

USI ITALIA
EXTRAORDINARY INNOVATION



Chronotech



**Master
Energo**



Cargo



**Fastech
Synchro**



Mixing Room

CHRONOTECH



EXCLUSIVE REFINISH TECHNOLOGY



CHRONOTECH



EXCLUSIVE REFINISH TECHNOLOGY



1. EASY PAINT SYSTEM (E.P.S.)



EASY PAINT SYSTEM is a dedicated software that suggests the MOST EFFICIENT PROCESS in real-time to the painter automatically, regulating the time, airflow, temperature, phase sequence, etc.

The painting process is fully automated, with the latest combination of products and components.

E.P.S. enables you to obtain the highest quality results in the shortest time at the lowest cost possible for each type of job.



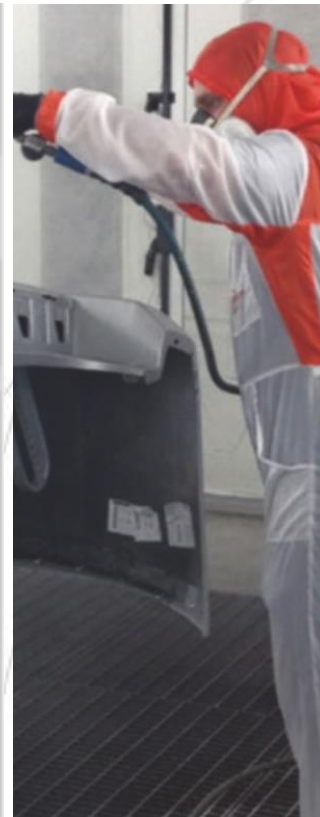
1. EASY PAINT SYSTEM (E.P.S.)



Extraordinary People.

We removed all the blowers, and USI showed us how to use this technology – the drying of the paint – they gave us a ton of input in that respect, and that has just catapulted us.

Dan Paganelli, Collision Center Manager
Lester Glenn Collision Center



Extraordinary People.

We also did some cross-training and there was definitely jealousy that they don't have the USI booth. Painters are unique individuals...

Randy Pinkowski, Chief safety Officer/VP
Equipment Procurement and Maintenance



1. EASY PAINT SYSTEM (E.P.S.)



Extraordinary People.

We are saving a minimum of 15 minutes per car and reducing flash times between coats, which means that we can paint at least one more vehicle every day.



Josh Lofrano, Area Manager
F. Lofrano & Son



Extraordinary People.

We first saw improvements from the booth with faster production times and some savings in our natural gas and electricity were substantial.

JR Sartain, Owner/Vice President
Auto Craft Collision



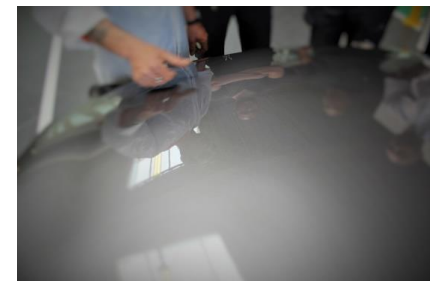
1. EASY PAINT SYSTEM (E.P.S.)



USI ITALIA paint booths provide a **RELIABLE AND HIGH PRODUCTION PAINTING PROCESS** with the best quality and superior technology.

Designed and focused on providing the highest performance spray booth, able to ensure:

- 1. A FAST & RELIABLE PROCESS:** shorter curing cycle without “blowers” in your paint booth.
- 2. ECONOMY:** with superior technology, especially with waterborne products.
- 3. EASE OF USE:** programs designed to simplify the user's day by day operation.
- 4. HIGH PRODUCTIVITY:** more profit, either with time/energy savings or the ability to paint more cars per day.



2. DGT MANAGER



The new definition of CONTROL

Until now, it was only possible to make an estimate of working times and costs. Thanks to their team of engineers, USI ITALIA has developed DGT Manager, a software to OVERSEE and ORGANIZE the workflow creating a DATABASE with the cost of each cycle - an essential tool for managing a painting department.

