

COMPLETE SOLUTION FOR PAINTING

PAINT BOOTH SYSTEM

CLEANING PEENING DEBURRING FINISHING PAINTING

Introduction

Welcome to Abrablast Equipment Pvt. Ltd.

A completet solution provider in the field of surface preparation & paint spray booth provides its expertise for every industries. ABRABLAST has designed, manufactured, installed, erected & commissioned huge turnkey projects for various renowned giant industries like BHEL, Air India, Hindustan Aeronautics, Bharat Earth Movers, Bhabha Atomic Power, Diesel Locomotive works.

Benefits At Glance

ENHANCE QUALITY OF WORK

Remove over spray effectively, thus eliminate its setting on wet painted components.

OPERATOR COMFORT & HEALTH

Provides clean air to the operator, taking away optimized paint particles through the exhaust.

SAFETY

Spraying paint may involve fire risk from both solvent vapours and continuously over spray deposits. A risk eliminate by using a spray booth.

LAW

In compliance with stringent pollution control norms.

INCREASE PRODUCTIVITY

Decrease operating cost due to elimination of water curtain chemical, maintenance & electrical cost.

ENVIRONMENT

Eliminate hazardous sludge disposal.

Silent Features

No sludge disposal.

All modular construction.

High particulate removal efficiency.

Healthy and pollution free work environment.

Access door window is with clear toughened glass.

The efficient centrifugal fan guarantees superior air movement & quite operation.

Special design of intake & exhaust filtration provides for even air movement inside the booth.

Down Draft Paint Spray Booth

Semi-Down Draft Paint Spray Booth

End Draft Paint Spray Booth

Down Draft Wet Paint Spray Booth

Water Curtain Paint Spray Booth

Applications

Aerospace

Auto Components

Architectural Components

Automoblies

Construction/Earth Moving Machinery

Consumer Durables

Rail Coaches/ Wagons

Electrical & Power

Wind Mills

Shipyards

Drums / Barrels

Miscellaneous

End Draft Paint Spray Booth

The End Draft (the direction of flow of air is towards the floor of spray booth) Paint Spray Booth is suitable for conventional, air-less and electrostatic spray painting and its consists of painting chamber, Inlet Air Filter, Paint Trap Filters, axial flow Fan, electric motor, duct and canopy etc. The design of the paint booth will be of End Draft type paint booth with disposable paint trap filters on floor. The intake air into the paint booth is filtered by intake filter to avoid foreign particle deposition on the painted surface. The intake air is sucked into the room by the extraction modules located on the back wall.

Functions:

- Maintains dust level to minimum, prevents spreading of paint and maintains clean air at the operators breathing level.
- Collects over sprayed paint, solid and discharge solvent fumes outside the building.
- Reduces the fire hazard.





Enclosure:

Spray booth is of rectangular shape rigid bolted construction. The structure is self-supporting and will not need supporting foundation except fixing bolts. Fabricated out of 18swg M.S. Sheet panels bolted with structural steel for rigidity.

Water Curtain Type Paint Spray Booth

The spray painting is carried out by operator with the help of spray painting gun [Buyer to arrange spray painting gun]. The paint fume particles are sucked by the partial vacuum created by exhaust fan through a water curtain. The air is cleaned by scrubbing action in turbulent water. The particulate matter remains floating on water tank is periodically removed manually. The air discharged into the atmosphere is clean thus keeps the environment clean and friendly.



Construction & Design

The practical expertise enables us to design the Water Curtain Spray Booth with superior performance. The spray booth is modular in construction so that booth can be easily installed, modified or integrated into complete plant. The additional middle suction, clearly provides improved air guidance and better suction of hazardous paint fume particles. The water film thickness on the drain wall can be adjusted individually via throttle valves. Moreover, the unit meets OSHA's safety norms.

Essential Elements of Water Curtain Spray Booth

EXHAUST FAN MOTOR

Paint spray booth is mounted with high efficiency centrifugal exhaust fan and motor to suck the fume and particulate matter in air.

WATER PUMP & PIPING

Paint spray booth provided with water pump and suitable piping arrangement for proper circulation of wate

THROTTLE VALVE

To control water film thickness on the drain wall.



