



APOLLO INFORMATION KIT

HVLP stands for “high volume/low pressure” and is the solution to common spraying problems for most woodworkers. Large volumes of air (cubic feet per minute or CFM) are compressed to only 5-10 pounds per square inch (PSI). The air moves through an oversized 5/8” supply line to the gun where it is converted to a low atomizing cap pressure at the computer designed air cap assembly/atomizing chamber. The cap pressure determines how thick or thin (viscosity) a material must be in order to atomize properly and provide a quality finish. HVLP systems are suitable for spraying virtually all sprayable coatings with reduced overspray and greater material transfer efficiency than traditional compressed air spraying systems. Less fogging and misting occur in the spray area and that keeps the spray environment cleaner and can result in material savings of up to 60%.

Apollo HVLP Sprayers

With over 30 years experience in the design and manufacturing of HVLP equipment, Apollo is one of the oldest companies consistently offering HVLP Systems. They have been a leader in HVLP technology since they introduced it to the United States in 1976 and there are many features that are unique and special to Apollo systems:

- *All Apollo Turbine case units are designed with dual filtration/ventilation and sized appropriately to the size and power of the blower motor. Comparable units with undersized cases can overheat, resulting in reduced motor life.
- *Apollo provides air hoses that are 5/8” diameter and feature a 4’ flexible whip on the spray gun end. Quick release couplers are provided on both ends. Comparable equipment uses bulky 3/4” hose with a screw-on fitting at the Turbine end.
- * Apollo Guns are pressure die cast of light weight aluminum for durability then precision machined for top performance. These guns have no “O” rings or corrosive parts and all fluid parts are 300 series Stainless Steel. The spray cups are Teflon lined. Apollo offers a full line of spray guns including a Touch Up Gun, a true HVLP Conversion Gun, and a Slim-Lite Gun that uses glass resin and nylon parts to reduce weight. Comparable guns may be chrome plated die cast zinc or other metals that are not as durable as aluminum and stainless steel.
- * Apollo offers a full two year written warranty on all products.

A Brief History of Apollo Sprayers Inc.

Apollo Sprayers Inc. was originally founded in England in 1966. Founded on the premise of providing good quality HVLP spray equipment, they set out on a mission to revolutionize the finishing industry. In 1976, Apollo moved to California. With John B. Darroch as President, Apollo Sprayers Inc. started to gain praise and acceptance in the American market, first in California and throughout the U.S. Soon the Air Quality Management District in California became interested in HVLP as a way to help improve air quality in the Los Angeles Metropolitan area. HVLP spray systems were proven to reduce the volatile organic compounds released into the atmosphere from spray finishing operations by improving material transfer efficiency; As a result, many industries soon adopted HVLP for their finishing operations.

By 1990 Apollo Sprayers Inc. had set up full manufacturing operations in California to produce all the turbine units and spray guns for the U.S. market. They now have branches in Australia and Malaysia as well as distributors throughout the U.S. Apollo Sprayers has always been the leader in HVLP technology and were the first to utilize larger 3 stage turbine motors in their systems, manufacture an all stainless steel spray gun, produce a variable power turbine system, and design an air conversion spray gun that works off any turbine system.

McFeely's began carrying the Apollo Sprayers line in 1993 based upon their superior reputation and the recommendations of our customers. We have found them to provide consistent professional results for most woodworking applications and to be some of the finest HVLP systems on the market.

How To Select The Right HVLP Spray System

Selecting the right kind of spray system can be a confusing decision and one that probably should be given some careful thought. We have put together some commonly asked questions which should help you in your decision.

Q: Should I select a turbine system HVLP or an HVLP air conversion spray gun to hook up to my air compressor?

A: If you are considering a Conversion Gun, you will need a compressor that has a 3 horse power or larger motor and a 20 gallon air tank. Compressors that meet these requirements will be adequate for use with the Conversion Gun. If you do not have a compressor that meets these requirements, you will want to consider a turbine system. Turbine systems also provide the advantages of added mobility and a dependable source of oil-free, warm, dry air, important factors in achieving a superior finish.

Q: My spray finishing needs are only occasional. Will a small turbine system fulfill my needs?

