

Superior Curing Technology

IRT
SYSTEM



Fixed installations
IRT Arches & Rails



IRT PowerCure SETS the standard for in-booth curing

IRT PowerCure Saves

- **Energy**
- **Time**
- **Space**

High profitability in a car refinishing paint shop is obtained by processing repair jobs in the most efficient way. Bottlenecks and waiting times must be minimized so the car can be returned to its owner in the shortest possible time.

The IRT PowerCure is designed to be installed inside the spray booth. The SETS features take in-booth drying to the next level.

They drastically shorten the curing times for all paint materials with a minimum of energy used.

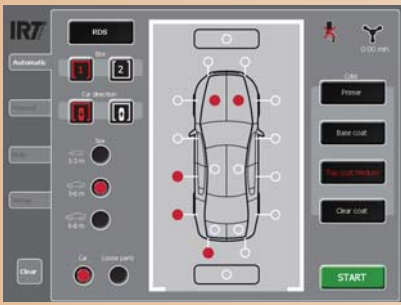
Energy

Why heat the whole spray booth and the whole car when most drying jobs comprises of 1-2 panels of the car? The IRT PowerCure will only heat and cure the selected panels of the car. The computer keeps track of position and status of the

IRT PowerCure and will turn on- and off the individual lamps in a fraction of a second, in order to only use the energy needed for the curing job. This radically reduces the energy consumption and pays off the investment in a very short time.

Time

When the painter has completed the finishing job and exits the spray booth he makes a short stop in front of the touch screen. This is where selections of panels to be dried and paint type are done quickly and easily. It is as easy as using



Simply choose the desired panels to be dried and start the curing process. This is as difficult as it gets with advanced and user friendly IRT technology.



The PowerCure automatically moves to the right position corresponding to the chosen panels.



The front and the back of the vehicle are easily cured as the wings can be angled towards the painted surface.



The vehicle and loose parts can be cured in the same drying cycle thanks to the intelligent software technology.



Loose parts are easy to cure. The PowerCure detects the starting position and saves energy by only activating the necessary IR lamps.



The shape and positioning of the reflectors give an even heat distribution.

your personal smartphone. A typical damage is cured in 10 minutes or less. Leave the car for another 10 minutes to cool down.

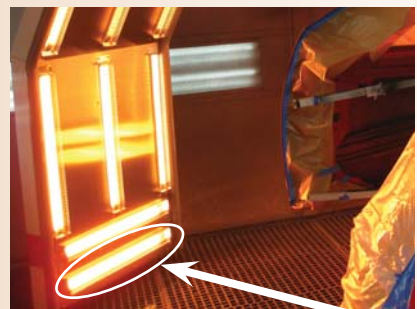
It can then be removed from the spray booth, polished and processed further. Hence the IRT PowerCure offers you increased drying capacity as it turns your traditional booth into a rapid curing booth.

Space

Space is often precious in a car refinishing paint shop. Traditionally two or more spray booths have been installed when more drying capacity was needed. This blocks and reduces the available space for other important parts of the shop such as the preparation bays. The IRT PowerCure gives you increased drying capacity by turning your traditional booth

into a rapid curing booth and typically this gives you enough drying and spraying capacity without investing in a second or third booth. IRT PowerCure cures the paint from the inside and out without retaining solvents and moisture. This is why the car can be polished and processed further immediately after cool down.

The result: you save space and improve the throughput of cars in your bodyshop.



Optional additional lamp for increased height



Optional Parking garage to protect the IR lamps

SETS

Saves Energy, Time & Space

- Short curing times
- Large curing area - even heat distribution
- Gold-coated FreeForm reflectors
- Increased efficiency
- Reduced energy consumption
- Environmentally friendly



IRT Hyperion Rail Systems

Simple & space saving curing

Reaching and maintaining the highest quality curing results have never been easier. With an IRT Hyperion Rail System, you can quickly manoeuvre the heater into the perfect curing position, reaching all parts of the car. The rails can be equipped with any number of heaters, all hanging on easy-glide, self-balanced cassette arms. Precious space between the cars can be saved, and no loose or trailing cables on the floor disturb the work process.

Rails

The rails can be customized to suit all workshops. The cassettes are suspended in arms that glide easily and are self-balancing. As the electric power supply is integrated in the rails, there are no loose cables dragging along the floor disrupting work and raking up dust.

