





REVOLUTIONARY CHANGE



### WHY CHOOSE GAS-CATALYTIC MEDIUM-WAVE INFRARED CURING?

Gas-catalytic medium-wave infrared (IR) curing is being adapted for automotive coatings as a result of shorter cure cycles and smaller floor space requirements when compared to conventional spray booths.

# WHY CHOOSE THE PHOENIX?

The US Autocure Phoenix is an autonomous paint curing machine that is designed to meet the stringent needs of the automotive repair industry. It has been designed by a team of engineers and automotive body and paint specialists who understand the benefits of increased production and improved quality.



#### Advanced Automotive Paint Curing System

- Increases throughput of existing booth resources without modifications
- Full and complete vehicle and part coverage
- No sticky door tops or rocker panels, full roof, hood, trunk, and bumper coverage
- · Accommodates all manner of vehicles and parts
- Fully-automatic digital robotic system
- Does not require precise center alignment of material
- System is self positionally-aware
- 11-point articulation
- Independent movement along top, left & right









#### MADE IN THE USA

The Phoenix is designed, built and supported by hard-working Americans. Unlike other IR curing systems on the market, mechanical and service support for the Phoenix are US-based. The system has been designed for quality and maintainability and uses advanced diagnostics to allow fast field repairs and software updates

US Autocure policy is to provide a maximum 48 hours downtime on failure or we will show up on site to repair. We understand the cost of downtime.

The system is Internet-enabled and can email status to users and US Autocure in the event of a alarm condition.

The system can be driven from local terminal or from any PC, iPad, iPhone, or Android device.





#### **Precision Thermal Control**

#### "Weather Center™"

The system registers current ambient booth temperature/humidity while it monitors IR temperatures with proprietary advanced scanning technology. Throughout a run, the carriage will increase and/or decrease speed to insure precise temperature control. Thermal measurements are available for review after each run.

#### Internet Enabled

- Advanced system self diagnostic test
- Operates from iOS, Android, and PC as well as main terminal
- Artificially intelligent (AI)

## **MSA Supported**

- · Minimizes downtime and training
- · Monthly Service Agreements are available

# Full Compliance to US Fire Prevention Standards

#### Class 1, Div. 2 Certification



Many current IR systems have NOT been certified to meet Class 1, Division 2 standards. These systems require fire enclosures that often result in expensive (and unplanned) facilities upgrades for the shop owner.

The Phoenix is currently the only IR curing system available for body shops that has met this strict standard.

The Phoenix is a "gas-catalytic" IR system, meaning that the system oxidizes the fuel source to create energy without use of a flame.

- Does not require enclosures!
- NFPA 133



Phoenix functionality is controlled through a modern user interface.



Coating formulations used in IR systems are generally the same as formulations for convection-only curing. The Phoenix is currently being certified by all of the major coatings manufacturers.

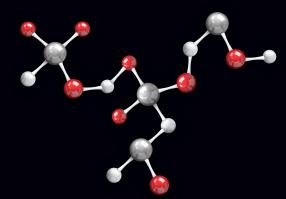


## THE TECHNOLOGY

Medium-wave IR energy is absorbed directly by the coating to complete the curing process, rather than heating the substrate in order to cure the coating.

This presents several key advantages:

- Faster cure cycles
- More complete curing
- Less heat transferred to the substrate





#### 11 Point Robotic Articulation

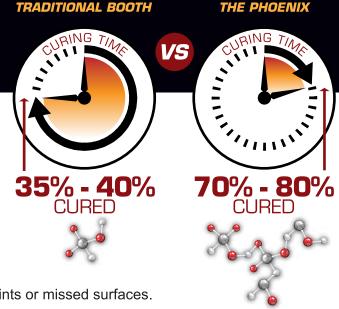
Traditional spray booths require long curing cycles. Even at "full cure" vehicles are only around 35%-45% cured, increasing the potential for rework and warranty claims.