Supervisors or managers can filter work orders according to many different criteria.

Thanks to the enormous potential of the DGT Manager software, we can proudly state that all these advantages are just the beginning of a new era in the professional management of painting departments.

1. **PRODUCTIVITY CONTROL** for each painter in the body-shop.
2. **REAL TIME REPORTS** for each RO, including: the number and type of parts executed, energy consumption and labor.
3. **STATISTICS** about the jobs carried out more or less frequently, in order to organize the paint body-shop division stocks.



3. REMOTE TECHNICAL ASSISTANCE

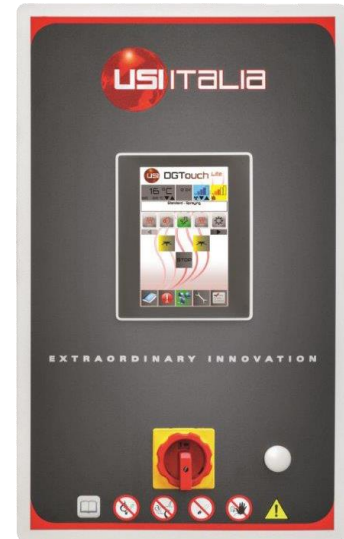


Remote customer service became a reality in 2008 in the USI ITALIA SPRAY BOOTH.

If the system reports an anomaly, activate the CUSTOMER SERVICE icon to alert USI OF NORTH AMERICA or USI ITALIA. **A dedicated technician will diagnose and update the system in real-time over the internet.**

Should a component become defective, the technician will be able to identify it **QUICKLY AND POSITIVELY** and ship a replacement part.

How much is this worth to you?



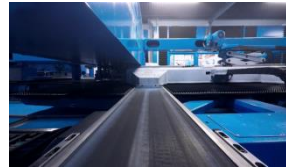
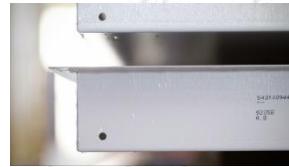
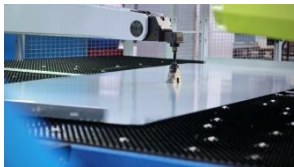
USI ITALIA



STANDARD FEATURES



Durability · Reliability · Precision · Performance

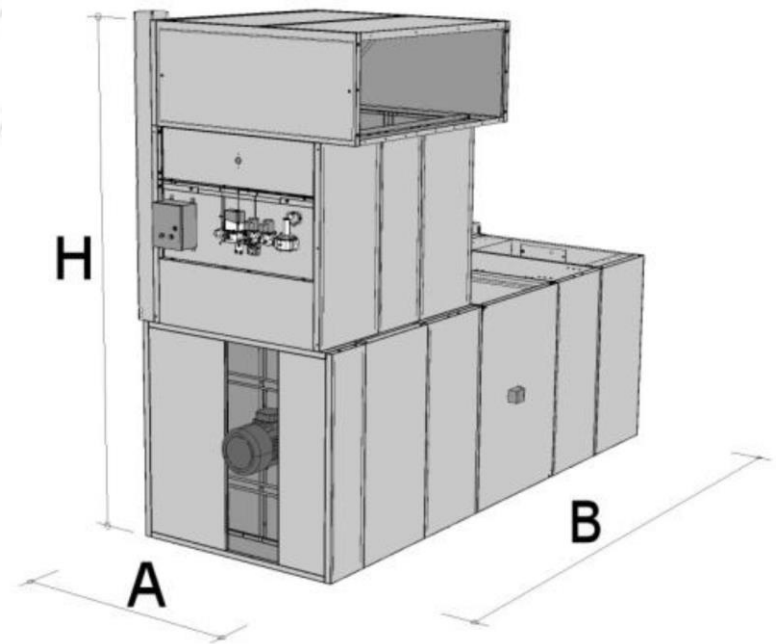
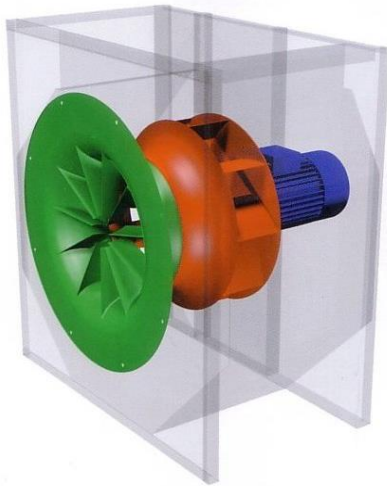