Cost-effective

Investing in a rail system is a way for a paint shop to eliminate bottlenecks in production and substantially increase productivity. Energy costs will be lower and valuable workshop space will be freed up. A rail system constitutes a flexible solution. It is just as practical in a spray booth as in the prep station.

FreeForm reflectors

With the introduction of the new, gold-coated, asymmetric FreeForm reflectors, we have developed the reflectors of the future.

Increased heat distribution provides a more even heat distribution implying that a larger area can be cured during the same period. A lot of energy is saved by only irradiating the object and not heating up the surrounding air.

All cables from the stand to the cassettes are enclosed. You avoid loose cables that can be burned or cause scratches in the paint, leaving your hands free to move the dryer.



The reach is so great that it is possible to even dry the sill and the underside of the car



By angling each cassette in its own direction, two cars can be dried at the same time.



By angling the cassettes towards each other, you can dry around the corner.

Cassette/lamps

There are two things that shorten the service life of an IR lamp: overheating and dust. An IRT lamp should last for 20,000 operating hours. For this reason, the Hyperion cassettes are equipped with powerful ventilation cooling both lamps and cassettes. This extends the life of the lamps significantly. The problems with dust have been resolved with a new, effective particle filter on the rear of the cassette. The software informs the operator of how much cleaning capacity is left in the particle filter and when it is time for the next filter replacement.

Control unit

The most advanced Hyperion rail system - IRT 4-20 - is equipped with advanced technology, such as temperature measurement, laser circle and digital distance sensor. The functions are easy to understand and easy to use. There is a program for each drying requirement. It is started with the simple press of a button.

18 different languages can easily be set. The display is clear and its brightness can be regulated. The laser circle shows where the measurement of the temperature on the curing area takes place, and the ultrasonic sensor measures the distance and signals when the distance is correct. The temperature is continuously measured, while the microprocessor regulates the effective output power upwards or downwards in a split second for optimal curing results. As an operator, you can continuously monitor the curing process and receive information about such things as object temperature and elapsed & remaining program time.

Start the control unit, select a program then dry.

Advantages

- Simple installation.
- Easy to move and set up in an exact position
- More flexible workshop
- No cables on the floor/ free areas
- Excellent fit in tight areas between cars



Easy to understand - easy to use

Technical description – IRT PowerCure

IRT PowerCure Single & IRT PowerCure Double

The IRT PowerCure paint curing arch is intended for installation in a spray booth (IRT PowerCure Single) or for installation between two in line placed spray booths (IRT PowerCure Double).

The IRT PowerCure is mainly designed for drying 1-3 panels of the vehicle. It is also possible to utilise the arch for curing loose parts. IRT PowerCure is suspended

by rails attached to the spray booth walls, easily adapted to all types of booths. The rails house the electrical power source for the arch heaters without any loose or trailing cables disturbing the work process. This also reduces the wear and tear. During spraying, the arch is normally separated from the spray booth by an automatic roller door (not included in delivery).

The IRT- PowerCure arch comprises a number of IRT-heaters arranged in the

form of an arch that passes over the parts of the vehicle that shall be cured, at a speed programmed in advance. The IRT-heaters in the arch are arranged, and their output controlled for each colour group, in such a way as to ensure a uniform heat distribution over the zones to be cured.

An overspray protection and a safety surveillance system, connected to the spray booth ventilation and the spray gun air supply, ensure a safe operation. Recommended minimum air flow in the booth is 0,15 m/sec.

The control equipment includes sensors and microprocessors which register and regulate, for example, power output, speed, distance and times. It adapts the function to suit different paint materials as well as the size and shape of the car. IRT- PowerCure has turning side wings. Turning is made automatically if front or rear of the vehicle is selected.

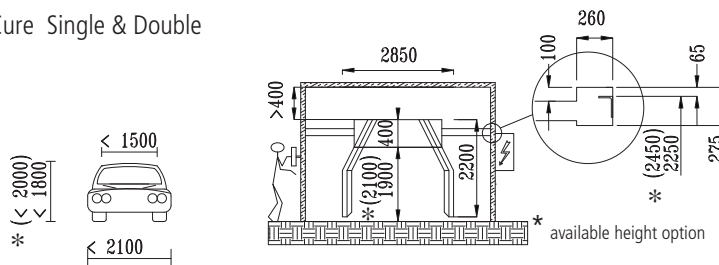
The output for heating the bonnet, roof and boot respectively is adjusted by means of a laser distance sensor. This accomplishes an optimum heating of the selected zones.

