



PAINT BOOTH





SPRAY BOOTHS - GENERAL SPECIFICATIONS

ISTpaint specializes in the engineering, manufacturing, installation, and servicing of custom-made Paint Booths, mixing rooms and finishing systems of any sizes and configurations. Our systems are used in a variety of industries where high-quality finishing is required. Our spray booths provide a controlled environment for industrial surface preparation, painting, coating and finishing applications.

Our paint booths can be designed with a filtration and exhaust system to provide a clean ventilated source of air to keep the spray chamber free of dust, fume and overspray. According to the surrounding climate, an air make-up units (AMU) can provide temperature controlled fresh air to the booth to ensure optimal curing environment.

All spray booth systems and components meet or exceed codes and compliance for CSA, OSHA, NFPA, ANSI and most local building codes and fire codes. A system certification can be obtained upon request.

	Canadian Standards Association
	Occupational Safety and Health Administration
	National Fire Protection Association
	American National Standards Institute

BOOTH FEATURES

- ✓ **Heavy Duty Construction** fabricated with the highest quality 18 gauge, G90 galvanized steel panels.
- ✓ **Easy Assembly** all designs create a bolt free booth interior and panels and support members are precision punched for easy nut and screw assembly.
- ✓ **Superior Doors** Product Doors are field located on slotted hinges to facilitate adjustment on 2-axes for uneven floors. Our personnel doors are 30" wide X 84" tall with 14 ½" wide x 48" tall observation window built into a pre-assembled heavy frame.
- ✓ **Industry-Leading Lighting** Lighted booths get bright, full booth illumination from standard LED ISTpaint light fixtures. ISTpaint light fixtures are CSA listed (Class 1 Division 2).
- ✓ **Paint arrestors** High efficiency RP Paint Arrestors which have a custom designed layering system to increase the overall efficiency of the booth. Filters are lab tested with over a 99% particulate removal efficiency.
- ✓ **Efficient Fans & Motors** Quality brand name tube axial fans and motors.
- ✓ **Air Solenoid Valve** Interlocked to the exhaust fan and air supply for the spray application equipment.
- ✓ **Meets Quality Performance Standards** Spray booths manufactured by ISTpaint meet and/or exceed all applicable OSHA and NFPA regulations.