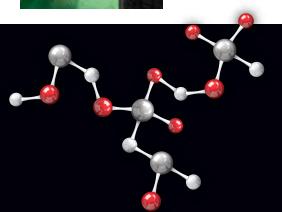
The Phoenix infrared curing system dramatically reduces cure time and results in a finish that is up to 70%-80% cured!

Other IR systems have limits based on their inability to accommodate component shapes and as distance from the component. For example, these "fixed-position" systems may be 3 feet from the vehicle's roof, but 6 feet from the vehicle's hood or trunk. As a result, the vehicle cannot be cured uniformly.

The Phoenix overcomes this limitation by allowing the IR emitters to articulate. In other words, the emitters are able to "cup" the vehicle or component to provide a uniformed cure. This ensures no tacky points or missed surfaces.

Additionally, the system monitors substrate (component) IR temperatures with proprietary advanced scanning technology. The system is "recipe driven." In other words, both automatic and manual settings can be saved and recalled. Sophisticated sensors allow the Phoenix to determine substrates and adjust accordingly. Coverage of bumpers to less than 1 foot of the ground with perfect exposure control.











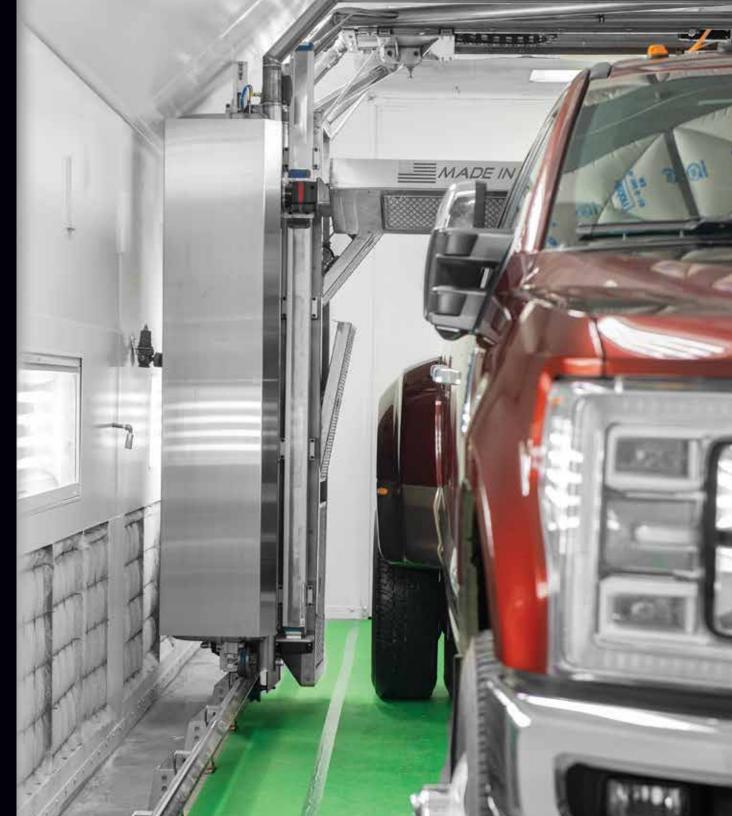
## DESIGNED FOR BODY SHOPS

The Phoenix is designed by body shop owners for body shop owners.

The system's modular design allows it to be configured to a wide range of booth sizes and shapes.

Accommodating existing spray booths without the need to build additional enclosures or reinforcing booth walls was a key consideration.

Additionally, the Phoenix will not interfere with operating your spray booth as a traditional, convection-heat booth.