The IRT-system does not heat up the air in the spray booth. The operator can re-enter the spray booth immediately after the curing process has been completed. The vehicle can directly be taken out of the booth. As soon as the heated surfaces have cooled to room temperature, polishing and other work can be made.

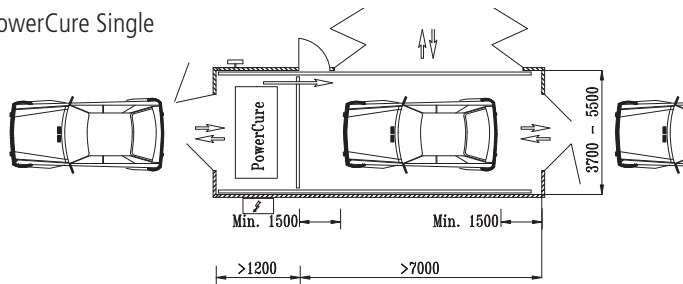
Thanks to the efficient cooling the IRT lamps last for about 20,000 working hours.

Dimensions

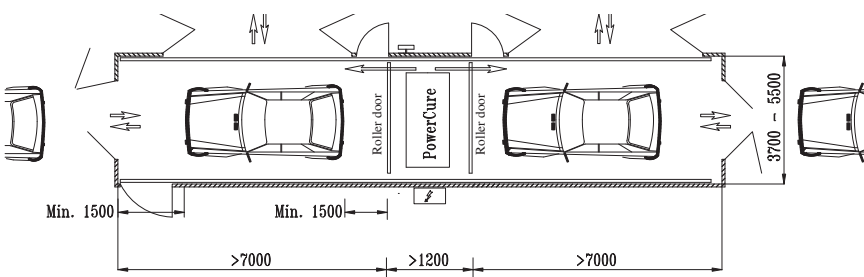
IRT PowerCure Single & Double



IRT PowerCure Single



IRT PowerCure Double



ELECTRICAL DATA

Voltage	400V, 3 Ph/PE
Frequency	50-60 Hz
Installed power	54 kW
Used power preset from factory	43 kW max*

* At 43 kW the PowerCure has to be fused with 63 A slow fuses

CURING TIMES

Medium-sized Vehicles

Base coat	approx
Bonnet	4 min
Door	3 min

Clear coat

Bonnet	7 min
Door	5 min

Typical examples of energy consumption for IRT PowerCure

Clear coat on base coat, medium sized car, medium colour shade

Front wing	6 min	0,95 kWh
Door	5 min	0,95 kWh
Front wing + door	10 min	1,6 kWh
Hood	7 min	1,5 kWh
Hood + 2 wings	9 min	2,8 kWh
Complete car	26 min	15,8 kWh

Technical description – IRT Hyperion Rail systems

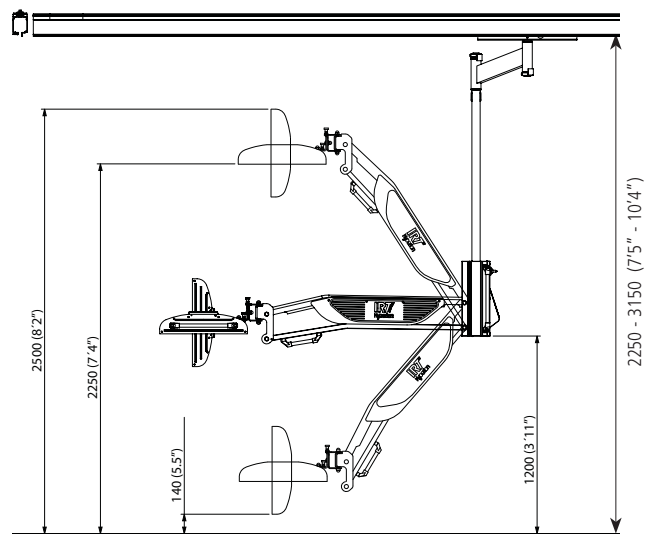
IRT 3-20 PcD & IRT 4-20 PcAuto

Rail systems adapted for the prep station or the spray booth. The heater is suspended in permanently installed rails and can be moved laterally and vertically in all directions.

