



CHOOSING THE RIGHT PAINT BOOTH

What You Need to Know to Make the Best Investment

In addition to protecting the environment, complying with state, national and local codes and regulations, and keeping your employees and facility safe, enclosing the painting process in a booth results in better quality paint jobs that are free of contaminants.

So, where should you start when buying a paint booth? The following five steps will help guide you through the process.

1. RESEARCH PAINT BOOTH SUPPLIERS

Although you can do a lot of planning on your own, it is helpful to begin looking into paint booth suppliers and their distribution options at the beginning of the purchase process. They will provide guidance to help you determine the size, airflow style and features that meet your business' needs and price point.

When selecting a paint booth supplier, be sure to choose a company that is experienced in the industry, has engineers on staff, validates the performance of their products and works with national safety and environmental organizations. You want to choose a company that is capable of providing local support, either through their own staff or distributors. They also should offer installation, maintenance programs and startup training for your new paint booth.

PAINT BOOTH SUPPLIER CHECKLIST

(Name of Paint Booth Supplier)

- Experience in Industry
- Engineers on Staff
- Validates Performance of Products
- Works with Safety & Environmental Organizations
- Local Support
- Installation
- Maintenance Programs
- Startup Training

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2. DETERMINE THE BEST SIZE FOR YOUR PAINT BOOTH

Your paint booth must be designed to accommodate the largest object that you manufacture or refinish. This will ensure there is adequate space and airflow through your paint booth.

APPLICATION

INDUSTRIAL & MANUFACTURING

Identify the largest object that you need to paint, then add a minimum of 2 feet to the height, 5 feet to the width and 5 feet to the depth. As you work out these measurements, be sure to incorporate the dimensions of pallets, racks or carts. If you are painting multiple parts, allow for 3 feet of empty space between each part.

Width: _____ + 5 Feet = _____

Depth: _____ + 5 Feet = _____

Height: _____ + 2 Feet = _____

AUTOMOTIVE REFINISH

Paint booth sizes tend to be more standardized, with 9-foot heights, 14-foot widths and 24-, 27- or 30-foot lengths. Higher ceilings to accommodate taller vehicles and size customizations are available; however, you want to make sure your paint booth stays within the range of ETL-listed sizes to prevent code compliance issues later on.

Width: 14 feet

Depth: 24 feet 27 feet 30 feet

Height: 9 feet

AVIATION

It is best to determine the dimensions of the largest aircraft you plan on painting, then add a minimum of 10 feet to all sides of the aircraft for clearance. You also need to take into account the additional space needed to accommodate scaffolding or personnel lifts. When possible, paint booth walls and ceilings are designed to conform to the shape of the individual aircraft, providing cost savings on capital equipment, as well as operational savings by reducing the amount of airflow required in the booth.

Width: _____ + 10 Feet = _____

Depth: _____ + 10 Feet = _____

Height: _____ + 10 Feet = _____

Paint booth sizing varies. Your paint booth manufacturer will work with you to design a booth to meet your business' needs.

3. DEFINE YOUR SPACE

Not only should you consider the working dimensions inside the paint booth, the space around the exterior of the booth is also important. Take the following factors into account when deciding on the layout and location of your booth:

- How will you be transporting products or parts (carts, conveyors, tracks, etc.) in and out of the booth? Is there a clear path into the booth?
- Does the layout of your booth (and any additional equipment) make sense for your desired shop flow?
- If an air make-up unit/air heater will be used, where will it be mounted?
- Are service ladders necessary?
- Where will exhaust ductwork go? Is there enough room between the top of the booth and the ceiling of your building for exhaust ductwork or will it have to exhaust out a wall?

Any complementary products to your paint booth, such as Paint Mix Rooms and Hazardous Material Storage Buildings, will require additional space. That must be accounted for early in the process to avoid layout headaches down the road.

4. PICK AN AIRFLOW STYLE

When investing in a paint booth, choosing the ideal airflow style for your business' needs is perhaps the most important decision. The airflow style you pick for your paint booth plays a big part when it comes to finish quality and contamination control, as well as capital costs and operational expenses.

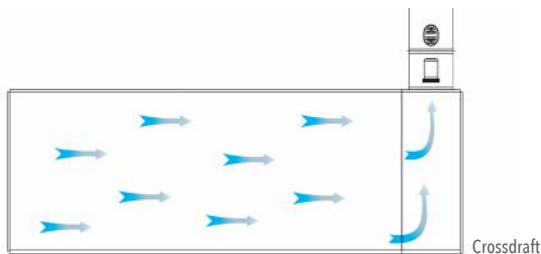
To ensure the product you are finishing gets the best possible finish, look for paint booths that provide laminar airflow. This ensures the spraying chamber is fully engineered to keep all the air moving parallel in the same direction, without turbulence that results in unpredictable spray patterns.