COMMON FEATURES



Control Panel



Personnel Access Door



LED Lighting System



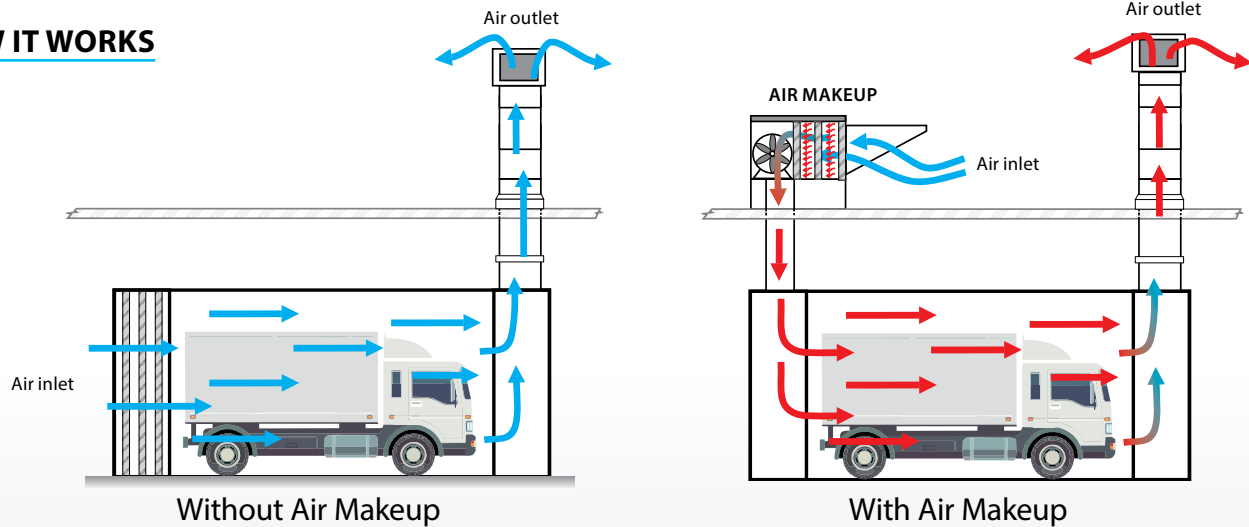
Easy Assembly Design



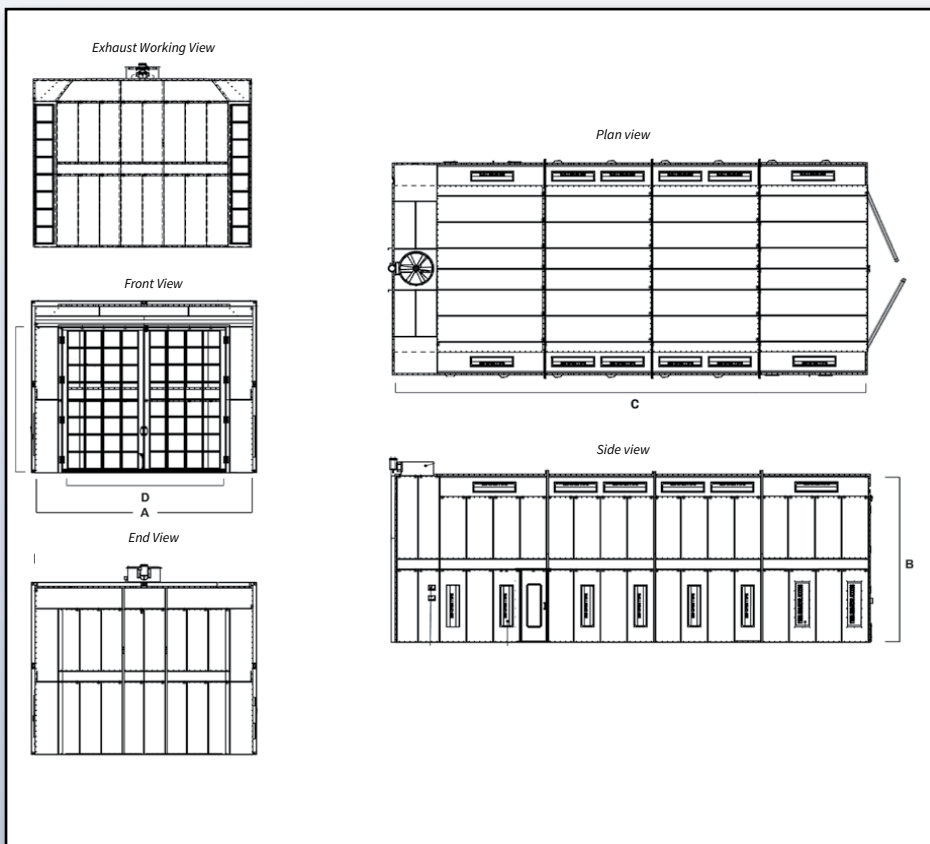
CROSSDRAFT SPRAY BOOTHS

Crossdraft booths, the simplest configuration, are efficient and economical and best suited for coating industrial/large equipment, truck and wood applications. ISTpaint crossdraft spray booths intake fresh air through filters in the product doors. The clean, filtered air is drawn through the booth and exhausted through a filter system at the opposite end.