A: Selecting an HVLP turbine is not based upon the capacity or frequency of use, but rather what type of coatings you intend to use with your sprayer. If you intend to spray heavier bodied materials such as some water-borne lacquers and polyurethanes, a turbine unit will be necessary regardless of the amount of daily use. For these materials we recommend the Apollo Model 825. The larger turbine unit of the 825 Model has the power it takes to atomize ALL of the new water-borne lacquers and urethanes. The Model 1025 uses a specially designed 4 stage HVLP Turbine to prove the power to spray heavier coatings such as Latex and MultSpec and Zolatone.

Q: How do turbine systems differ?

A: There are three basic parts to a “turbine system”: the turbine and integrated motor (which drives your air supply), the air hose which delivers the air, and the spray gun.

The Turbine

The first part of the “turbine system” to be considered is the turbine itself. Turbines vary greatly in size, quality and power as do turbine motors. The size of the turbine motor is directly related to the viscosity of materials that you need to spray. Larger, more powerful motors are able to atomize thicker fluids. Apollo sprayers use only the best quality, all aluminum, ball-bearing motors, manufactured in the USA by AMETEK-LAMB. Some HVLP turbine systems use plastic turbine motors that have a considerably shorter life expectancy. The turbine case must be adequately sized to provide ventilation which prevents overheating. Apollo turbine sprayers are all carefully designed to the exact specifications required by the motor manufacturer so as to provide the maximum life expectancy with every turbine unit.

The Hose

In addition to the turbine unit, an HVLP system also consists of an air hose. The air hose used for HVLP spraying is usually 3/4 inch in diameter except for Apollo units. These hoses tend to be very bulky, heavy and a common cause of operator fatigue since they lack flexibility. Apollo offers air hoses in 5/8 inch diameter with a four foot flexible whip on the spray gun end. Using a smaller diameter hose, along with the flexible whip, greatly helps to relieve fatigue associated with long spray jobs, and allows the operator to turn the gun in virtually any position with ease. Hose length can also vary from manufacturer to manufacturer. While hose length is seemingly unimportant, air lines that are too long for the unit will reduce the performance of the spray gun. Apollo custom matches each

turbine size with the correct size air lines. All Apollo hoses feature brass quick connectors on both ends of the hose.

The Gun

The most important part of the HVLP “turbine system” is the spray gun. Quality construction is critical to achieving high performance and easy, trouble-free, maintenance. Spray guns supplied with many “economy” grade HVLP systems are of the “clamshell” design and are generally made of plastic. They may not withstand normal use. Apollo HVLP Spray Guns are pressure die cast in high grade aluminum, then machined to aircraft tolerances. All fluid parts are stainless steel and cups are Teflon lined. Spray guns with “O” rings and plastic parts will increase the amount of service and maintenance required. Apollo Spray Guns have no “O” rings or plastic parts and very few gaskets, which makes clean-up quick and easy and increases the time between required maintenance.

Today, with the demands of modern solvents and waterborne coatings, stainless steel fluid parts are most important in any spray gun. Serious corrosion of the gun and contamination of finish can occur if aluminum, alloys or other metals are used for the pressure pot and fluid passages. Apollo Spray Guns utilize marine grade stainless steel in all fluid parts, including the spring and plate in the air cap assembly, the trigger and all screws. The Apollo A5510 and A5111 Spray Guns contain all marine grade stainless steel all the way in to the cup assembly as well. This is standard with these spray guns, not a costly extra.

Spray guns can be of either the bleeder or non-bleeder design. Apollo Spray Guns utilize the bleeder design. Bleeder spray guns allow the air flow to continually flow through the gun as long as the turbine is running, whereas non-bleeder type spray guns have a valve which shuts off the air flow when the trigger is released. Most HVLP turbine spray guns are the bleeder type, however there are a few manufacturers that have made non-bleeder guns to work with HVLP turbines. Non-bleeder spray guns are not recommended for use with turbines because they result in added stress to the motor/turbine assembly and may decrease the unit’s life. Some manufacturers provide a relief valve to release the air from the turbine but their effectiveness varies greatly.

Q: Do air conversion HVLP spray guns work as well as HVLP turbine spray systems?

