

Delivers Powerful, Focused Air Pulse to Disperse Material Buildup

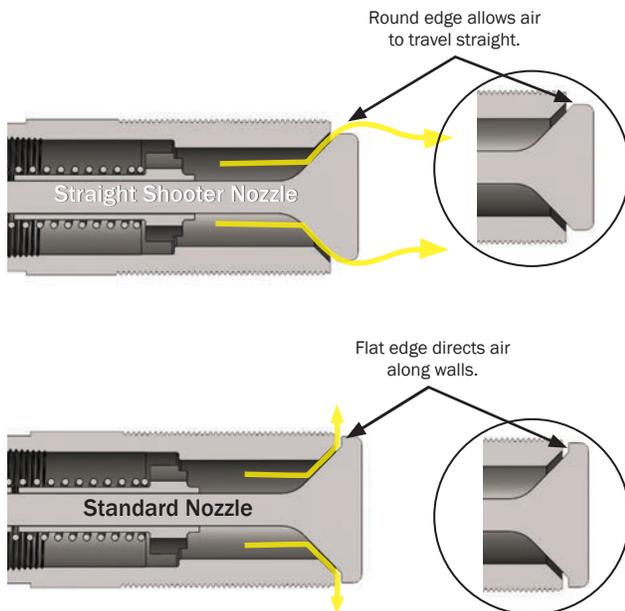
The **AirSweep®** material activation system delivers on-demand product flow, eliminates hang-ups and blockages, cleans interior surfaces and enhances batch uniformity.

The **Straight Shooter** is designed for applications where a focused column of air is required to reach and activate material not accessible by the standard AirSweep 360-degree pulse pattern. The Straight Shooter is available in all standard AirSweep sizes (3/4", 1-1/2" and 2").



VA-06 Straight Shooter (with solenoid valve, mounting coupling and lock nut)

Air Flow Straight Shooter vs. Standard AirSweep®



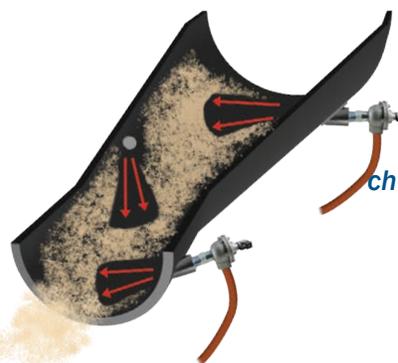
The **Straight Shooter's** design allows the powerful air pulse to extend in a tight column directly in front of the nozzle. The unit instantly re-seals to prevent clogging or material feedback. The "fire hose" effect of the air pulse makes these mini-blasters perfect for larger-sized pieces of material or for areas where the standard AirSweep cannot be mounted, such as across from inaccessible walls. Units can be easily mounted to blast in any direction using standard schedule 40 pipe connections. Because they instantly reseal, these units can even be mounted inside the vessel to blast away areas of buildup.

- Patented valve design utilizes only one moving part, ensuring an immediate reseal after each pulse to prevent clogging and material buildup
- System can be mounted inside or outside of the vessel
- Energy efficient – uses plant air
- Mount to metal, concrete, fiberglass or wood vessels
- Manufactured from high grade steel for long service life

Applications:

Straight Shooters are being used to move crushed ceramic tile, blow metallic brake dust off of mixer paddles (inside the mixer), and blow off flour and crumbs in a bakery application.

Contact us for a detailed AirSweep System proposal, engineered specifically for your application.



