

Exhaust Pipe Size Estimate: A good section of straight pipe will flow about 115 CFM per square inch of area. Here's a quick table that shows how many CFM each common pipe size will flow, as well as the estimated max horsepower for each pipe size:

Pipe Diameter (inches)	Pipe Area (in ²)	Total CFM (est.)	Max HP Per Pipe	Max HP For A Dual Pipe System
1 1/2	1.48	171	78	155
1 5/8	1.77	203	92	185
1 3/4	2.07	239	108	217
2	2.76	318	144	289
2 1/4	3.55	408	185	371
2 1/2	4.43	509	232	463
2 3/4	5.41	622	283	566
3	6.49	747	339	679
3 1/4	7.67	882	401	802
3 1/2	8.95	1029	468	935

NOTE: These numbers are just estimates. All pipes are assumed to be 16 gauge steel.

The table above is probably over-estimating pipe size, but you can see that a 400 hp vehicle with a dual exhaust system only needs 2 1/4 – 2 1/2 inch pipes. Anything larger is overkill.