The following are the four primary airflow styles for paint booths:

CROSSDRAFT PAINT BOOTHS

Crossdraft paint booths are the most cost-effective and popular for industrial applications. They are generally less expensive up front because they typically operate at a lower cubic feet per minute (CFM) airflow rate, and therefore require smaller fans, smaller air make-up units (AMUs) and fewer filters. This also results in lower operating costs.

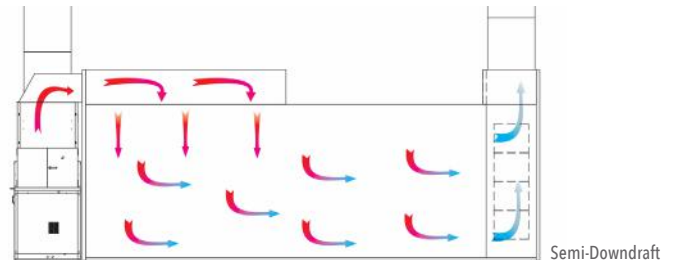
In addition to the less expensive price tag, industrial manufacturers like crossdraft booths because they are easily pressurized for climate control. They also provide a versatile solution for a variety of coating applications – from wood products to aircraft.



SEMI-DOWNDRAFT PAINT BOOTHS

Semi-downdraft paint booths are a hybrid, combining features of crossdraft and downdraft booths. They are generally less expensive than downdraft booths, with lower installation and operational costs. They are commonly used in both industrial and automotive refinish applications.

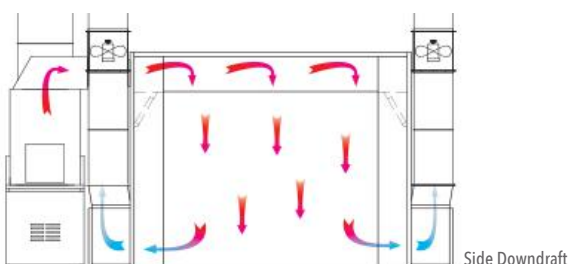
While downdraft paint booths are best suited for high-production shops, semi-downdraft booths are often the best option for restoration shops. Since restoration shops do not usually have as tight of deadlines as collision repair facilities, a semi-downdraft booth meets their performance requirements at a less expensive price tag, with no concrete work needed in the floor.



SIDE DOWNDRAFT PAINT BOOTHS

Side downdraft paint booths are an economical solution for businesses that cannot or do not want to dig an exhaust pit, which requires concrete work, making installation longer and costlier. They are most commonly used by industrial manufacturers and businesses that need to paint equipment, utility vehicles or trucks.

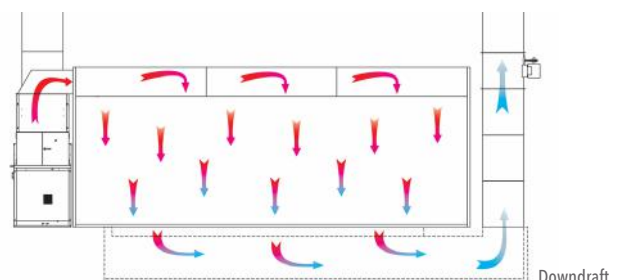
Gravity-assisted downward airflow is one of the biggest benefits of side downdraft booths, and they provide more uniform airflow than crossdraft booths. Side downdraft booths also offer a higher level of contamination control and finish quality than crossdraft booths, largely because of the downward airflow and side exhaust.



DOWNDRAFT PAINT BOOTHS

Downdraft paint booths provide the best airflow style for controlling overspray and contamination. For most automotive refinishers, especially those repairing luxury vehicles, downdraft airflow is the preferred choice.

Downdraft booths require about 20 to 40 percent more air than crossdraft booths, adding to operational costs. Even though downdraft booths are the most expensive, businesses can usually make up the added cost for top-of-the-line equipment in less than a year, thanks to increased throughput and labor savings, with not as much time needed for cutting and buffing.



5. CONSULT LOCAL AUTHORITIES

As you work through the installation process, be sure to consult local authorities with jurisdiction and expertise in local codes. If you are building a new facility and also installing a paint booth, working with the building inspector up front will help with permitting and make it easier to be aware of any additional safety requirements beyond general booth requirements.

In addition to ensuring that your facility complies with local codes, certain states and cities may offer grants, financing or rebate programs for paint booths that meet and exceed certain environmental guidelines.

Global Finishing Solutions® (GFS) has an extensive history of designing and building exceptional paint booths and finishing equipment for a wide variety of industries – including aerospace, automotive refinish, industrial manufacturing and woodworking. Our high-quality, proven products are backed by our unmatched technical support team, distribution network and field services staff for lifelong support of your spray booths and finishing equipment.

GFS is proud to offer an extensive, experienced team of distributors throughout North America to assist you with initial purchasing decisions, as well as throughout the lifespan of your equipment and beyond. To learn more about the different types of paint booths available or to get in contact with a distributor in your area, please visit globalfinishing.com.