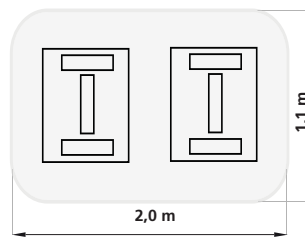
- No cables on the floor - free areas
- Electric power supply integrated into the rails
- Excellent fit in tight areas between cars
- Less risk for unintentional damage to the car
- Unique possibilities to position the cassettes
- Computerised curing process
- Gold-coated FreeForm reflectors for optimal heat distribution
- Pyrometer for exact temperature control (IRT 4-20 only)
- Laser circle indicates where temperature measuring takes place (IRT 4-20 only)
- Electronic distance sensor
- Very easy to use
- 12 preset and 3 custom programs
- Can cure all paint materials
- Efficient particle filter on the cassettes
- Powerful ventilation that cools the cassette and increases lamp life

The IRT Rail Systems can be equipped with many heaters, all hanging on easy-glide, self-balanced cassette arms. IRT rails are tailor-made to suit different working areas. Apart from carrying the heaters, the rails also house the electrical power source for the heaters without any loose or trailing cables disturbing the work process. The heaters are delivered with two

cassettes. The cassettes are easy to adjust into the correct position. The heater lamps are rigidly set in precision gold coated reflector bodies, ensuring the most even and efficient heat distribution. All lamps are cooled by ventilator fans. Drying time and power is controlled by a microprocessor which, pre-programmed for different types of paint, automatically handles the entire curing process.

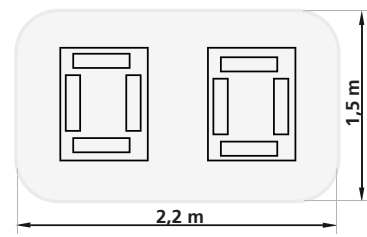


Curing Surfaces



IRT 3-20 PcD

Two cassettes at a distance of 600 mm, on black sheet metal



IRT 4-20 PcAuto

Two cassettes at a distance of 600 mm, on black sheet metal

	Weight
Traverse 7 m	165 kg
Rail without power supply	5 kg/m
Rail with power supply	7 kg/m
Heater 2 cassettes	60 kg

Curing times	Minutes
Putty	2-3
Filler	3-7
Primer	5-8
Water-base paint	2-4
Base coat	4-8
Top coat	6-10
Clear coat	5-10
Filler on plastic	7-10
Top coat on plastic	15-18
Clear coat on plastic	15-18

The curing times are extremely short. The times above apply to the IRT PcAuto series. Add a minute or two for other models.

	3-20 PcD		4-20 PcAuto	
Voltage	220-240V	380-420V	220-240V	380-420V
	3 Ph/PE	3 Ph/PE	3 Ph/PE	3 Ph/PE
Frequency	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Current	15 A	9 A	30 A	17 A
Output power	6 kW	6 kW	12 kW	12 kW
Fuse	16 A	16 A	32 A	32 A

Basic features

IRT PowerCure Paint Curing Arch

Mainly designed for drying 1-3 panels of the vehicle
Easy to cure loose parts
Curing of a complete car
No pre-heating of emitters necessary
Operates in one or two booths
Modern design and electronics
Light construction
Easy to service
Integrated ventilation system – protects electronics and lamps
Energy saving – the lamps are controlled individually
Extra lamp can be fitted to enable curing of high vehicles (option)
Integrated laser sensors for exact positioning
Integrated power transmission in rails
Arch garage parking in 1.2 m extended booth
Online control system – Drive, service, update and programming via Internet
Online supervision control (Option)
Touch screen
User-friendly graphics - self-instructive menus
Programs for all types of paint material - water, solvent, clear, base etc.
Very low running costs
Lifetime of lamps: 20 000 working hours
All components of latest technical standard

IRT Hyperion Rail systems

Even heat distribution
Short curing times
Environmentally friendly, efficient use of energy
24 carat gold coated reflectors with 97 % reflection
Powerful ventilation - lifetime of the lamps up to 20.000 hours
FreeForm reflectors for an unsurpassed drying surface
Efficient particle filter that creates a dust-free environment in the cassettes
Enclosed cassette cables
The angle of the arm provides increased reach
Possible also to dry high cars, e.g SUVs
The arm is self-locking in all positions
Electronic distance sensor
Self-instructive programs
Computerised curing process
12 preset programs - 3 custom programs
Programs for plastic/metal - water/solvent
18 languages
Pyrometer for exact temperature control (IRT 4-20 only)
Clear display with graphics showing the exact progress of the curing process
Computerised temperature monitoring of curing process
Laser circle indicates where temperature measurement takes place
All components of latest technical standard

IRT-System is a registered trademark.

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The manufacturer reserves the right to introduce technical modifications.



899000/rev 1/ 2010-11



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