A: HVLP air conversion spray guns vary widely in quality and efficiency. Many guns are nothing but modified conventional spray guns. Most conversion spray guns consume large amounts of air, rated in Cubic Feet per Minute (CFM) and Pressure per Square Inch (PSI), and thus require a very large (5 horse power or larger) dedicated compressor to provide enough air to run them. The Apollo A51111 air conversion spray guns are designed much like a turbine spray gun rather than a conventional spray gun. Thus, all

the air ports and passageways throughout the gun are 1/2 inch or larger diameter. Due to this unique design, the A5111 spray guns require less air pressure and CFM (7 CFM @ 45 PSI) than any other air conversion spray guns and because of this, can run off of a compressor as small as a 3 HP with a 20 gallon tank. The performance and results are equal to any HVLP turbine system. In fact, the same gun is also instantaneously convertible to run off any brand turbine. The A5111 spray guns will spray any sprayable material including things like stains, lacquers, varnish, polyurethane, water-borne coatings, latex house paint, contact adhesive, Multispec, Zolatone, and all automotive finishes. The only drawback to the air conversion spray guns is that they require a 3 HP/20 gallon air compressor which does not make them very portable; turbine based HVLP systems are very portable and are well suited for jobsite use.

Q: Can I spray other finishes such as latex paint?

A: Apollo Sprayers will spray virtually any sprayable coating as long as it can be thinned to the proper viscosity. This is why all Apollo Spray Guns available from McFeely's include a viscosity meter.

Latex paint is not an easily sprayable material but it can be sprayed. When spraying Latex paint, you must thin the coating with 20% - 40% warm water and add a Latex conditioner (FLOETROL), which may be purchased at any paint supply store. When spraying Latex paint, the additional power of the 3 stage Model 825 or 4 stage 1025 unit is required. Additional use of a B style air cap and a 2mm tip/nozzle will maximize the use of these units with latex.

CrystaLac Waterborne Products can be sprayed with the 825 Turbine Systems straight from the can in most instances and can be thinned with CrystaLac Viscosity Reducer.

Traditional Solvent Based lacquers and stains may be sprayed with all Turbine Systems. Thicker coatings such as Zolatone, Plextone, and Multispec need the power of the 3 stage Model 825 or 4 stage 1025 Turbine Units.

Q: Will I need different sized tips and needles for spraying different coatings?

A: All Apollo Spray Guns are supplied with a 1mm tip and needle. This size will cover most standard finish coatings at the proper viscosity. Additional specialized tips are available in 0.75mm, 1.5mm, 2.0mm, and 2.5mm. for specialized applications. McFeely's offers two tip accessory packages to maximize your system's performance.

Apollo Spray Latex Kit includes 2mm Tip and needle set, B style air cap and a special air supply control valve for use in texturing and with lighter materials. The Apollo Tip Kit contains a .75mm and a 2.0mm Tip and nozzle and a B style Air Cap.

The Apollo Product Line From McFeely's

ApolloSpray HVLP Conversion Gun

APS-5111 True HVLP from YOUR COMPRESSOR



Apollo Air Conversion non-bleed HVLP Spray Guns give TRUE HVLP performance and control using air from your regular compressor. A specially designed spherical air expansion chamber together with an "air-miser" valve reduce air consumption by 50% over other air conversion HVLP spray guns. This enables the Apollo HVLP Conversion Gun to run off virtually any compressor 3 HP or larger with a 20 gallon tank.

Spray control, atomization and speed are identical to the finest conventional spray guns, PLUS you have all the benefits of HVLP. Constructed entirely of metal, the Apollo Spray Gun is lightweight and made to withstand industrial use.

ALL fluid parts are marine grade stainless steel including the trigger, which prevents corrosion or rust on this spray gun. The gun is very simple to operate and easy to maintain. It has a spray pattern which adjusts from a 1/4" line to a 15" fan using the same tip/needle/aircap combination. Alternative sizes in jet/needles/aircaps are offered for specialized coatings. Air pressure at the handle can be varied from 20 PSI to 80 PSI, so virtually all sprayable coatings can be sprayed, including waterborne, latex and even adhesives.