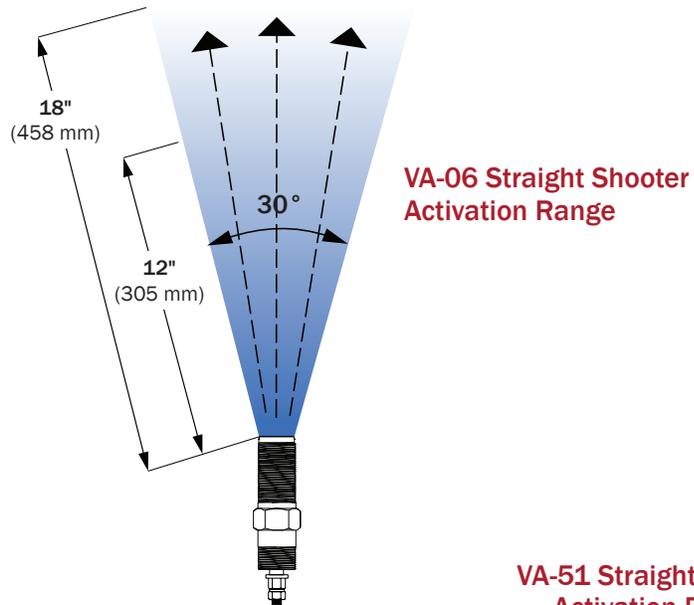
The Straight Shooter's directed pulse helps push materials down chutes and out of narrow transition sections.



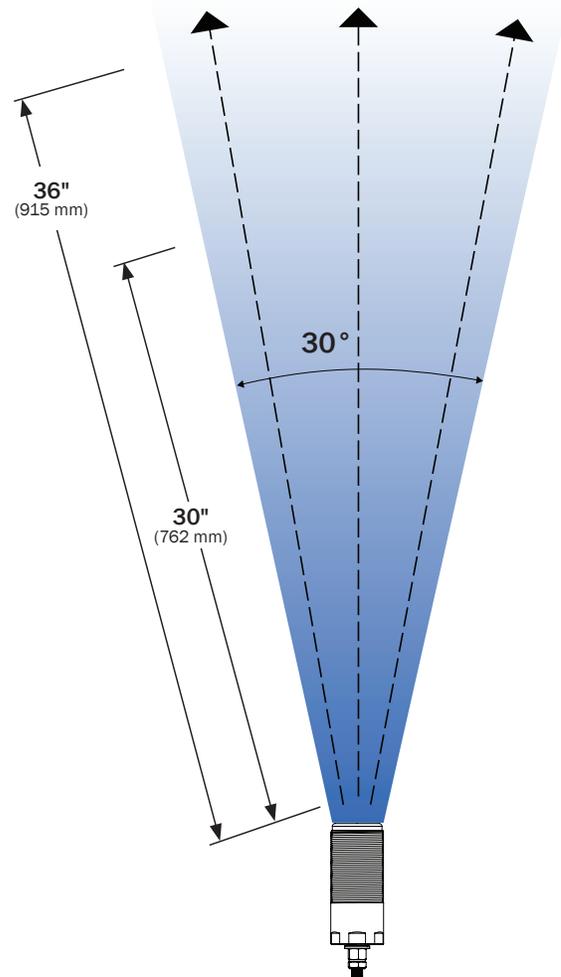
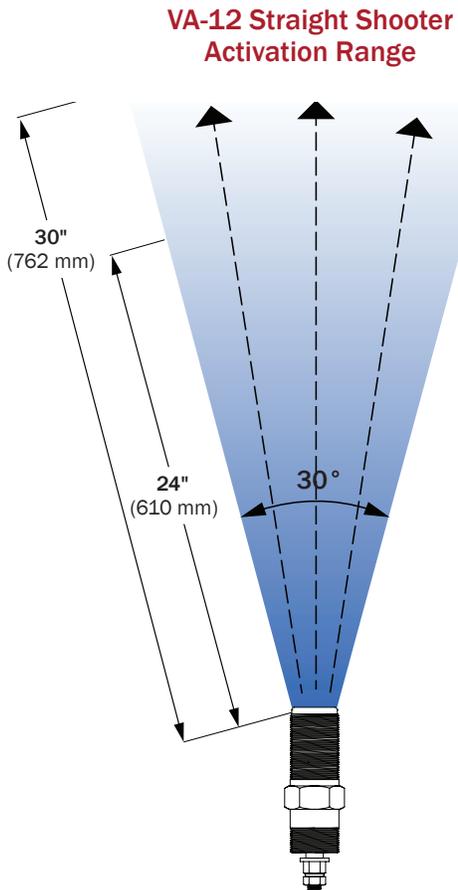
AirSweep® Straight Shooter Activation Range

Straight Shooter Model	Approximate Activation Range
VA-06	12" to 18" (305 to 460 mm)
VA-12	24" to 30" (610 to 760 mm)
VA-51	30" to 36" (765 to 915 mm)

Specifications subject to change without notice.



