Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
0	82	2.406790e+02	7.187e-01	1.376e+02	
1	172	2.324684e+02	1.998e+00	1.285e+02	2.972e-01
2	257	2.285856e+02	4.761e+00	2.036e+02	1.980e-01
3	344	2.304665e+02	2.010e+00	4.971e+01	6.112e-02
4	428	2.283904e+02	4.636e+00	3.934e+01	1.269e-01
5	514	2.314295e+02	2.023e+00	4.703e+01	9.575e-02
6	608	2.314310e+02	1.579e+00	1.135e+02	2.333e-04
7	691	2.314121e+02	1.579e+00	1.135e+02	1.519e-03
8	781	2.314123e+02	1.576e+00	3.173e+02	6.537e-05
9	864	2.314088e+02	1.576e+00	3.170e+02	4.515e-04
10	955	2.314088e+02	1.575e+00	5.597e+02	7.438e-06
11	1038	2.314084e+02	1.575e+00	5.596e+02	5.899e-05
12	1128	2.314084e+02	1.575e+00	8.649e+02	2.661e-06
13	1211	2.314083e+02	1.575e+00	8.648e+02	2.178e-05
14	1301	2.314083e+02	1.575e+00	1.199e+03	9.548e-07
15	1384	2.314083e+02	1.575e+00	1.199e+03	7.979e-06
16	1470	2.314084e+02	1.574e+00	4.138e+03	4.379e-06
17	1553	2.314080e+02	1.574e+00	4.138e+03	9.223e-05
18	1639	2.314096e+02	1.574e+00	2.264e+03	4.820e-05
19	1722	2.314053e+02	1.574e+00	2.253e+03	1.034e-03
20	1808	2.314232e+02	1.572e+00	1.601e+03	5.400e-04
21	1891	2.313747e+02	1.572e+00	1.521e+03	1.159e-02
22	1977	2.315755e+02	1.549e+00	1.116e+03	6.046e-03
23	2060	2.310489e+02	1.546e+00	2.254e+02	1.302e-01
24	2146	2.332809e+02	1.331e+00	2.381e+02	6.720e-02
25	2229	2.316857e+02	1.315e+00	3.668e+02	4.179e-01
26	2316	2.342841e+02	1.053e+00	2.196e+03	7.790e-02
27	2403	2.367014e+02	7.340e-01	1.601e+02	7.042e-02
28	2490	2.387732e+02	5.959e-01	3.058e+02	6.051e-02
29	2575	2.382724e+02	5.911e-01	4.251e+02	1.021e-01
30	2661	2.396596e+02	4.896e-01	6.260e+02	4.061e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
31	2758	2.396596e+02	4.710e-01	6.360e+02	1.290e-05
32	2841	2.396591e+02	4.710e-01	6.360e+02	6.103e-05
33	2929	2.396591e+02	4.054e-01	1.087e+03	2.341e-05
34	3012	2.396579e+02	4.054e-01	1.087e+03	1.147e-04
35	3098	2.396597e+02	4.163e-01	2.584e+03	5.340e-05
36	3181	2.396570e+02	4.163e-01	2.579e+03	5.106e-04
37	3277	2.396570e+02	4.159e-01	2.533e+03	9.302e-08
38	3360	2.396570e+02	4.159e-01	2.533e+03	6.610e-07
39	3447	2.396570e+02	4.146e-01	2.343e+03	4.300e-07
40	3530	2.396570e+02	4.146e-01	2.343e+03	3.546e-06
41	3623	2.396570e+02	4.146e-01	2.597e+03	1.157e-08
42	3706	2.396570e+02	4.146e-01	2.597e+03	7.273e-08

```
Local minimum possible. Constraints satisfied.

fmincon stopped because the size of the current step is less than
the default value of the step size tolerance and constraints are
satisfied to within the selected value of the constraint tolerance.

<stopping criteria details>


Optimization stopped because the relative changes in all elements of x are
less than options.TolX = 1.000000e-10, and the relative maximum constraint
violation, 4.145686e-01, is less than options.TolCon = 1.000000e+00.

Optimization Metric                                       Options
max(abs(delta_x./x)) =   6.17e-11                  TolX =   1e-10 (default)
relative max(constraint violation) =   4.15e-01    TolCon =   1e+00↙
(selected)

>> diary('FeasibleSolution_1')
>> diary('FeasibleSolution_1.txt')
>> save('FeasibleSolution_1.mat')
>>
```