Transfer efficiency exceeds all applicable Government codes including California SCAQMD 1136. Two years in development, this Apollo Spray Gun was computer designed with input from professional spray finishers. They addressed such items as weight, balance, style, size, and ultimately, performance. The gun fits snugly into the operator's hand, has a very easy trigger action and perfect balance which greatly reduces wrist/operator fatigue. It has a consistently even spray pattern at any supply pressure; there is no fan distortion. Uniquely, this gun will also run off any brand turbine and the change over from compressed air to turbine air takes just a few seconds. Each gun comes with a spare parts kit, stainless wrench, #2 Zahn metal viscosity cup and couplers to enable you to run off *any make* turbine and an illustrated instruction manual. 100% Made in America with a *two year written* warranty.

Requires a compressor with a minimum 3 HP, 20 Gallon tank that can deliver 7-11 CFM at 20-80 PSI.

Features	Apollo 825	Apollo 1025
Turbine:	3 Stage	4 Stage
PSI:	5.5	8.0
CFM:	115	130
Air Filtration:	Double	Double
Gun Usage:	Single	Single
Case:	Green Steel	Green Steel
Weight:	29 lbs	30 lbs
Height:	15"	15"
Width:	8.5"	8.5"
Length:	12"	12"
Volts/Hz:	110VAC/60H	110VAC/60H
Amps/Watts:	11A/1500W	13A
HorsePower:	1.65 Hp	1.85
Hose:	24 ft. Flex	34 ft. Flex
Gun:	<u>A5510</u>	<u>A5510</u>
Warranty:	2 Year Factory	2 Year Factory

Apollo Accessories

Apollo Spray Turbine HVLP - Model 825

The **Model 825** is ideal for spraying all solvent based materials (i.e Enamels, Lacquers, Stains, Polyurethanes) and most waterborne coatings. This Model WILL NOT spray Latex Paint and other specialized materials like Multispec and Zolatone straight from the can. However, Latex Paint may be sprayed by thinning and adding a latex conditioner.

Apollo Spray Turbine HVLP - Model 1025

The **Model 1025** is ideal for spraying solvent based materials such as Enamels, Stains, Lacquers, and Polyurethanes, as well as any waterborne coatings, Latex Paint (use with

Floetrol or similar flow additive) and other specialized materials like Contact Cement and Gelcoat. The 1025 will supply the power needed for almost any spray application.

ApolloSpray Latex Kit

Maximize Your Sprayer for Latex

Latex paint is incredibly thick so it takes a powerful HVLP sprayer like an Apollo 825 or 1025 to really lay it on successfully. Pushing Latex through the standard 1mm tip, even after it has been thinned and doctored with a conditioning additive, really loads down the turbine unit and requires an experienced touch to achieve good results. Change the tip and needle to 2mm though, and watch out! The Apollo Spray Latex Kit includes 2mm Tip and needle set, B style air cap and a special air supply control valve for use in texturing and with lighter materials.

APS-0002 Apollo Latex Performance Kit

Apollo Tip Kit

Increase the performance of your Apollo

Apollo HVLP guns are incredibly versatile. The 1mm tip included is standard with all McFeely's Apollo units, works well with most materials and will do an acceptable job with materials that are thicker and thinner than most. Let your Apollo strut its stuff by sizing your needle to your material. This kit contains a .75mm for lighter materials such as oil and alcohol based stains and a 2.0mm tip and nozzle and a B style Air Cap for heavier materials such as Latex paint.

APS-0003 Apollo .75/2.0mm Kit

CrystacLac Gun Cleaner

Now Get Those Spray Guns Really Clean

Cleaning up after any finishing job is never much fun. Most problems with HVLP guns result from inadequate cleaning. Now you can clean that gun easily and economically. Just run this biodegradable cleaner through the gun after spraying and remove and clean the tip and nozzle as recommended. Stubborn deposits left over by neglect are removed by a few hours soaking and a little elbow grease. This organic cleaning solution has a health rating of 1, reactivity rating of 0, and a flammability rating of 2 and may be strained and reused many times.

CLS-0009 Crystalac Gun Cleaner 1Qt