1. HIGH AIR VOLUME TURBOFAN SYSTEM:



Two backward inclined turbofans mounted directly to the motors provide the highest airflow when necessary.

Heating/ventilating unit made of galvanized panels, equipped with two motors each **15HP**, mounted directly to the fan without driving elements



1. HIGH AIR VOLUME TURBOFAN SYSTEM:

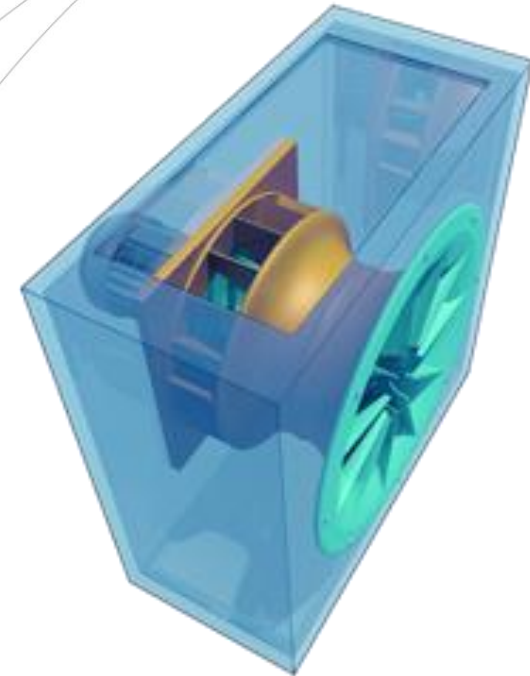
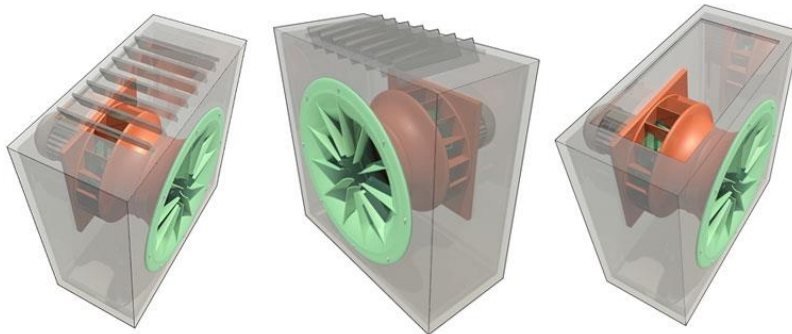


MOST COMMON FANS USED FOR SPRAY BOOTHS



1. HIGH AIR VOLUME TURBOFAN SYSTEM:

- **HIGH & CONSTANT AIRFLOW** during the entire life of the filters.
- Long lasting filters due to the ability of the fan to maintain high air volume even when filters are clogged.
- High efficiency resulting in energy savings.
- High reliability due to the absence of belts, pulleys, etc.
- Maintenance free.



2. VFD SYSTEM:

In TRADITIONAL VENTILATING SYSTEMS, the cheapest way used to reduce or adjust a scope is to act on a damper, which provides a practical bottleneck in the path of the air discharge channel.

By contrast, the electric motor moving the fan, continues to absorb the same power, and indeed there is also the possibility that absorbs a little bit more. You also risk phenomena such as hiss and other annoying noises (especially in the ducting paths).

