

Choosing a Silencer

Step 1 – Determine your blower speed.

To estimate blower speed, use the following formula:

$$RPM = \frac{\text{motor rpm}}{\text{blower sheave diameter} \div \text{motor sheave diameter}}$$

Example:

$$\text{Blower speed} = \frac{1750}{6'' \div 8''} = \frac{1750}{0.75} = 2333$$



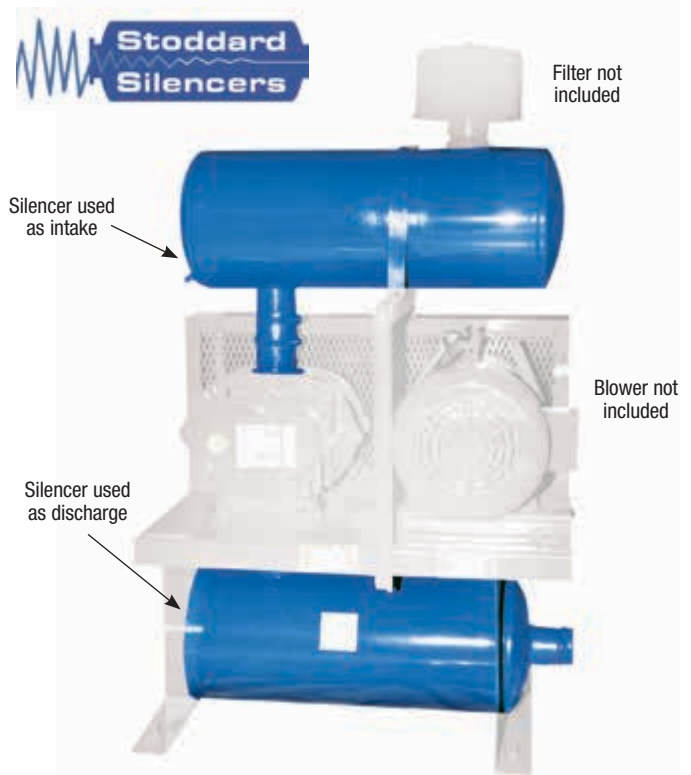
Step 2 – Use chart below to identify transition speed for your blower.

Sutorbilt, M-D, Roots Blower Series*	Intake Silencer Transition rpm	Discharge Silencer Transition rpm
2	6032	5157
3	4202	3438
4	3151	2578
5	2521	2063
6	2101	1719
7	1801	1473
8	1576	1289

* First digit in part # of Sutorbilt Legend, MD Competitor Plus and Roots URAI blowers (e.g., Sutorbilt 3M, MD3003, Roots 33). The sizes listed on this page have inlet and outlet connections at opposite ends. Side inlet and side inlet/outlet models are available. We supply silencers for nearly all positive displacement and centrifugal blowers on the market up to 30" in size.

Step 3 – Compare your blower speed to the transition speed and choose the appropriate silencer.

Use **chamber style silencers** if the blower is operating *below* the transition speed. Use **absorptive-chamber style silencers** when operating *above* the transition speed. In the example above, if you have a Sutorbilt 5M or Roots 56 blower, 2333 rpm is below the transition speed on the inlet side and above the transition speed on the discharge side. You could therefore select a chamber silencer for the intake and an absorptive-chamber silencer for the discharge, or simply use two absorptive-chamber silencers for maximum sound reduction throughout the blower's operating range.



Stoddard PD Blower Silencers

- Significant noise reduction
- Selected models for Sutorbilt, M-D and Roots PD blowers

Intake and discharge silencers reduce noise by several decibel levels in typical STP applications by lowering air pulsation within the piping system and airborne noise radiation in the vicinity of the blower. As an added benefit, the reduced air pulsation improves check valve life.

Choose from two silencer styles: chamber and combination absorption-chamber. The style you choose depends upon the speed you're operating your blower in relationship to its transition speed. (Transition speed is the point where mid- and high-frequency amplitude increases dramatically.)

Chamber-style silencers are lower-cost models that can be used with blowers operating below their transition speed. Chamber style silencers incorporate a series of expansion chambers and acoustically balanced bypass tubes for noise attenuation at low to medium speed ranges.

Premium **absorption-chamber style silencers** include the same features as chamber style silencers with the addition of an acoustically packed blower connection to reduce objectionable high frequency noises that occur above transition speeds. They're also suitable for use throughout the entire speed range of PD blowers listed in this catalog.

Shipping: Silencers over 80 pounds ship motor freight.

CONNECTIONS	LENGTH	WT (LBS)	STOCK #	EACH
CHAMBER STYLE				
1" NPT(M)	21"	7	10810	\$
1½" NPT(M)	24"	14	10820	
2" NPT(M)	33"	23	10811	
2½" NPT(M)	33"	36	10812	
3" NPT(M)	51"	45	10813	
4" NPT(M)	53"	125	10814	
6" FLG	72"	175	10815	
ABSORPTION-CHAMBER STYLE				
2" NPT(M)	33"	25	10940	\$
2½" NPT(M)	33"	53	10950	
3" NPT(M)	51"	75	10960	
4" NPT(M)	53"	139	10970	
6" FLG	72"	281	11020	

Air Filter Monitors

- Clear visual indication of filter condition
- Easily resets when filter is replaced



Clogged air filters can significantly increase motor amp draw, and even cause damage to your blowers.

Filter monitors let you check the condition of your filter elements by monitoring the pressure differential across the filter element—no need to remove the filter housing cover! Choose from two mounting styles.

Vacuum pick-up ring monitors sense filter condition using a vacuum pick-up ring mounted under the filter housing cover wing-nut. Use for Stoddard filter housings, and others without 1/8" holes. **Includes:** pick-up ring and 12" connecting hose.

Thru-bolt mount filter monitors sense filter condition through a 1/8" hole found on Solberg and Universal filter housings. **Includes:** 1/8" bolt with barb fitting and sensing hole, and 18" connecting hose.



Use with filter housing (sold separately; see facing page).

DESCRIPTION	STOCK #	EACH
Vacuum Pick-Up Ring Filter Monitor	58142	\$
Thru-Bolt Mount Filter Monitor	58143	