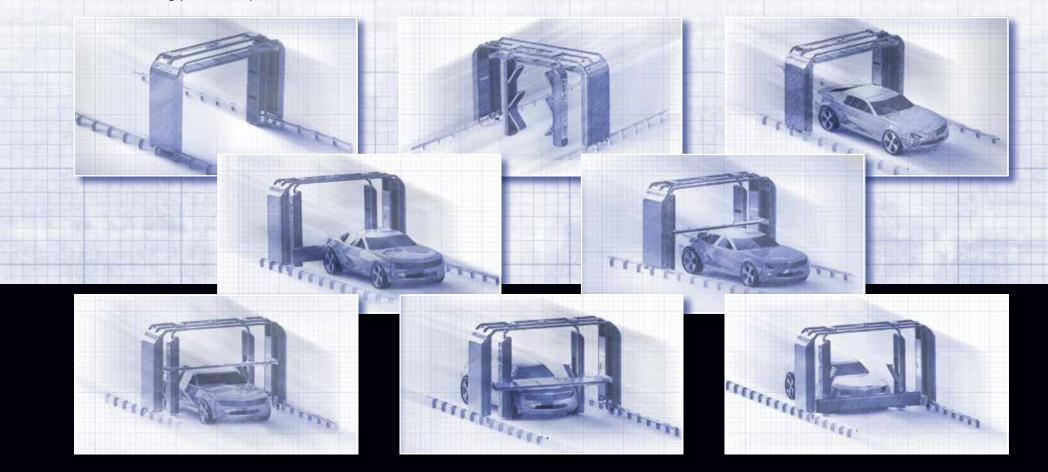


#### Modular Design

- Modular Design allows for expansions to larger heights and widths for installations such as trucks, buses, and RV's.
- Free Standing Rail System does not require support from booth wall. Permits fast, safe installation.
- Intelligent Actuated IR Elements may be independently controlled: manual, deactivated, or automatic.
- Advanced Servo Drive System for accuracy, reliability, and quality. No "homing" required after every operation. Stop, park, and resume from any point on track.

#### Advanced Surface Mapping Technology

Advanced Surface Mapping Technology (PAT PENDING) provides advanced servo-controlled elements - side, front, top, and back are fully covered with equal exposure. The system actuates dynamically to expand and contract for coverage of door tops, rocker panels, top and bottom of free standing parts, bumpers, etc.





# THE PHOENIX IS GOOD FOR BUSINESS

The US Autocure Phoenix infrared curing system allows you to increase your daily output without expanding facilities, adding a new booth, or increasing personnel.





#### Increased Daily Output

Many shops have the demand to warrant increased production, but are unable to complete more repair orders due to space or facilities constraints. The Phoenix allows shops to increase their productivity without the pain and expense of expanding their facilities. Simply adding one R/O per day can have an immediate impact on a shop's bottom line.



# CONSIDER THE IMPACT OF ONE ADDITIONAL REPAIR ORDER A DAY:

AVERAGE R/O = **\$2900** 

AVERAGE PROFIT MARGIN = 40%

AVERAGE PROFIT PER R/O = **\$1160** 

\$1160 X 20 WORKING DAYS PER MONTH =

\$23,000

ADDITIONAL PROFIT PER MONTH!



#### The 3:1 Rule of Gas Catalytic IR Curing

For every three minutes it takes to cure a part in a conventional convection oven, it will require only one minute in a gas catalytic IR oven.

For example, parts that normally take 30 minutes to cure conventionally, only take 10 minutes in a gas catalytic IR oven.



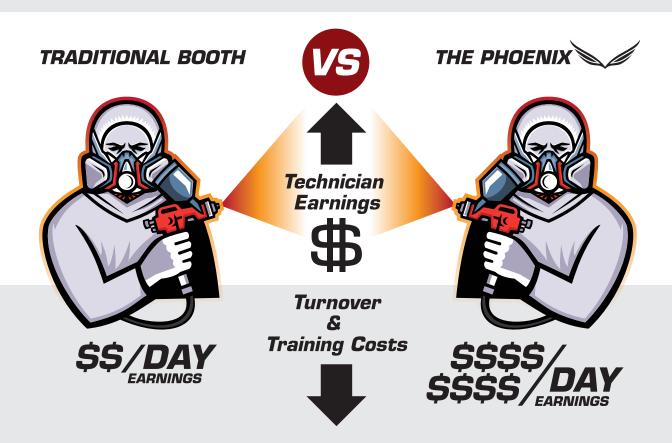
# THE PHOENIX IS GOOD FOR BUSINESS

Hiring additional employees in order to increase production is not always an option. The Phoenix allows shops to increase production with their current workforce.



