905 0.1860 1.2716 2.8896 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.4080 1.3090 0.0508 1.2716 2.4507 -1.8630

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1745 1.2716 2.2867 -1.5167

46.5359 1.3090 0.1860 0.8396 2.5000 -1.7002

46.7928 1.3090 -0.4474 2.0106 2.4008 -1.6346

46.0443 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.5450 1.3090 0.1860 1.2716 1.0896 -1.5167

46.5450 1.3090 0.1860 1.2716 2.5000 -1.5167

46.8512 1.3090 -0.0708 1.5994 2.7171 -1.5167

46.7038 1.2409 0.0161 1.1148 3.1184 -1.5392

47.4102 1.3784 0.1601 0.9450 3.0117 -1.0754

46.2376 1.6297 0.3413 1.0585 2.3170 -1.1215

45.7971 1.6359 0.0786 1.1632 2.8471 -2.1338

46.6075 0.8545 -0.2297 1.0763 2.7769 -1.4432

46.4390 1.3764 -0.3348 0.9724 2.3456 -1.7568

46.4965 1.5091 0.4152 1.6432 2.6785 -1.4604

46.9303 1.0340 -0.2555 1.3487 2.5794 -1.3169

46.8843 1.2699 0.1267 0.5457 2.1687 -1.1164

46.1039 1.7129 0.3421 0.7474 1.9136 -1.5416

46.2365 0.9565 -0.5379 1.2908 2.1234 -0.1540

46.2950 1.1276 -0.3728 1.2823 2.4988 -1.4277

46.9045 1.4660 0.0847 0.9169 2.5594 -0.7708

45.8457 1.9400 -0.2704 0.8994 2.2929 -2.3601

46.0734 1.7020 -0.8573 1.5792 2.9214 -1.2772

46.7954 1.2565 0.2228 1.0954 2.4247 -1.7241

47.0169 1.5579 -0.1238 0.9657 3.2777 -1.8323

46.6970 1.0506 0.2604 1.2225 2.6730 -1.6395

47.1701 1.6481 0.1215 1.2683 2.7377 -1.4525

46.8071 1.0354 0.1955 0.8190 2.5578 -1.5931

Columns 7 through 10

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 2.7757 1.3861 0.1495

3.9809 1.9640 1.7827 0

3.9809 2.2602 1.7673 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0.2838

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.5462 1.7827 -1.1431

3.5058 1.9640 1.7827 0.4140

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 2.3431 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 0.6708 -0.2233

3.9809 1.9640 1.7827 0

4.2784 0.2634 1.7667 -0.4749

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 2.1527 0

4.4686 1.4917 1.4022 -0.0671

4.1196 2.4941 1.7827 -0.4776

3.9809 1.8192 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.8867 1.8760 1.4802 0.3875

3.9809 1.9640 1.7827 0.0362

3.9809 1.9640 2.2333 0

3.9809 1.9640 1.7827 0.1343

3.9809 2.3817 0.6708 0

3.9809 2.1190 1.2387 0

4.1640 1.9640 1.7827 0

3.9809 1.9640 0.7104 0

3.5926 1.2616 1.7338 -0.1735

3.8203 1.9712 1.4936 0.1806

3.9809 1.9640 1.7827 0

4.5447 1.0689 1.8666 0

4.5258 1.8120 1.7827 0

3.9809 1.9640 1.7827 -0.1833

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.6302 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 -0.0921

3.9809 1.9640 1.7827 0

3.9244 2.0624 2.0385 -0.0904

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

4.1823 1.9640 1.7827 0

3.9809 1.9640 1.5875 -0.2247

3.9809 1.9640 1.7827 -0.2539

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.6576 1.7827 -0.1984

3.9809 1.9640 1.7827 0

3.9809 1.9640 2.3431 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0.2838

3.9809 2.5028 1.7827 -0.1984

4.0170 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9615 1.7120 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.6722 1.9640 1.7827 -0.4741