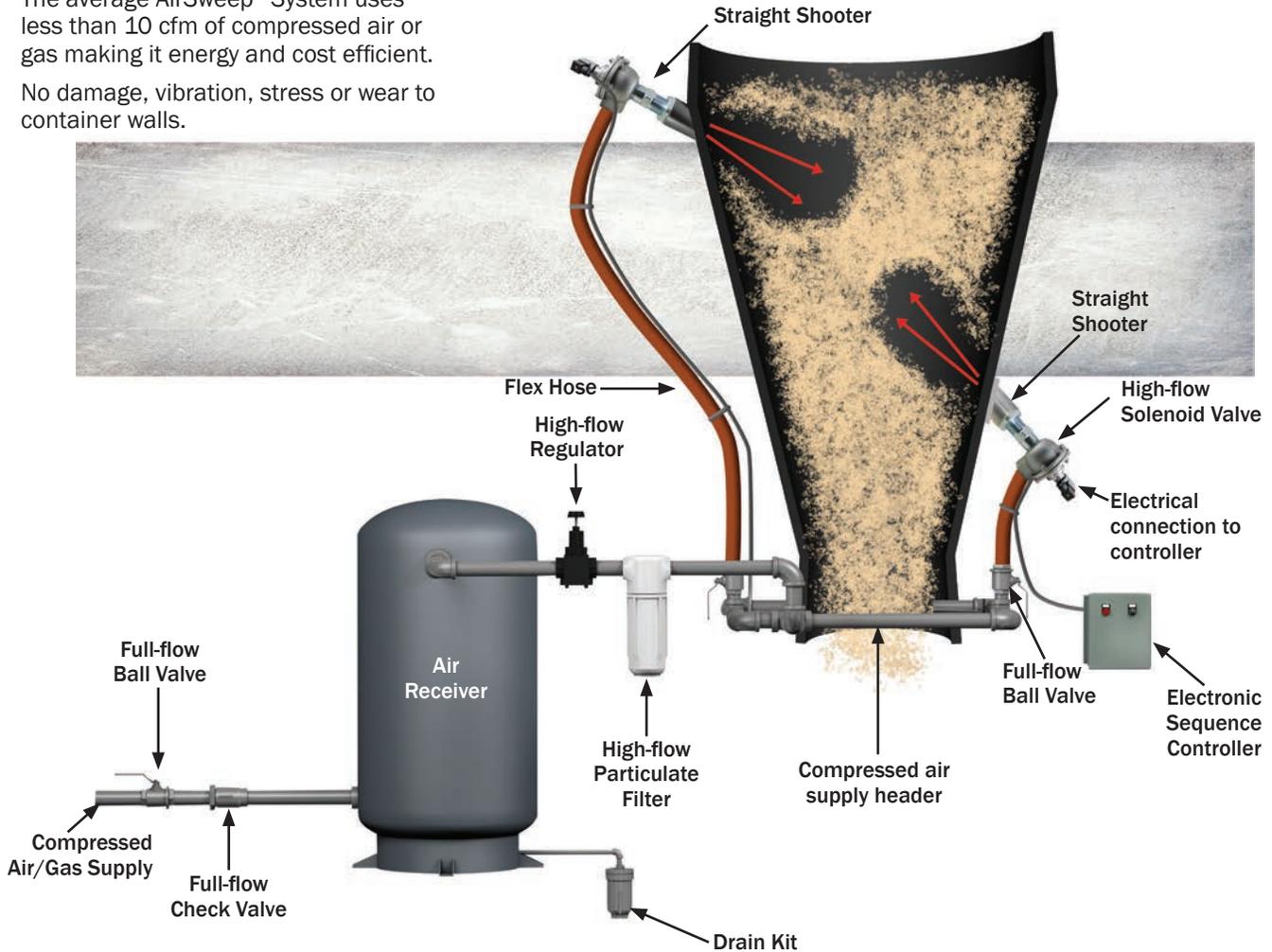
VA-51 Straight Shooter Activation Range



Typical AirSweep® Straight Shooter System

A typical Straight Shooter material activation system consists of strategically-located Straight Shooters, high-flow solenoid valves, electronic sequence controller and air receiver. The illustration below is intended to show components of a typical AirSweep system only and may not be representative of a vessel that would require a Straight Shooter system.

The average AirSweep® System uses less than 10 cfm of compressed air or gas making it energy and cost efficient. No damage, vibration, stress or wear to container walls.



Typical AirSweep® System Components

AirSweep – Straight Shooter Models

Solenoid Valve – Delivers rapid, high-volume pulse of compressed air/gas to AirSweep nozzle.