HOW IT WORKS



FLOOR PLANS



Standard Duty Crossdraft



Heavy Duty Crossdraft



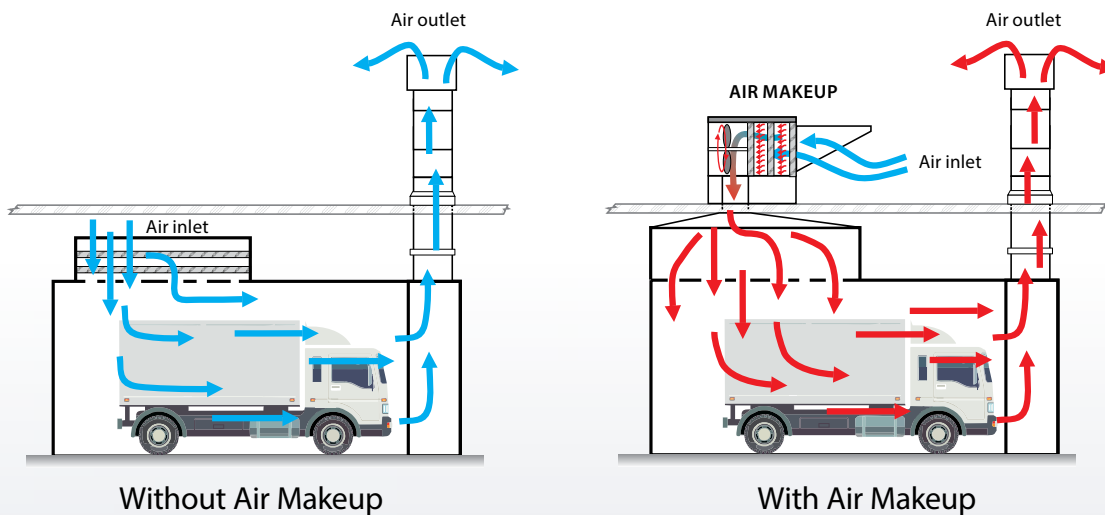
Crossdraft Interior



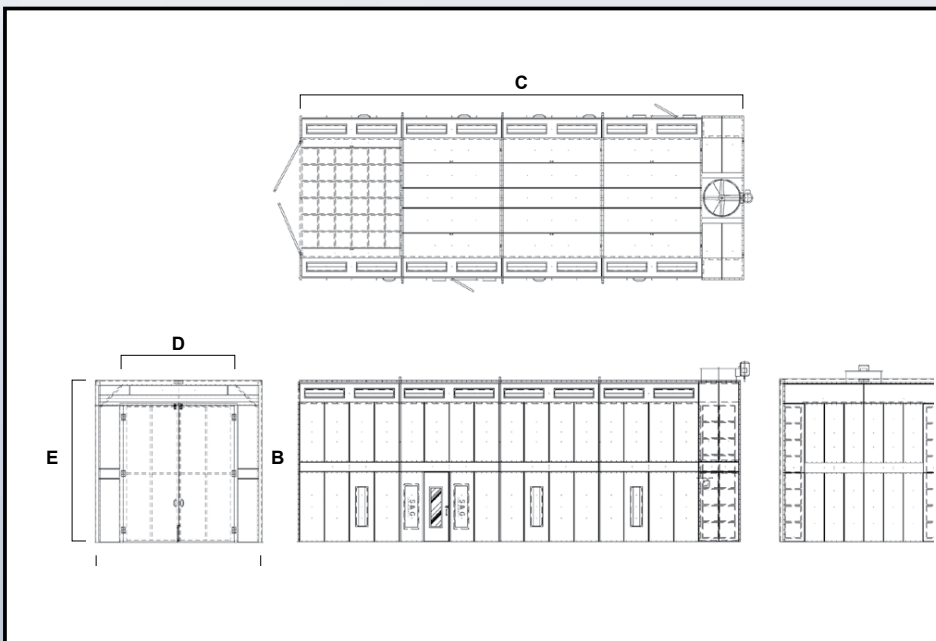
MODIFIED DOWNDRAFT SPRAY BOOTHS

Offering a clean and healthy work place, modified downdraft spray booths allow for easy pressurization with the addition of an intake plenum with fan or a heated air makeup unit. The modified downdraft intakes air from the cleaner upper levels of the shop through a filter bank located in the booth ceiling, near the product doors. The filtered air is drawn down through the booth to an exhaust filter system at the other end, and is optionally equipped with a pre-filter plenum for additional intake air filtration.