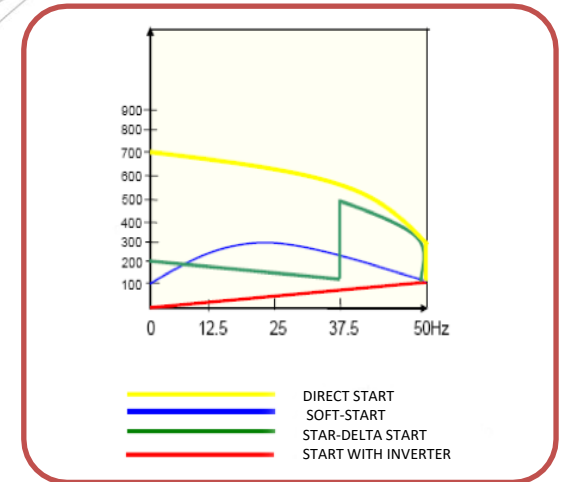
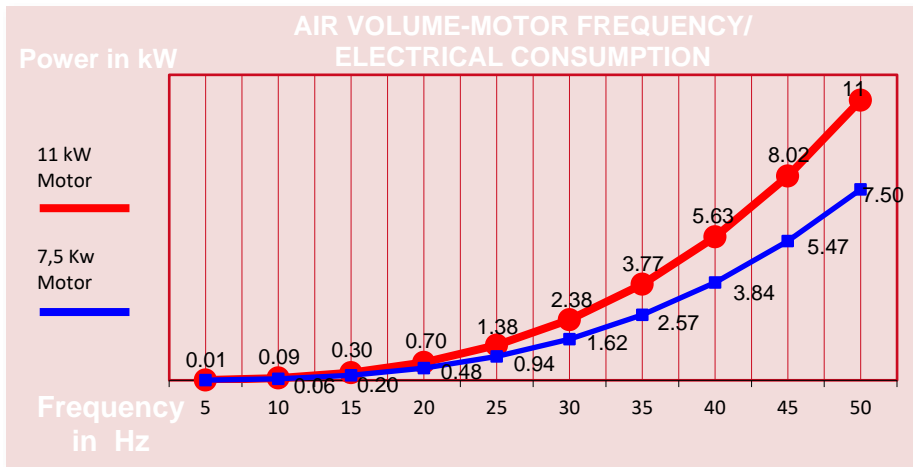


If we then analyze the data from ANIE (Electro-Technical National Association) which states that 74% of the consumption of the bill of manufacturing companies comes from electric motors, one can understand how the USE OF VFDs (in industry, but not only) is destined to become increasingly INSTRUMENTAL IN REDUCING THE OPERATING COSTS.



2. VFD SYSTEM:

Projected with two **Variable Frequency Drives** to adjust the speed of the motors.



By switching on the fan motors with a speed that is proportional to what the plant needs (this means through inverters), you will have the **TOTAL ELIMINATION OF ELECTRIC** and the **POWER CONSUMPTION** (as well as the air volume capacity) **PROPORTIONAL TO THE WORK REQUIRED**.



2. VFD SYSTEM:

ENERGY SAVING MODE

Most of the preliminary paint operations can be carried out in the energy saving mode with a **reduction of 90% in the energy consumption compared to a traditional spray booth**.

PRESSURE ADJUSTMENT

The VFD on the exhaust motor avoids having the motor running always at its maximum speed, therefore always with the maximum consumption, as in the traditional spray booth with dampers. **With the VFD, the exhaust motor increases its speed only when necessary** (for instance when the pressure starts to increase due to gradual clogging of filters).

PREFIXED PERCENTAGE AND CONSTANT AIR EXCHANGE

Differently from common spray booths in the market, ENERGO has a prefixed percentage and **constant air exchange** during bake cycle, which is **guaranteed by the exhaust fan running at a reduced hertz ratio* (10HZ) and reduced rpm**.

