



GLOBAL FINISHING SOLUTIONS

# AdvanceCure®

Accelerated Airflow System



- Ultimate Compatibility
- Increased Productivity
- Reduced Energy Consumption
- Improved Finish Quality
- Maximized Profitability

# AdvanceCure®

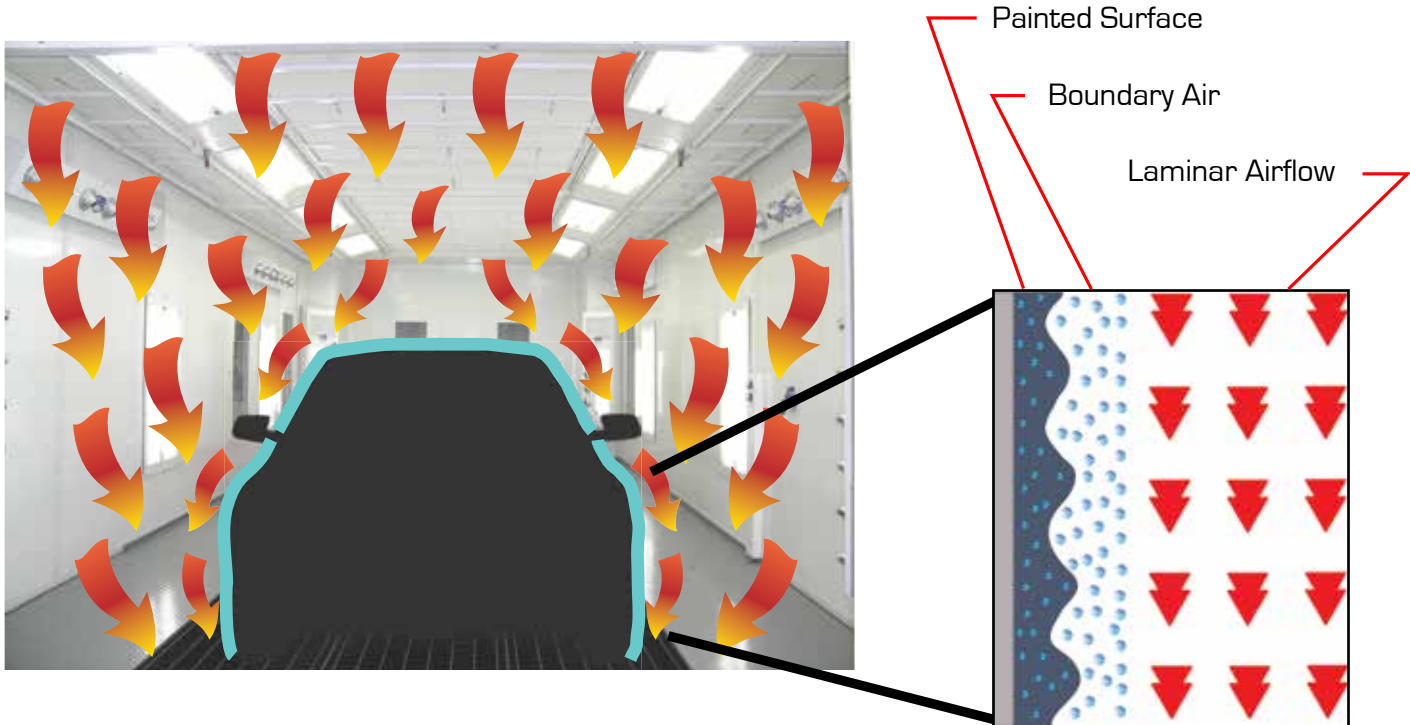
## How the AdvanceCure System works:

Downdraft airflow is generally accepted as the best type of airflow for a paint booth, and generally speaking this is correct. It does an excellent job of controlling overspray and contamination, and provides a safe, clean environment in which to paint. However, there is one limitation that downdraft airflow just cannot avoid. This limitation is the creation of 'laminar air' and 'boundary air'. Laminar air is created as air passes in one direction over a solid object in a paint booth. Boundary air is a low-pressure layer of slow moving air immediately below the laminar air and above the surface of the vehicle.

When looked at under a microscope, even the most perfect paint jobs are not entirely smooth. They have tiny bumps, dips, and ridges that are imperceptible to the naked eye. These tiny imperfections slow down the air enough to create a layer of slow-moving air referred to as the 'boundary air'. During the paint drying process, this boundary air becomes saturated with water molecules from the paint, and limits the speed of evaporation that can take place. It is this boundary air that prevents the airflow from drawing water molecules out of the wet paint.

In order to achieve the fastest drying times possible, this boundary air must be disrupted and dispersed. This disruption is accomplished by creating turbulent airflow on the surface of the vehicle, which is what AdvanceCure does. It breaks up the slow-moving boundary air and rapidly speeds up the drying process.

