How to spray Water Based Finishes

Polyvine water-based varnishes can be sprayed through compressed air, HVLP and airless spray units.

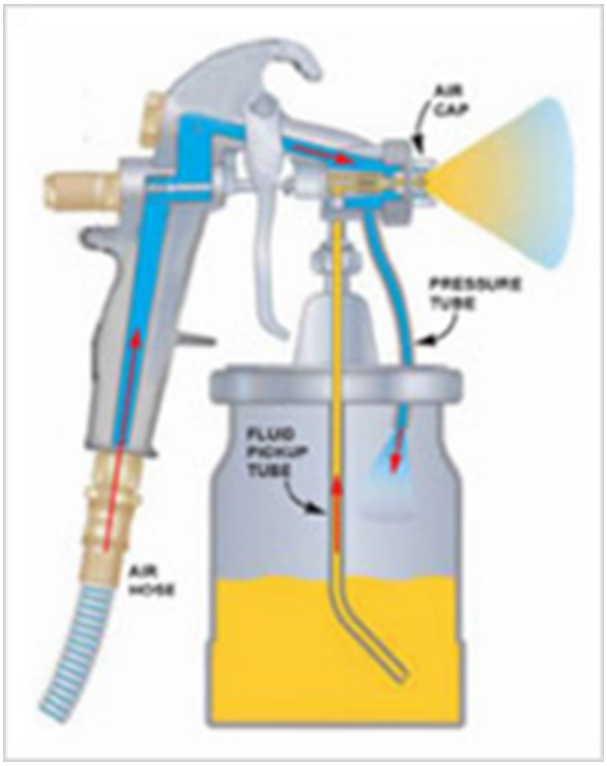
HVLP is recommended by Polyvine for easy application and very little overspray.

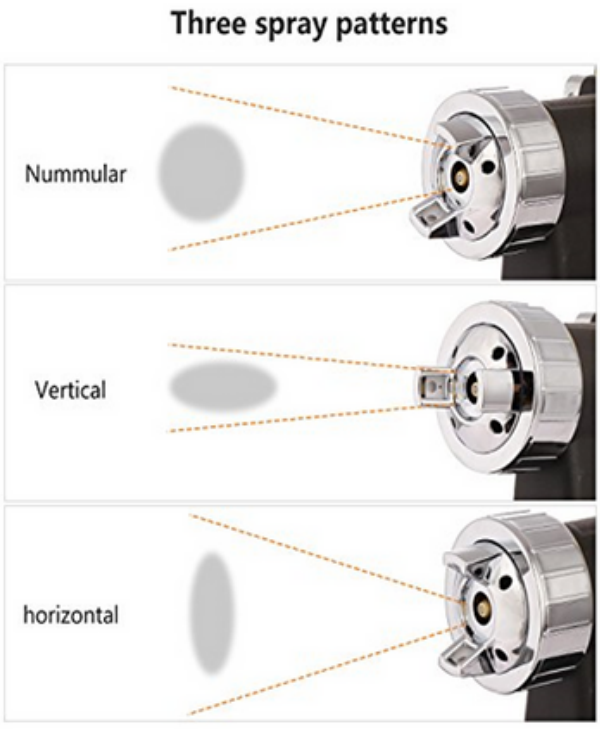
Spray unit and Tip Size

Water-Based Stains Tip Size 1.1 mm 0.043” 30 psi Max psi into gun

Water-Based Varnish Tip Size 1.3 mm 0.051” 30 psi Max psi into gun

SURFACE PREPARATION:
All surfaces should be clean and free from dirt and oil, and sanded.





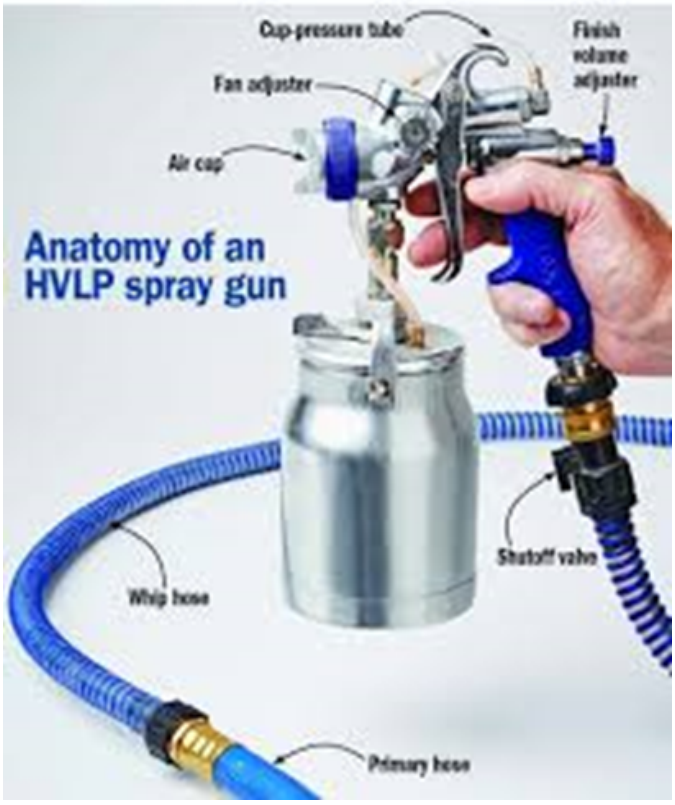
All Polyvine water-based topcoats and wood stains are ready to spray from the container without additives. Always strain material through a medium to fine mesh filter before spraying. If necessary, viscosity can be reduced or open time extended in hot or dry climates, by adding up to 10% water.