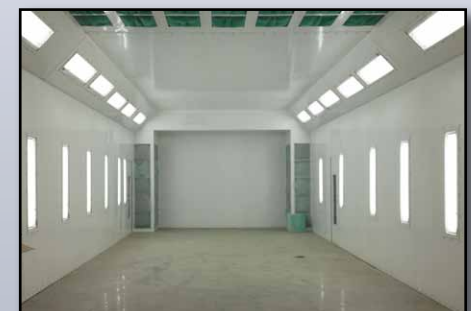
HOW IT WORKS



FLOOR PLANS



Modified Downdraft



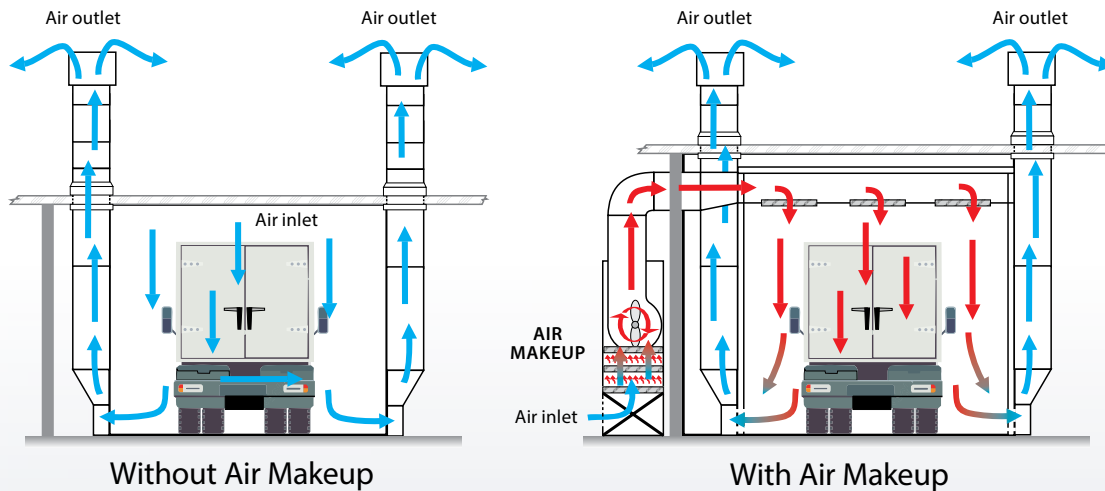
Modified Downdraft Interior



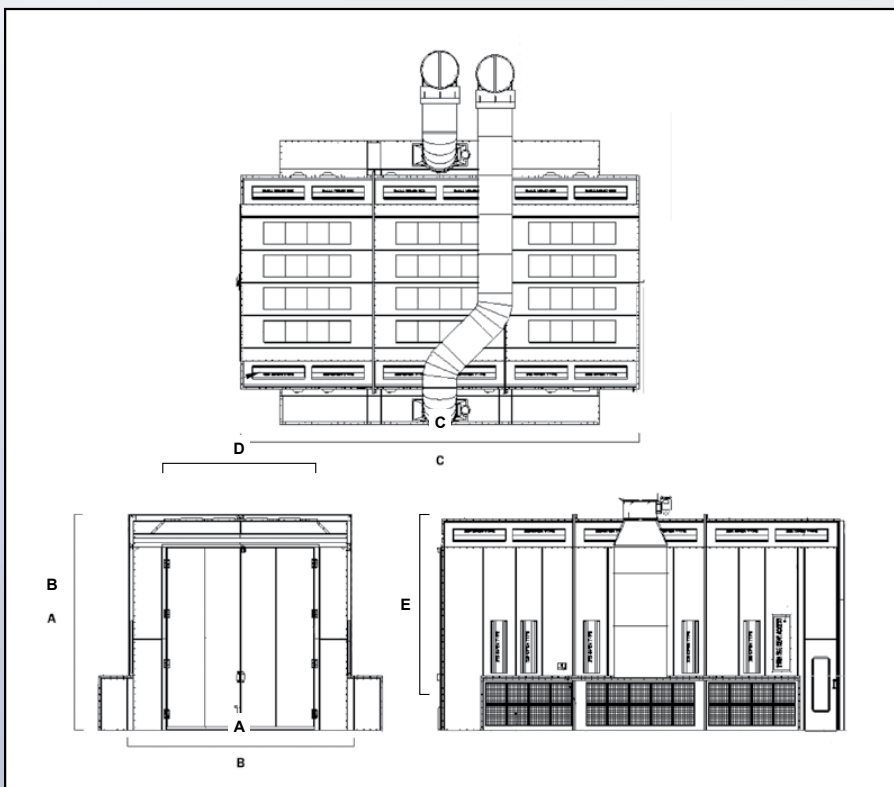
SIDE DOWNDRAFT SPRAY BOOTHS

A more economical solution for shops that are unable to install a pit, side downdraft spray booths intake fresh air from the cleaner upper levels of the shop through a filtered booth ceiling. The filtered air is drawn down and away from the product through exhaust filters at the floor level along both sides. This provides efficient overspray control that reduces prep time while also delivering a healthier work place environment. The side downdraft booths can also be purchased with a pre-filtered plenum or a pressurized intake plenum and can be equipped with an air replacement unit and cure cycle to meet your requirements.