3.9809 1.9640 1.7827 0

3.9809 1.9366 2.2353 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.8087 0

3.9615 1.9640 1.7827 0

3.9809 1.9640 1.7827 0

3.9809 1.9640 1.7827 0.0353

3.6747 1.6653 2.1253 0.3470

4.0424 2.0121 1.4455 0.7168

4.9315 2.5670 2.2037 -0.6048

3.9611 1.7577 1.9599 0.4565

3.8314 1.5413 1.7772 0.1213

4.6026 3.0702 2.5409 -0.3441

3.9096 1.2808 1.4681 0.3362

4.3806 2.1338 2.1857 -0.0397

4.1118 2.0613 2.0956 -0.2053

3.5986 2.2149 2.0209 -0.4134

5.0048 2.7695 1.2250 -0.0377

4.3837 1.9723 1.9771 -0.3918

4.1096 2.4346 2.1421 -0.1214

4.6970 1.9006 0.8917 -0.1111

4.4118 2.6004 2.0312 -0.7987

3.3857 2.4211 1.2443 0.2487

2.9005 1.7217 2.2681 -0.0785

3.3128 2.5939 1.8102 0.5934

4.1562 2.4572 1.7336 0.1616

4.2537 2.2521 2.1756 -0.0431

scores =

1.0e+004 \*

0.0006

0.0006

0.0006

0.3657

0.0006

0.2838

0.0006

0.0006

0.0006

0.0293

0.0006

0.0021

0.6467

0.3128

0.0011

0.0006

0.1468

0.0855

0.3962

0.0006

0.8559

0.0006

0.0006

0.0006

0.1695

0.1315

0.7663

0.0965

0.0006

0.0006

0.3788

0.0043

0.4885

0.0140

0.2741

0.3866

0.0605

0.2756

0.4822

0.2674

0.0006

0.3289

0.0898

0.1221

0.0029

0.0006

0.1452

0.0006

0.1639

0.0006

0.4076

0.0006

0.0132

0.3132

0.3384

0.1689

0.0785

0.0960

0.1431

0.0366

0.0782

0.0006

0.0006

0.0293

0.4417

0.4650

0.0006

0.0891

0.0006

0.0006

0.0006

0.4784

0.0638

0.1819

0.0046

0.0006

0.0025

0.0070

0.0006

0.1187

0.0589

0.4491

1.5721

0.2406

0.3697

1.4311

0.2037

0.1792

0.1661

0.7333

0.5794

0.3889

0.5597

0.5784

1.5736

0.3272

0.1733

0.5356

0.5385

0.3676

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

Did not find any pre-existing parallel jobs created by matlabpool.

**Caculation finished and the elapsedTime= 37.1802hours**

**x =[46.6104,1.3076,0.1891,1.2715,2.5103,-1.5169,3.9813,1.96,1.7845,0.0001];**

**下面是精确值：**

**x =[4.6610447e+001,1.3075639e+0,1.8911207e-001,1.2714657e+0,2.5103035e+0, -1.5168925e+0,3.9812634e+0,1.9600006e+0,1.7844515e+0,7.9074669e-005];**

**P\_asterisk =4.7867; L =1.0000; delta = -2.9524e-008; AR =2.9417; Re =186.1461;**

**penaltyfun1 =5.9048e-005; penaltyfun2 =0; penaltyfun5 =0; obj\_function =4.7868;**

**Rario\_F\_vertical\_horiz\_aver =3.2990;**

**F\_vertical\_to\_horiz\_rms =1.1089;**

**P\_aero\_aver\_to\_inertia\_aver =3.7811;**

**由以下初始值代入计算而得：% 继续遗传50代+2000代局部搜索的结果**

**% x\_start=[46.545,1.30898,0.0154,1.2716,2.5,-1.5167,3.9809,1.964,1.7827,0.0000];**

**% P\_asterisk =4.7922; L =1.0020;**