Thanks to the exhaust motor running during bake phase, **we do not need the overpressure damper in the plenum as it is installed in traditional booths** and we are sure that the air exchange percentage will remain unchanged independently from the filters clogging.

FILTER CLOGGING INDICATOR

When the exhaust motor reaches the same absorption as the intake one, an indicator lamp lights up. **The pressure inside the booth is still perfect, but from this moment on the operator will have to plan filter replacement** because the booth will not be able to compensate any further pressure increase in the booth, unless the filters are changed.



2. VFD SYSTEM:



WORK PHASE	PHASE	INTAKE MOTOR WITH VFD	EXHAUST MOTOR WITH VFD
Masking operation 1° choice	Recirculation	30 Hz	≈ 6 Hz
Masking operation 2° choice	Total Exhaust	30 Hz	≈ 25 Hz ▶
Paint	Total Exhaust	60 Hz	≈ 40 Hz ▶ 60Hz
Flash-off	Total Exhaust	60 Hz	≈ 40 Hz ▶ 60Hz
Flash-off with Recirculation Intermediate curing Preheating	Recirculation	60 Hz	≈ 12 Hz
Automatic cycle FLASH-OFF	Total Exhaust	60 Hz	≈ 40 Hz ▶ 60Hz
Automatic cycle CURING 1 CURING 2 CURING 3	Recirculation	40 Hz	≈ 10Hz
Automatic cycle COOL DOWN	Total Exhaust	60 Hz	≈ 40 Hz ▶ 60Hz



USEFUL FORMULAS TO UNDERSTAND ENERGO



1) THE AIR VOLUME (Q) IS PROPORTIONAL TO THE FREQUENCY (F)

	Air Volume	Hertz available	Percentage of potentiality
Example 1	Approx. 23.000 m ³ /h	60 Hz	100 %
Example 2	Approx. 18.400 m ³ /h	40 Hz	80 %
Example 3	Approx. 13.800 m ³ /h	30 Hz	60 %
Example 4	Approx. 11.500 m ³ /h	25 Hz	50 %
Example 5	Approx. 5.520 m ³ /h	12 Hz	24 %
Example 6	Approx. 4.600 m ³ /h	10 Hz	20 %
Example 7	Approx. 2.760 m ³ /h	6 Hz	12 %



PARADOX FOR BETTER UNDERSTANDING

	Air Volume	Hertz available	Approx. watts consumed
Example	23.000 m ³ /h	60 Hz (F ¹)	7,5 kW
Paradox	46.000 m ³ /h	100 Hz (F ²)	60 kW



USEFUL FORMULAS TO UNDERSTAND ENERGO



2) THE POWER (P) IS PROPORTIONAL TO THE CUBED FREQUENCY (F)

Hertz ratio	kW of reference	Consumption
$(50/50)^3$	x 7,5 kW	= 7,5 kW
$(40/50)^3$	x 7,5 kW	= 3,84 kW
$(30/50)^3$	x 7,5 kW	= 1,62 kW
$(25/50)^3$	x 7,5 kW	= 0,93 kW
$(12/50)^3$	x 7,5 kW	= 0,10 kW
$(10/50)^3$	x 7,5 kW	= 0,06 kW
$(06/50)^3$	x 7,5 kW	= 0,01 kW

$$P \propto F^3$$



CHART CONSUMPTIONS PER EACH PHASE



WORK PHASE	TOTAL HZ USED	CONSUMPTION PER PHASE
MASKING OPERATION (IN RECIRCULATION)	30 + 6	= 1,63 kW approx.
MASKING OPERATION (IN TOTAL EXHAUST)	30 + 25	= 2,55 kW approx.
PAINT, FLASH OFF, COOL DOWN (situation with clogged filters that need to be changed)	60 + 60	= 15 kW approx.
PAINT, FLASH OFF, COOL DOWN (WITH NEW FILTERS)	60 + 40	= 11,34 kW approx.
FLASH OFF IN RECIRCULATION (HOT FLASH OFF)	60 + 12	= 7,60 kW approx.
FINAL CURING IN RECIRCULATION	40 + 10	= 3,90 kW approx.