HOW IT WORKS



FLOOR PLANS



Side Downdraft



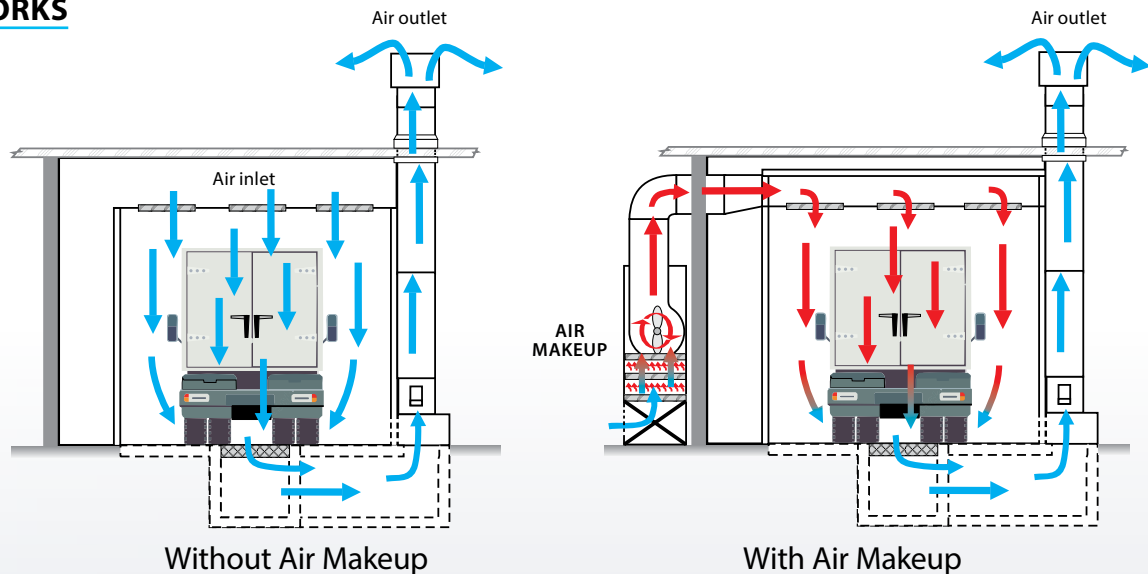
Side Downdraft Interior



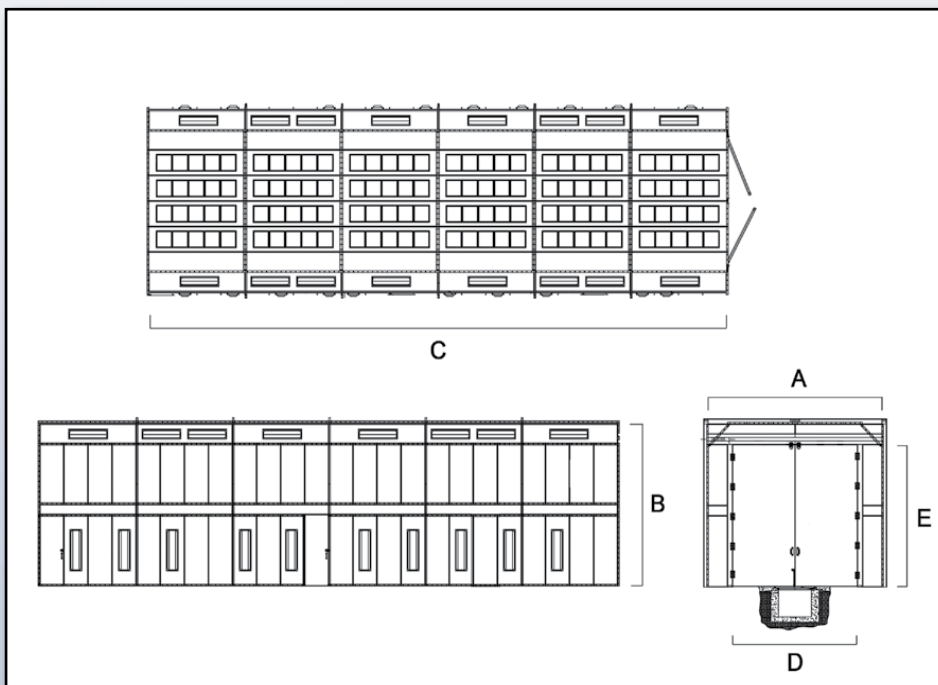
DOWNDRAFT SPRAY BOOTHS

Providing the best airflow style, downdraft booths offer efficient overspray control that reduces prep time and also provides a much healthier workplace environment. Downdraft booths take in fresh air from the cleaner upper levels of the shop through a filtered booth ceiling. The filtered air is drawn down and away from the product into the filtered exhaust pit located in the floor. This booth can be purchased with a pre-filtered plenum or with a pressurized intake plenum. It can also be equipped with an air replacement unit and cure cycle to meet your requirements. Optional above ground basement exhaust plenum is available for installation without concrete work.

HOW IT WORKS



FLOOR PLANS



Concrete Pit Installation



Raised Floor Installation



AIR MAKE-UP UNITS

Air make-up units (AMU) are used to replenish fresh air into the paint booth to stabilize its pressure as air is being exhausted. Direct-fire heaters and other energy-efficient technologies can be added to AMU to supply temperature-controlled air to the spray booth in order to provide painters with a comfortable work environment as well as to accelerate the paint drying/curing time.

ISTpaint offers a variety of energy-saving Air Make-Up configurations that can minimize the operation cost of the paint booth by taking into account key factors affecting the air quality—such as size of the booth, local climate, cycle times and temperature set points. Our units can come factory-set in either positive or negative pressure configurations and can be field adjusted to accommodate the full range of application duties that may be required.