Down Draft-Wet Type Paint Spray Booth

The spray painting is carried out by operator with the help of spray painting gun [Buyer to arrange spray painting gun]. The paint fume particles are sucked by the partial vacuum created by exhaust fan through a tank of water. The particulate matter floating on water tank is periodically removed manually. The air discharged into the atmosphere is clean and thus keeps the environment clean and friendly.

The Unique feature of Pump-less Water Wash

During Thermal Spray process dust is generated. To keep the environment friendly suction is created by an exhaust Fan causes the dust laden air to enter a wider area after an abrupt change in its direction. At this stage heavier dust particles settle down without causing any abrasion to the metallic surfaces, which can be removed through a Clean out Door. After this the air carrying finer dust particles strikes the water surface and travels beneath the weir plate of a venture system creating a stream of droplets entraining dust. This stream undergoes a further changer in direction causing dust to get collected in the water. Dust free but wet air strikes a number of Baffles where the moisture is separated and clean air escapes to the atmosphere through the exhaust fan. The collected dust settles down as sludge at the bottom of the wet collector and is cleaned out, manually, at intervals through a Drain.

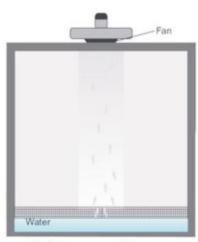
Water

Fabricated Spray Room

Pump-less Type Wet Fume Collector

Wet fume collector is fabricated from 2 mm steel sheet and suitably reinforced for strength and rigidity. Grating will be provided on water tank in paint spray booth. Water tank is civil constructed as per pit drg. provided by us. However, detailed civil drg. for pit construction is in buyer's scope.

Baffle type arrangement to eliminate the moisture from air exit out in atmosphere. During operation, a series of eliminator separate the air from the liquid mixture. Clean air is exhausted to atmosphere. Side doors of size 500 mm [W] X 1000 mm [H] is provided at the sides of wet fume collector for inspection and maintenance. Disposal of paint particulate matter from the water tank is manual.



Civil Constructed Room

Semi-Down Draft Paint Spray Booth

The Semi Down Draft (the direction of flow of air is towards the side walls of spray booth) Paint Spray Booth is suitable for conventional, air-less and electrostatic spray painting and its consists of painting chamber, Inlet Air Filter, Paint Trap Filters, axial flow Fan, electric motor, duct and canopy etc. The design of the paint booth will be of semi down draft type paint booth with disposable paint trap filters on side walls. The intake air into the paint booth is filtered by intake filter to avoid foreign particle deposition on the painted surface. The intake air is sucked into the room by the extraction modules located on the side walls.

Enclosure:

Spray booth is of rectangular shape rigid bolted construction. The structure is self-supporting and will not need supporting foundation except fixing bolts. Fabricated out of 18swg M.S. Sheet panels bolted with structural steel for rigidity.

Functions:

- Maintains dust level to minimum, prevents spreading of paint and maintains clean air at the operators breathing level.
- Collects over sprayed paint, solid and discharge solvent fumes outside the building.
- Reduces the fire hazard.









Down Draft Paint Spray Booth

The vertical Down Draft (the direction of flow of air is towards the floor of spray booth) Paint Spray Booth is suitable for conventional, air-less and electrostatic spray painting and its consists of painting chamber, Inlet Air Filter, Paint Trap Filters, axial flow Fan, electric motor, duct and canopy etc. The design of the paint booth will be of vertical down draft type paint booth with disposable paint trap filters on floor. The intake air into the paint booth is filtered by intake filter to avoid foreign particle deposition on the painted surface. The intake air is sucked into the room by the extraction modules located

Enclosure:

Spray booth is of rectangular shape rigid bolted construction. The structure is self-supporting and will not need supporting foundation except fixing bolts. Fabricated out of 18swg M.S. Sheet panels bolted with structural steel for rigidity.

Functions:

- Maintains dust level to minimum, prevents spreading of paint and maintains clean air at the operators breathing level.
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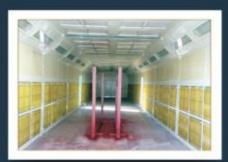












PAINT BOOTH TYPES

- **▲ End Draft Paint Spray Booth**



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