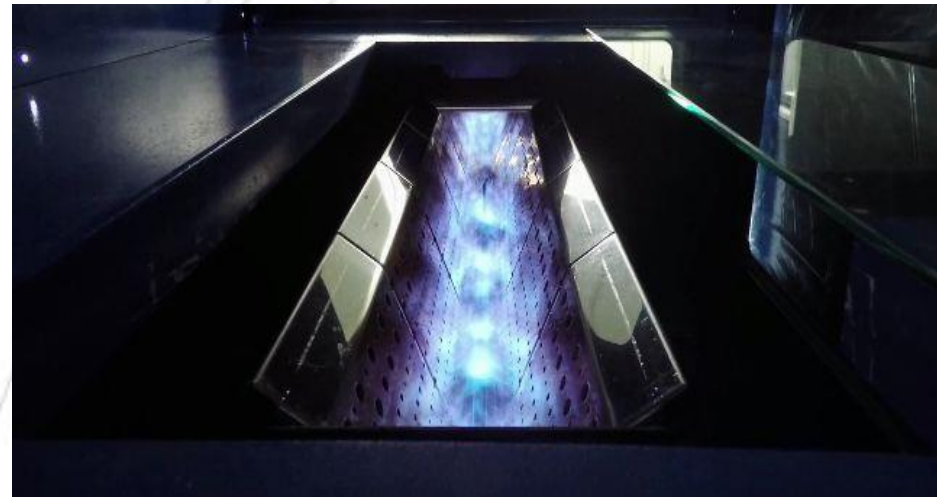


3. DIRECT FIRED BURNER



Our DIRECT FIRED burner combined with the DGT SOFTWARE can guarantee:

- The temperature set point is quickly and accurately reached
- Higher stability and control of the temperature
- Modulating flame
- 97% fuel efficiency
- Longer life expectancy
- Lower maintenance



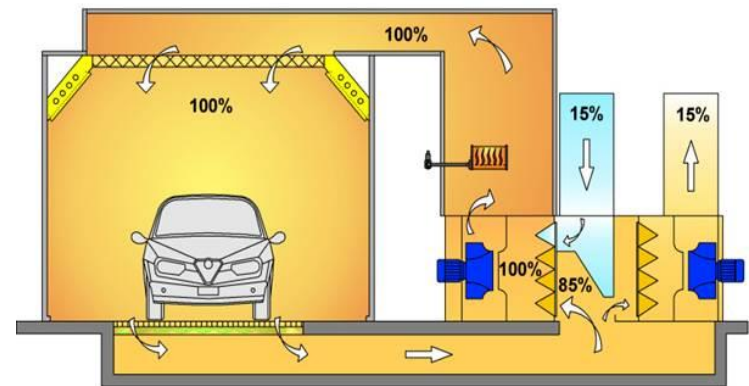
4. WATERBASE CURING RECIRCULATION SYSTEM



Combined with the high airflow provided by the TURBOFANS, the USI ITALIA spray booth provides the **BEST PERFORMANCE with WATERBORNE PRODUCTS**

Advantages:

- 85% Air recirculation during curing phase
- No additional gadgets in your booth such as blowers, IRT or compressed air heating systems
- Shorter curing times with the highest airflow supplied by the TURBOFAN system, when necessary,
- Uniform curing on all points of the vehicle obtained by the even distribution of hot air inside the spray booth
- High fuel savings



5. XL NEON LIGHT TUBES



Mounted on **ELECTRONIC BALLASTS** which reduce the electrical consumption up to 30% over traditional systems and extends the life of the tubes

TOP LIGHTS: alongside the ceiling filters, 8 light fixtures with electronic ballast each with 4 colour corrected fluorescent tubes 48" long, in total 32 high efficiency neon tubes
(Total 96,000 lumens)