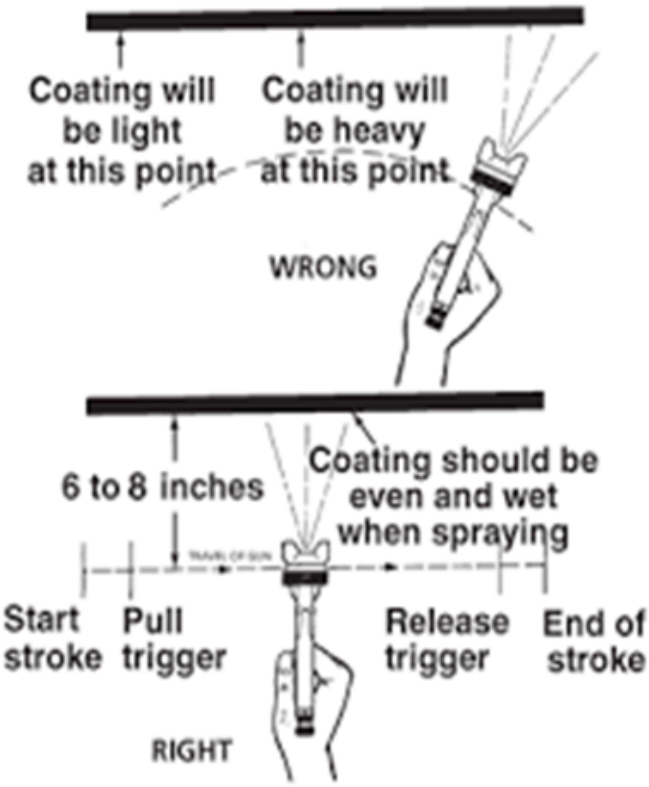
Softwoods such as Pine absorb stain at an uneven rate and may respond better to staining if the wood is prewetted. Always test your colour on a hidden part of the furniture.
If you are using a sprayer that has been used for oil-based or lacquers, clean the unit thoroughly.

Apply a thin coat first that will dry and harden faster. Sand this first coat down to a smooth base on which to build your finish coats with a 220-320 grade foam sanding pad or #400-grit sandpaper. It is better to spray 2 thin coats rather than 1 heavy coat.

Break your work into sections such as dresser top or drawer fronts. Spraying too large of an area can result in a textured grainy surface. A correctly sprayed finish should appear even and glossy. It is important to spray enough material to allow proper flow and levelling of the finish.

Spray medium wet films at 3-5 wet ml thickness. Practice makes perfect. If you have never sprayed finishes before, take a large piece of cardboard and practice your technique first.





Spray water on the cardboard to learn how the gun works. Check your fluid settings and adjust the controls to get comfortable with the spray angles and to develop your technique.

SPRAYING TOPCOATS:
Keep your gun at a 90* angle, 6-8" from the surface. On large flat areas, use wet, even patterns 6 to 8 wide. For narrow surfaces, reduce the fan pattern to 2-3" to reduce overspray.
For topcoats, overlap each pass 25% to conceal lines.

SPRAYING WATER BASED WOOD STAINS:
Keep your gun at a 90* angle, 6-8" from the surface. On large flat areas, use wet, even patterns 6 to 8 wide. For narrow surfaces, reduce the fan pattern to 2-3" to reduce overspray. Overlap each pass of stain 50% for even coverage and wipe back the excess with an absorbent cloth. For narrow surfaces, reduce the fan pattern to 2-3" to reduce overspray.

What is HVLP?

HVLP stands for "high volume low pressure", which means a "high air volume, low pressure" . HVLP paint spray systems are a great solution if you want to achieve a fine and even spray pattern with low spray mist. How does spraying with HVLP work?

The air flow generated by the turbine moves into the container and to the gun nozzle.
The air flowing into the paint container compresses the air in the container and pushes the paint through the suction tube, towards the nozzle.

With the help of the high air volume and the low air pressure, the paint is atomised into the finest paint particles at the nozzle outlet. This is how the actual spray jet is created.
Since both paint particles and an air stream are conveyed through the nozzle, the paint particles remain enveloped by the air stream as if by an air jacket. This helps to minimise the spray mist and ensure a higher material transfer. Accordingly, the biggest advantages for the user is better coverage and less material loss.

by Peter Wells, Polyvine Technical Director.