## With AdvanceCure turned off . . .



You can see that with AdvanceCure turned off, the traditional top-to-bottom downdraft airflow causes a boundary layer of slow-moving air to form on the surface. Vapors and fumes linger on the painted surfaces as a result. This prevents the underlying coating from being exposed to the moving air, and results in curing times that are longer than necessary. This also prevents the coating from curing in the most effective manner, resulting in a less-than-optimum finish quality.

# AdvanceCure®

## Definition: Controlled Turbulent Airflow

Controlled Turbulence? Seems like a contradiction, doesn't it? However, when it comes to airflow, this is exactly what you want to achieve in your waterborne paint booth.

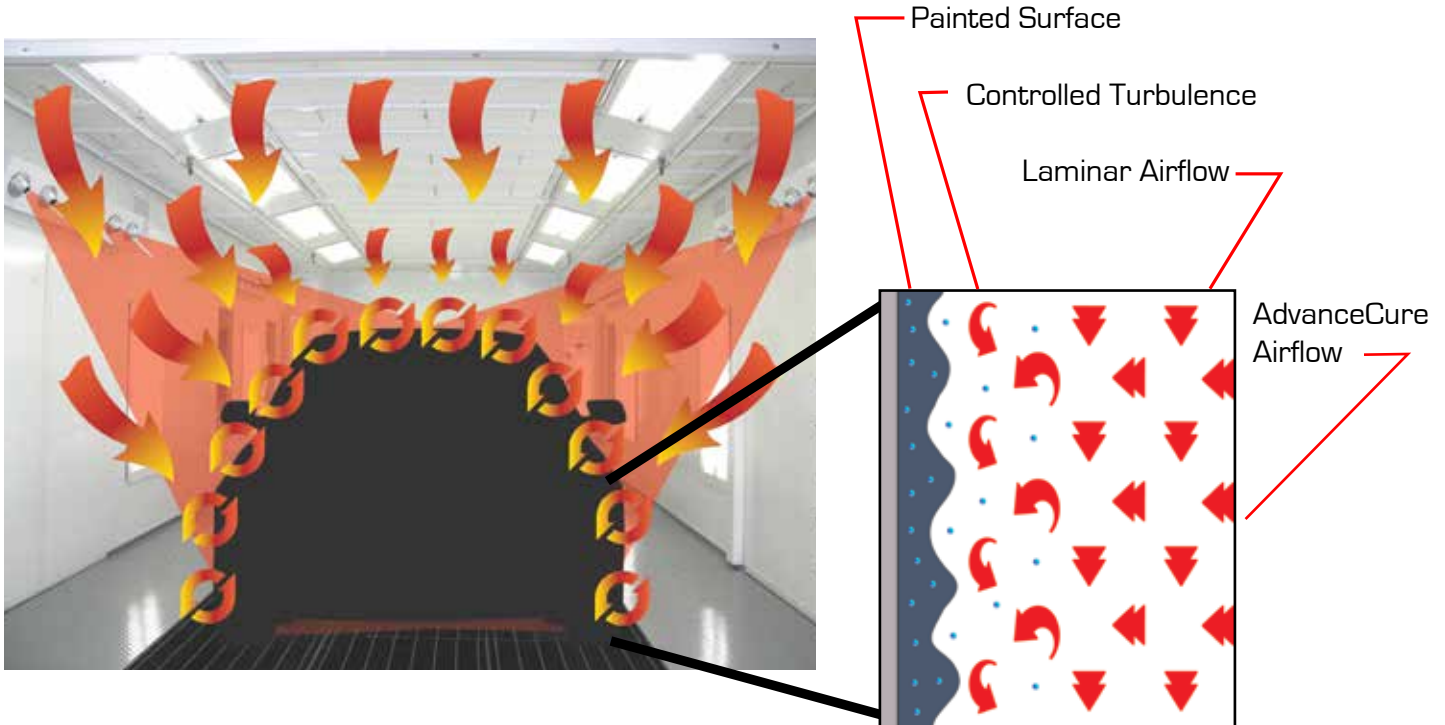
Controlled turbulent airflow is essentially the fusion of two different airflow concepts:

**Controlled Airflow** - Intentionally directed, focused airflow

**Turbulent Airflow** - Rapidly moving, multi-directional airflow

AdvanceCure interacts with the downdraft airflow in order to produce controlled turbulent airflow on all the surfaces of the vehicle. This effectively turns the paint booth in to a convection oven, and drastically reduces drying times.

## And now, AdvanceCure turned ON!



The result of AdvanceCure's powerful airflow is plain to see. The boundary layer is broken and the illustrative smoke is dispersed much more quickly. This rapid airflow allows the heated moving air to reach the painted surfaces, raise the skin temperature and draw the vapors and fumes out of the coating at a much faster rate. This minimizes the time required for flash-off and curing, and results in optimum curing for the best quality finish.