Flex Hose Assembly – Connects the solenoid valve to hard-piped header loop.

Full-flow Ball Valve – Isolation valve for individual nozzles.

High-flow Particulate Filter – Point-of-use particulate filtration enhances life of system components by removal of in-line contaminants.

Air Receiver – Compressed air reservoir ensures instantaneous volume for system.

High-flow Regulator – Regulates compressed air supply to within 40-60 psi for proper AirSweep operation.

Full-flow Check Valve – Ensures one-way flow to system.

Full-flow Ball Valve – System shut-off.

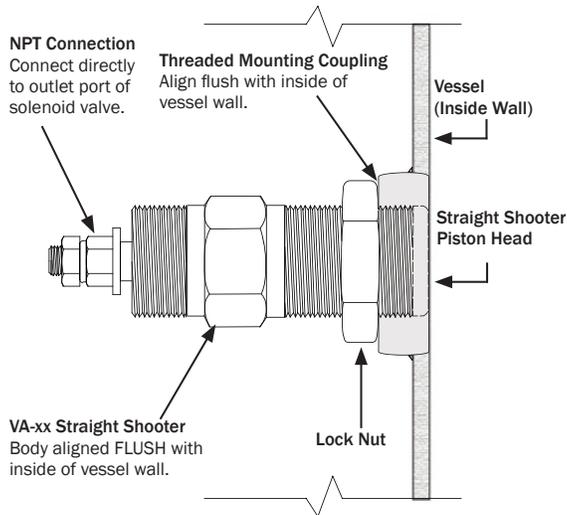
Electronic Sequence Controller – Controls sequenced pulsing of AirSweep system; adjustable for any process.



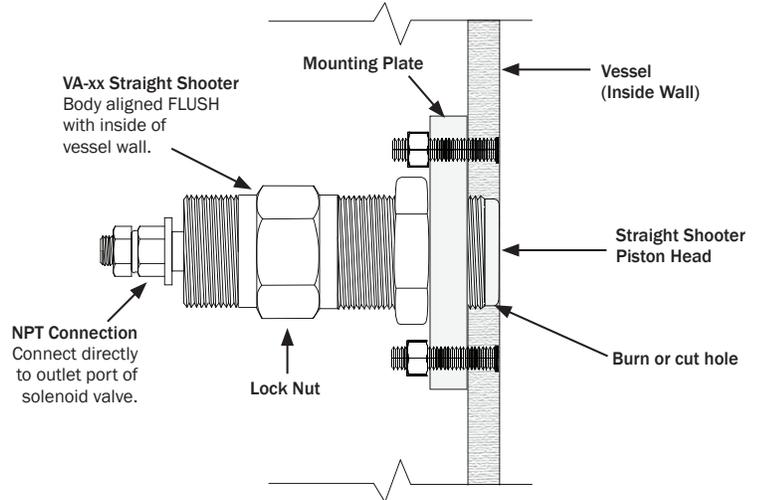
AirSweep® Straight Shooter Mounting Options