1. Direct fired and indirect fired heating systems
2. 100% fresh air control systems
3. Bake Mode recirculation
4. Prep Mode
5. Spray Mode recirculation
6. Pulse control system



Single Stage (Constant and Variable Volume) Units

Single Stage AMU provide a constant rate of warm fresh outside-air into the spray booth and use direct-fire heaters to heat air at the source at a specific temperature set point. Our systems are 99% efficient due to the fact that all heat generated from the heaters is directly introduced into the supply-air stream of the spray booth, with very low heat loss.

Dual Stage – Hi/Low – Dual Temperature Make-Up Air Units

With the same 99% efficiency as our Single Stage AMU, Dual Stage AMU allow the customer to switch between high and low speed, each with a unique temperature set point. This configuration is ideal for applications that have dual speed or heat requirements and provide an economical alternative to Recirculating Heaters.

Recirculating Units

As opposed to Single Stage and Dual Stage AMU that draw exclusively outside-air to supply the paint booth, Recirculating Units allow for a majority of pre-heated filtered air (approx. 80%) to be drawn into the paint booth supply-air stream while only using a small portion (approx.. 20%) of fresh outside-air. This configuration is the most cost-effective and energy-efficient solution of the three by significantly reducing the amount of gas required since that the air comes across the burner pre-heated. Optional sensors can be installed to monitor heat, pressure, and other variables to provide a truly energy-efficient industrial heating unit.

Optional Control Upgrades

- Digital differential pressure sensor with clogged filter warning lights in panel
- Low and High-Gas Pressure Switches
- Outside-air ambient temperature sensor with automatic burner control
- Supply-air ducting kits
- Burner/spray-booth interlock kit
- Motor Soft Starters
- Variable Frequency Drives (VFD)



DRYING ROOM

Drying Rooms provide the ideal controlled environment for your finishing, curing and drying requirements. Diverting freshly coated parts into a separate drying room not only allows for continuous spraying operations inside the paint booth but it also provides a clean, filtered atmosphere for optimal drying and curing process along with reducing overall operating costs and increasing productivity.

Drying Rooms can be drawn to the customer's specifications and be equipped with infrared and/or convection curing systems according to applications and coating requirements.



WATERBORNE PAINT DRYING SYSTEM

ISTpaint's waterborne paint drying system produces the ideal turbulence inside the booth that will accelerate drying time and keep freshly coated parts away from dust and airborne contaminants. It can easily be fitted into a paint booth of any sizes or a standalone drying room.

This waterborne paint drying system takes air from the spray booth cabin through an intake filter controlled by a blower. The air is then delivered evenly onto the painted surface from a set of nozzles horizontally mounted at the gable of the spray booth.

Our exclusive design uses two patented technologies to create the perfect turbulence:

Nozzles with twist inserts

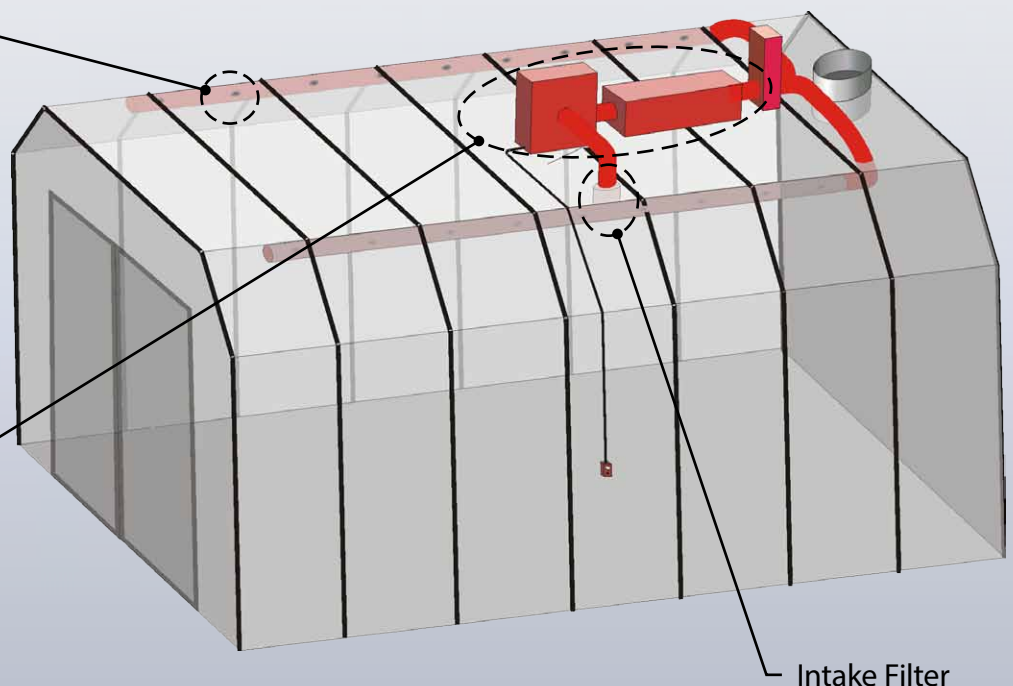


The airflow is twisted in a cork-screw fashion as the air leaves the nozzle

Blower with pulse generator



The pulsing motion of the blower creates turbulence without blowing dry overspray on painted surface





MIXING ROOM

ISTpaint mixing room provides a safe environment for paint preparation and storage next to the spray booth. Available in various sizes and pre punched for easy nut-and-bolt installation, our mixing room meet NFPA 33 requirements.

STANDARD FEATURES

- ✓ 18-gauge galvanized steel finish
- ✓ 12" Exhaust fan with 1/3 hp motor
- ✓ Personal door with observation window
- ✓ Door interchanges with any panel for custom configuration
- ✓ Class I division II light fixtures
- ✓ LED lighting system
- ✓ Various sizes available
- ✓ Meet NFPA 33 requirements (electrical, fire suppression, curb not included)
- ✓ Built in compliance with OSHA 1910 code (electrical, plumbing and sprinklers not included)



Outside view



Inside view

OPTIONAL FEATURES

- ✓ Powder coated white
- ✓ Additional doors

AUXILIARY EQUIPMENT



Pail Washers



Spray Gun Cleaners



Solvent Recyclers



Can & Aero Crushers



AVAILABLE OPTIONS

3-AXIS ELEVATOR SYSTEM

BL lifts can replace ladders for working in elevation and provide increased safety and productivity.



MONORAIL

Facilitates handling of large and heavy part with a monorail pass through conveyor.



BOOTH OPTIONS



Durable powder coated white option available



Optional UL/CSA listed control panel with or without VFD



Roll-Up Doors



Bifold or Trifold Doors

SAFETY EQUIPMENT



Gas Monitor



Respiratory Mask

IST provides a complete range of respiratory protection to the painter, providing pure breathable air to the operator's hood, eliminating air contaminants such as oil vapors, hydrogen gases, rust and other potentially hazardous contaminants to provide pure compressed air of respirable quality.

This system is equipped with an air supply detector and a carbon monoxide detector which continuously monitors and samples the air supplied in accordance with OSHA standards.





ABOUT THE COMPANY

WHO WE ARE

IST is a leading industrial manufacturer of standard and custom engineered equipment for the surface treatment industry and the solvent recycling industry.

MISSION

IST is dedicated to being an innovative and trusted supplier in the conception, fabrication and distribution of surface treatment equipment and recycling equipment.

The success of our mission relies on the following core values :

Innovation - Integrity - Quality

The products, technologies and industry expertise of IST are used in a wide range of manufacturing and industrial applications, including but not limited to :

- General Manufacturing
- Industrial Equipment
- Metal forming
- Aerospace and Aviation
- Rail and Transit
- Marine
- Automotive
- Petroleum
- Flexography (labelling) & Lithography
- Wood finishing
- Power & Energy
- Pharmaceutical