# AdvanceCure®

## Drastically reduced drying times

GFS developed the AdvanceCure Accelerated Airflow System to help body shops be more productive, more efficient, and more profitable. GFS' AdvanceCure accomplishes these tasks by greatly reducing the amount of time needed to cure or dry any type of coating, be it waterborne or solvent-based. The key to AdvanceCure's amazing results is the convection-type airflow it creates. This type of airflow dramatically improves the heat transfer from the air to the painted panels, and provides much more even heat distribution over the entire vehicle. By reducing the amount of time required for each paint job, GFS' AdvanceCure helps put more jobs through your shop in the same amount of time, uses less energy per job, and actually improves the final finish quality!

It's no secret that warm air rises. Even in a downdraft paint booth, the air near the ceiling will be warmer than the air near the floor. As a result, the vehicle surface temperature will also vary from the top to bottom, often times by up to 15° or more. By introducing controlled turbulent airflow, AdvanceCure helps distribute the heat much more evenly. By doing this, AdvanceCure eliminates this 'layering' and greatly improves the rise of the painted panels. coated surfaces cure much less time.

For example, to achieve of 140° over the entire in a typical downdraft to 20 minutes! With to bring the entire vehicle be reduced to about 8 than half the time!



a surface temperature surface of the vehicle booth, it can take up AdvanceCure, the time up to temperature can minutes. That's less

**During downdraft airflow, the air at the top of the cabin is warmer than the air near the bottom.**

**By turning on AdvanceCure, you can see the air becomes 'mixed up', and the heat is distributed evenly over the entire vehicle.**



GFS Performer downdraft booth with horizontal modules



GFS Ultra downdraft booth with horizontal modules



GFS Ultra Plus 1 downdraft booth with corner modules with lights

# AdvanceCure®

## AdvanceCure - The original system, and still the best. Here's why:

GFS spends so much time and effort in research and development that we rival some NASA programs! The reason is that we know when your productivity and profitability are on the line, you can't spare a single second of lost production or any increase in costs if you want to stay competitive. This is why we've developed the most feature-packed, most effective waterborne drying systems available. With multiple designs and configuration options, you can be sure that AdvanceCure will provide the results that you need for your shop, no matter what.

## Some examples of AdvanceCure Installations:



GFS Ultra downdraft booth with horizontal and corner modules



Downdraft booth with four horizontal modules



Drive-thru prep station with four horizontal modules



External view of module remote motors

# AdvanceCure®

## Key Features of the AdvanceCure System:

### Contaminant-free airflow, the easy way.



By drawing pre-filtered air directly from the interior of the paint booth, AdvanceCure simplifies the air supply process and ensures that the air is already at the proper temperature without the need for any additional heating. AdvanceCure's

integrated intake filters provide extra protection against any random contaminants that may work their way into your booth.

### Ready . . . Aim . . .



With AdvanceCure's multiple independently adjustable nozzles on each module, there's no area of the booth that the airflow can't reach. Simply direct the nozzles at problem areas, or at regular intervals around the booth, and AdvanceCure will take care of the rest. The optional laser aiming device (at right)

makes pinpointing specific areas of the painted surface a cinch. Plus, AdvanceCure's nozzles are made from a durable aluminum alloy for easy cleaning.

### It doesn't get any easier than this.

Want one module on, but not the others? How about two on and two off? With GFS' AdvanceCure, you can use any combination you want. Our unique control system gives you complete control over each individual module, making it just as effective for spot-painting a single panel as it is for painting the entire vehicle.

(4-module panel shown, 6-module control panel available)



### More light is always a bonus!

GFS AdvanceCure Corner modules offer the added bonus of an optional integrated 3-tube high-efficiency light fixture. This extra light helps illuminate the ends of the vehicle, and helps eliminate shadows.



### On and off without ever leaving the booth.



With the optional AdvanceCure internal activation switch unobtrusively installed inside your booth, you can easily activate your AdvanceCure system with the press of a button, without ever needing to open the cabin doors! This simple device can provide major time-savings for the painter on each and every job.

# AdvanceCure®

GFS' AdvanceCure modules comes in multiple designs to virtually fit any spray booth, new or used. You can mix-and-match any combination of modules to fit your exact booth in order to achieve the maximum results!

## Modules with Remote Blowers:

These modules are the most popular way to create turbulent airflow and can be placed virtually in any spray booth, including inside prep stations. These modules utilize a remotely located motor and intake filter to provide universal compatibility.



Modules feature:  
> 6 nozzles  
> Remote intake filter  
> 1 HP remote motor



Remote Motor



## Modules with Integrated Blowers:

### Corner with Light:



This is the module that is standard issue with GFS' Ultra Plus 1 paint booth. This is the module that has it all, in one self-contained unit!

> Corner mounted  
> 6 nozzles  
> Intake filter  
> 1 HP motor  
> 3-tube light

### Corner:



Completely self-contained, this module is easy to install and fits a wide variety of paint booth designs.

> Corner mounted  
> 6 nozzles  
> Intake filter  
> 1 HP motor

### Sidewall:



For longer booths, or designs where corner installation is not possible, the Sidewall module is the perfect solution.

> Sidewall mounted  
> 6 nozzles  
> Intake filter  
> 1 HP motor





GLOBAL FINISHING SOLUTIONS