Standard

Mounting Coupling Installation (Weld to vessel)



Mounting Plate Installation (Bolt to vessel)



Straight Shooter Mounting Coupling Installation

1. Cut hole in vessel wall. Recommended hole size is approximately 1/8" (3.175 mm) greater than diameter of coupling (see recommended hole size below), to allow coupling to pass through curved wall.
Recommended hole size: VA-06-ST: 1-5/8" (41.275 mm)
VA-12-ST: 3-1/8" (79.375 mm)
VA-51-ST: 3-5/8" (92.075 mm)
2. Align coupling on vessel wall and weld continuous bead to exterior of wall.
3. Apply anti-seize compound to front threaded section of Straight Shooter. Thread Straight Shooter into coupling until front of valve head is flush with inside wall.
4. After Straight Shooter is positioned, tighten lock nut against coupling to keep Straight Shooter in position.

Straight Shooter Mounting Plate Installation

1. Position plate on wall surface. Mark hole for Straight Shooter. Mark bolt circle layout.
2. Drill or cut hole for Straight Shooter and bolt holes. The hole size should be sufficient diameter to allow Straight Shooter to pass through wall.
3. Fasten plate to wall by bolting.
4. Apply anti-seize compound to front threaded section of the Straight Shooter. Thread the Straight Shooter into position so the front of the valve head is aligned flush with the inside wall of vessel. This will properly position piston head within the vessel.
5. After the Straight Shooter is correctly positioned, tighten lock nut against plate to keep the Straight Shooter in position.