LIGHT FIXTURES ON SIDE WALLS

Four light fixtures with electronic ballast each with 4 colour corrected fluorescent tubes 48" long, in total 16 high efficiency neon tubes
(Total 48,000 lumens)



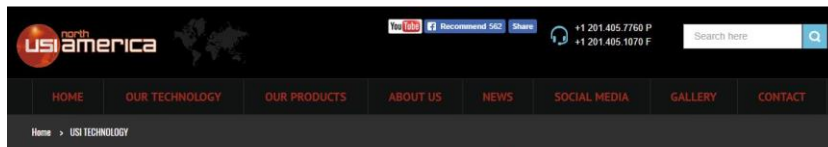
USI ITALIA



THE SPRAY BOOTH TECHNOLOGY

HTTPS:// www.usius.com

INSTAGRAM: [@usi_refinish](https://www.instagram.com/@usi_refinish)

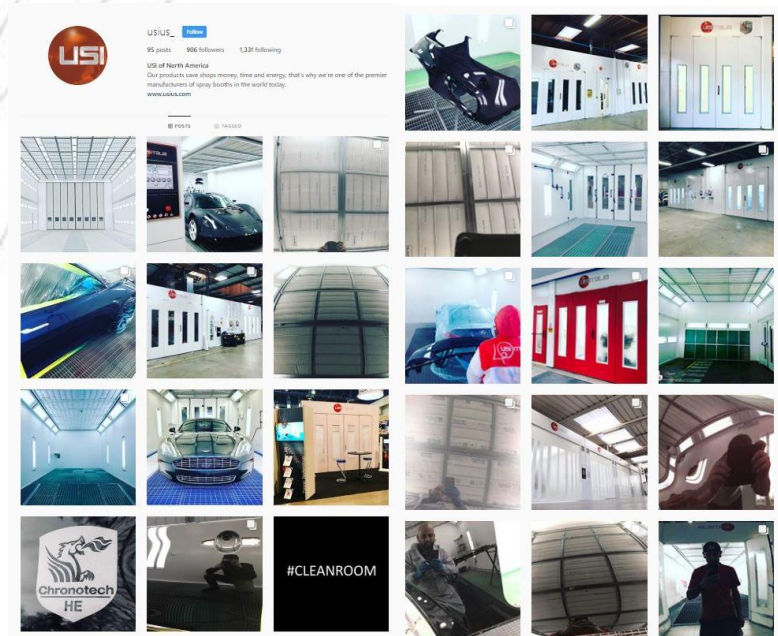


USI TECHNOLOGY

Italy is well-known for making some of the best things in the world, and USI Italia is surely no exception. Our products save shops money, time and energy and that's why we're one of the premier manufacturers of spray booths in the world today. USI Italia spray booths are carefully engineered, thoroughly tested and manufactured to lead the market for these following reasons:

- 1. World's Fastest Painting Cycle:** With the shortest flash-off and curing times on the planet. You will never need additional tools in your booth such as blowers of any kind, IR or compressed air heating systems with a USI Italia booth. By featuring shorter curing times with the highest flow available anywhere provided by our exclusive turbofan system, the energy savings are huge and the results are exceptional.
- 2. Standardized Quality Results:** With a USI Italia spray booth, you can rely on the same excellent results time and time again. Before we introduce a new model to the public, strenuous testing with a select system of controls is conducted, ensuring that it will perform at a high level in any shop environment. With all of the latest cutting-edge products and components working together, the entire painting process is controlled and fully automated through our Easy Paint System. This option takes all of the guesswork out of the process, because with every cycle E.P.S. suggests the most efficient process with each vehicle in real-time and enables your crew to obtain the highest quality results in the shortest time at the lowest cost overall.
- 3. Economy and Superior Technology:** Especially ideal for waterborne products, USI Italia spray booths are durable and reliable while saving collision repairers time, energy and money by painting more cars with precision performance. Painters love USI Italia booths because the finished product is exemplary and while enabling them to paint more cars every day by tapping into our advanced technology.

Customers Testimonials





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