

Lesson 1: Spray Painting and Finishing

Spray Painting

Objective: Students will observe how to finish a project using spray equipment.

Directions: Use spray equipment to apply primer and finish.

Materials and Equipment:

Spray equipment and accessories	Thinner
Safety goggles*	Solvent cleaner
Respirator	Paint strainers
Rubber gloves and any other protective clothing recommended by instructor	Masking tape
Wooden paint stirring paddle	Clean cloths
Unpainted shop project	Clean containers for mixing and storing paint
Appropriate paint	Paper, cardboard, or scrap material for testing spray pattern
Compatible primer	Mineral spirits to clean spray gun, if water-based finish is used

* Everyone participating in or observing the demonstration should wear appropriate protective eyewear, a respirator, and any other protective clothing as needed.

Procedure:

1. Wear appropriate safety equipment.
2. Demonstrate the correct procedure for preparing the surface to be finished. Steps for preparing wood and metal were covered under learning objective 4. That material and any additional material on surface preparation discussed in class can be presented again as a review. Procedures include, but aren't limited to, the following.
 - a. Clean the surface.
 - b. Repair surface imperfections.
 - c. Use masking tape to cover areas that should not be painted.
3. Prepare the primer coat following the manufacturer's instructions.
4. Demonstrate the correct procedure for setting up the spray equipment.
 - a. Set air pressure.
 - b. Adjust the spray gun.
 - c. Test the spray pattern using the paper or cardboard.
 - d. Make any adjustments to the spray pattern, if needed.

5. Demonstrate the correct procedure for applying primer with the spray equipment using techniques discussed in the lesson and following an appropriate spraying sequence.
 - a. Hold the gun the correct distance from the work. For air spray equipment, this is approximately 8 in.
 - b. Paint corners and edges first.
 - c. Keep the gun at a 90-degree angle to the work.
 - d. Move the gun parallel to the work through the whole pass.
 - e. Begin and end spraying with the gun in motion.
 - f. Overlap passes by 50%.
6. Demonstrate the correct procedure for cleaning the spray gun.
 - a. Empty the paint cup.
 - b. Use an appropriate solvent for cleaning.
 - c. Do not use wires or other metal objects to clean orifices on the paint gun.
 - d. Dry all parts and reassemble the spray gun.
 - e. If the sprayer has been used to spray water-based material, run mineral spirits through the gun to remove any moisture and keep the gun from rusting.
 - f. Dispose of cleaning cloths properly.
 - g. Dispose of or store any unused primer properly.
7. When the primer coat is dry, demonstrate the correct way to prepare the finish.
 - a. Mix the finish.
 - b. Thin the finish, if needed.
 - c. Strain the finish.
8. Finish the project using an appropriate spraying sequence.
9. Clean the spray gun.
10. Dispose of cleaning cloths properly.
11. Dispose of or store any unused finish properly.
12. Assign the student version of AS 1 to be performed by students.