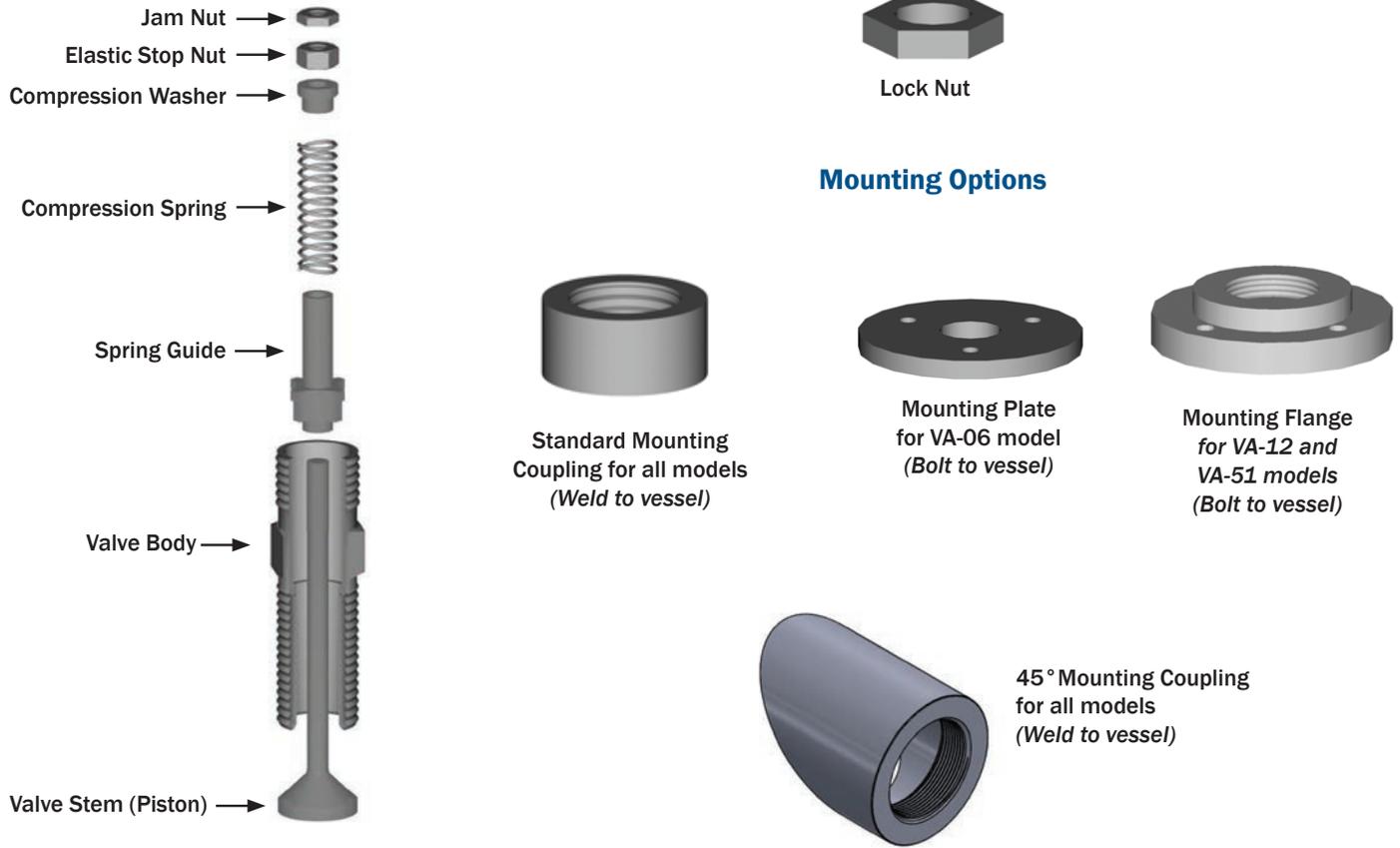
45° Angle-mounted

The 45° angle-mounted **Straight Shooter** is ideal for applications where the vessel walls may not be accessible for installation of a standard AirSweep system.



VA-06 Straight Shooter (with solenoid valve, 45° mounting coupling and lock nut)

AirSweep® Straight Shooter Assembly and Mounting



Standard materials of construction include:

- Carbon Steel
- 304 Stainless Steel
- 316 Stainless Steel

Other materials available upon request.

Straight Shooter Rebuild Kit

Straight Shooter Nozzle Rebuild Kit contains 1 each:

- valve stem
- spring guide
- compression washer
- compression spring
- elastic stop nut
- jam nut



Recommended service interval of internal parts:

Approximately 1 million cycles.*

Maintenance recommended:

Replacement of internal parts.

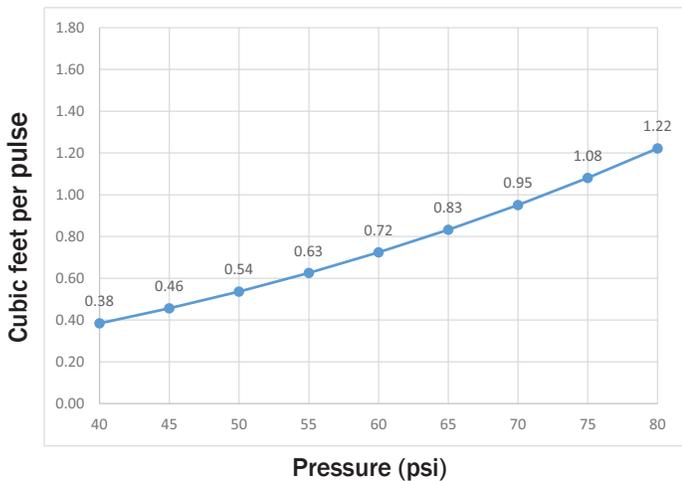
Straight Shooter Model No.	Material of Construction		
	Carbon Steel	304 Stainless Steel	316 Stainless Steel
VA-06-ST	RK-06-CS-ST	RK-06-SS-ST	RK-06-316-ST
VA-12-ST	RK-06-CS-ST	RK-12-SS-ST	RK-12-316-ST
VA-51-ST	RK-51-CS-ST	RK-51-SS-ST	RK-51-316-ST

* Typical service interval under standard operating conditions. Some environments, materials and processes may result in a shorter useful service interval.

