

Tank Ninja <http://www.ansgear.com/ProductDetails.asp?ProductCode=NINJATANK-48&Click=2>
 Pressure 3000 psi weight 2.8125 lbs
 Volume 48 in³ length x dia. 10.5 x 3-5/8 inches

The data collected showed that Americans, on average, took **5,117** steps a day

Avg Daily Steps 5,200 http://weill.blogs.nytimes.com/2010/10/19/the-pedometer-test-americans-take-fewer-steps/?_php=true&_type=blogs&_r=0
Target Steps 3000 Assume 6000 steps per day/2 feet
Muscle

Torque required	Lever arm	lb-in/N-m	Force required*	ROBO ant force
N*m	in	lb-in/N-m	lb	lb
4	3	8.9	12	30

Note: The ROBO Ant team reported their muscles exceeded 30lbs of force

*This was a rough initial calculation, please refer to the ankle torque feasibility test

Row	Pressure	Initial Length	Deflection	I. dia. (deflated)	I. dia. (inflated)	Vt @ Press.	V _{Muscle}	Vt/V _{Muscle}	Corrected
#	psi	in	in	in	in	in ³	in ³	steps	steps*108%
1	60	8	1.3	0.13	0.4	2400	3.00	800	800
2	60	7.75	1.3	0.13	0.4	2400	2.89	831	831
3	60	7.5	1.3	0.13	0.4	2400	2.77	865	865
4	60	7.25	1.3	0.13	0.4	2400	2.66	902	902
5	60	7	1.3	0.13	0.4	2400	2.55	942	942
6	60	6.75	1.3	0.13	0.4	2400	2.43	986	986
7	60	6.5	1.3	0.13	0.4	2400	2.32	1035	1035
8	60	6.25	1.3	0.13	0.4	2400	2.21	1088	1088
9	60	6	1.3	0.13	0.4	2400	2.09	1147	1147
10	60	5.75	1.3	0.13	0.4	2400	1.98	1212	1212
11	60	5.5	1.3	0.13	0.4	2400	1.87	1286	1286
12	60	5.25	1.3	0.13	0.4	2400	1.75	1369	1369
13	60	5	1.3	0.13	0.4	2400	1.64	1464	1464
14	60	4.75	1.3	0.13	0.4	2400	1.53	1573	1573
15	60	4.5	1.3	0.13	0.4	2400	1.41	1699	1699
16	60	4.25	1.3	0.13	0.4	2400	1.30	1847	1847
17	60	4	1.3	0.13	0.4	2400	1.19	2024	2024
18	60	3.75	1.3	0.13	0.4	2400	1.07	2238	2238
19	60	3.5	1.3	0.13	0.4	2400	0.96	2502	2502
20	60	3.25	1.3	0.13	0.4	2400	0.85	2838	2838
21	60	3	1.3	0.13	0.4	2400	0.73	3277	3277
22	60	2.75	1.3	0.13	0.4	2400	0.62	3877	3877
23	60	2.5	1.3	0.13	0.4	2400	0.51	4747	4747
24	60	2.25	1.3	0.13	0.4	2400	0.39	6119	6119