#### Labor

In today's tight labor market, adding more qualified paint technicians to your team difficult. The Phoenix allows the shop to produce more work with the same labor due to it's decreased curing cycle times and potential to complete more RO's per day. The Phoenix also allows paint technicians to earn more per hour, resulting in happier employees with lower turnover and associated costs.





"Not only am I working with the latest technology, we're producing more work at high quality than ever before. I won't work anywhere else."

- Sam Gonzales
Paint Technician, Beal's Collision
Prescott, AZ



## THE PHOENIX IS GOOD FOR BUSINESS

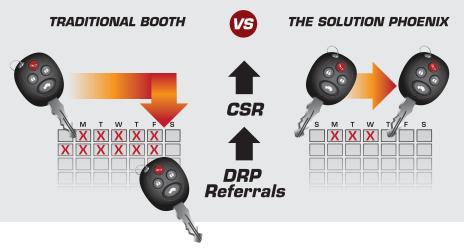
Quicker turnaround time and higher quality finishes make for happy customers! Keep your insurance providers happy with CSI scores that set the bar high for your market. The Phoenix keeps vehicles moving through your booth at a remarkable rate, providing your growing shop with the potential for improved cash flow!



#### Decreased Key-to-Key Cycle Times

Customer satisfaction scores are the lifeblood of referrals and a key consideration of insurance DRP programs. The Phoenix allows the shop to greatly reduce key-to-key cycle times, meaning more satisfied customers and more referrals!

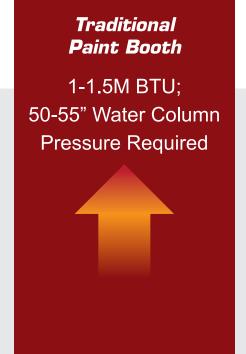
Shorter key-to-key cycle times can also have a big impact on overall cash flow—an important consideration for any growing business.





#### Energy Use

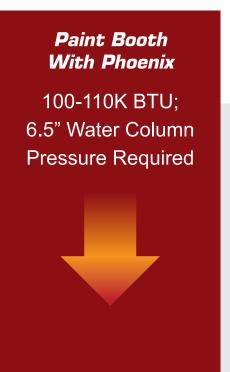
The Phoenix requires up to 90% less energy to operate compared to a traditional booth. Shorter cure cycles also means that the shop is using less energy-per-vehicle than with a traditional spray booth. With the Phoenix, shops can increase daily output while simultaneously decreasing energy costs.





90%

The Phoenix requires 90% less energy to operate compared to a traditional booth





DISTRIBUTED
EXCLUSIVELY BY
INDUSTRIAL FINISHES
& SYSTEMS, INC.



3455 W. 1st. Ave. Eugene, OR 97401 **800.531.1305 IndustrialFinishes.com** 





# Industrial Finishes & Systems, Inc. Automotive and Industrial Coatings.

Your trusted partner for over 60 years.

Our team brings technological innovations and best business practices pioneered in diverse industries for the benefit of all Industrial Finishes & Systems customers.



#### INVENTORY MANAGEMENT



COMPLETE SYSTEMS INTEGRATION



TECHNICAL RESOURCES



TRAINING & CERTIFICATION



**OUTSTANDING CUSTOMER SUPPORT** 

**HEADQUARTERS** 



MSO PROGRAMS

## OVER 30 LOCATIONS TO SERVE YOU

Arizona

California

Oregon

Indiana

Washington

Virginia

Idaho

Georgia

Nevada

Mississippi

Utah

Louisiana





Gas-Catalytic Medium-Wave Infrared Curing System



1725 W. Williams Drive Suite 57 · Phoenix, Arizona 85027 (480) 268 9703 | www.usautocure.com