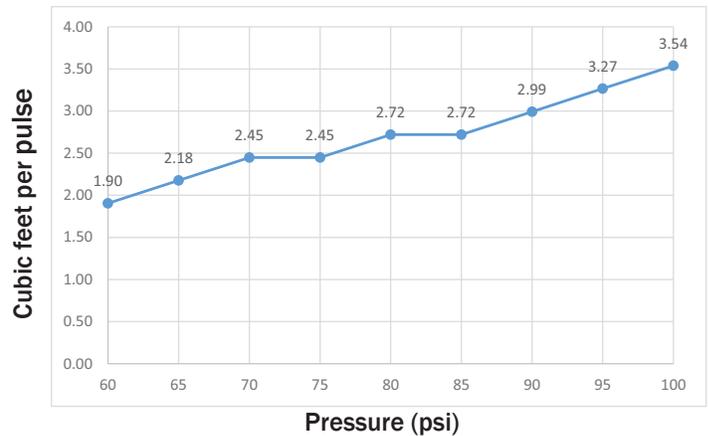
Typical Operating Parameters – Compressed Air/Gas Consumption for AirSweep® Straight Shooter Models

Model	VA-06	VA-12	VA-51
Recommended operating pressure	40 to 60 psi	80 to 100 psi	80 to 100 psi
Typical effective diameter of material activation <i>(dry, powdered material, 60-75 lbs/ft³)</i>	12" to 18" (305 to 458 mm)	24" to 30" (610 to 762 mm)	30" to 36" (762 to 915 mm)
Recommended pulse time	250 milliseconds	250 milliseconds	250 milliseconds
Approximate air/gas consumption rate per 250 millisecond pulse	0.38 ft ³ at 40 psi 0.72 ft ³ at 60 psi	2.72 ft ³ at 80 psi 3.54 ft ³ at 100 psi	2.99 ft ³ at 80 psi 3.54 ft ³ at 100 psi
Typical sequence rate range <i>(application/material dependent)</i>	3 pulses to 12 pulses per minute	3 pulses to 12 pulses per minute	3 pulses to 12 pulses per minute
Typical (approx.) compressed air/gas consumption rate range <i>(based on typical sequence rate range of 3 to 12 pulses/min)</i>	1.14 to 4.56 scfm at 40 psi 2.16 to 8.64 scfm at 60 psi	8.16 to 32.64 scfm at 80 psi 10.62 to 42.48 scfm at 100 psi	8.97 to 35.88 scfm at 80 psi 10.62 to 42.48 scfm at 100 psi

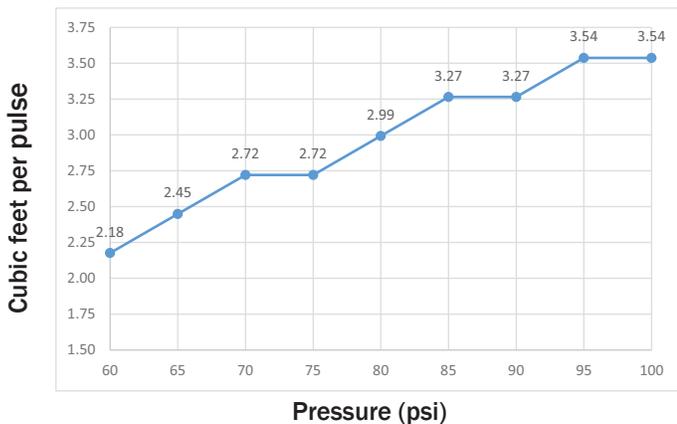
**VA-06 Straight Shooter
Compressed Air/Gas Consumption**



**VA-12 Straight Shooter
Compressed Air/Gas Consumption**



**VA-51 Straight Shooter
Compressed Air/Gas Consumption**



● = Consumption per 250 millisecond pulse