



# ***TCR: Professional Infrared Curing*** controlled by Thermal Camera / Radar



More info on new TCR

## Surface temperature mapping

Identify hot spots across the surface

### Thermal Camera



### Identify hot spots

Our thermal camera acts as a "smart eye" for the curing unit - automatically adjusting the infrared lamps to achieve uniform, precise and energy-efficient curing.

### Large coverage

768 individual measuring points over 170x90 cm.

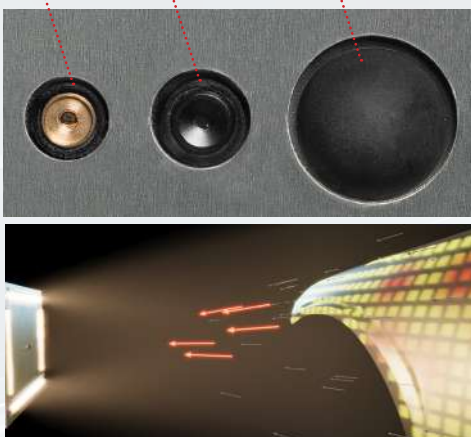
### Feed back to control system

Temperature data is continuously fed to the control system, which adjusts IR lamp intensity and exposure time to maintain the desired curing profile.

### Result:

- Accurate, real-time temperature monitoring
- Consistent quality
- Overheating prevention
- Energy use optimization

Laser Pointer Thermal Camera Radar Distance Sensor



### Quick Facts:

#### Thermal camera

32x24 Array = 768 individual pyrometers.  
 Measuring point per pyrometer approx. 5x4 cm (at a distance of 60 cm).  
 Surface temperature mapping area 170x90 cm.

Continuously identifies and measures the 5 hottest target points.  
 Delivers an average temperature value based on these.

Temperature profiles can be logged for quality assurance, traceability, and process optimization.

#### Radar Distance Sensor

Intelligent and exact distance measuring.

4-1 and 4-2 TCR



### The intelligent curing station

Automatically optimizes and documents each curing job



#### Intuitive control and thermal camera:

- Touch screen for instant access
- Radar distance sensor confirms correct distance
- Time, ramp and temperature is built-in for putty, filler, base, clear, plastics
- Continuously adjusts IR power to keep the temperature on track
- Delivers only the power needed to reach the set temperature
- The real-time process is displayed, so the operator stays informed

**Real-time temperature reading** .....> **Fast process control and troubleshooting**  
**Uniform heat distribution** .....> **Reduced defects and rework**

# IRT TCR - 5th Generation infrared dryers

**4-1 and 4-2 TCR**

## Intuitive display

- 5" touch screen with dual navigation options: scroll or tap, whichever you prefer
- Key functions are also accessible via physical buttons – ideal when working with gloves
- Highly durable, hardened glass protects the display
- Clear visibility even in brightly lit workshops
- Optimized viewing angle ensures good readability
- Withstands cleaning with both solvents and razor blade
- Easy to upgrade software with standard micro SD



## Finger-light arm design

- Smooth height adjustment
- Self-locking
- Small footprint when not in use: cassettes park between the legs

## Integrated cables

- Precision adjustment
- Perfect positioning of cassettes

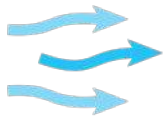


## Low slim base

- Moves easily
- Access under vehicles
- Secure, tip-resistant design

## Insight: Temperature control

Precision cooling for lasting performance



### More than just cooling

Adaptive fan speed provides:

- Minimized noise levels
- Reduced, unnecessary energy consumption
- Enhanced protection and long-term reliability
- Extended filter life



### What is adaptive ventilation?

Adaptive ventilation continuously regulates fan speed - operating quietly under normal conditions and ramping up only when additional cooling is required.

At high temperatures, the fan instantly accelerates to full speed to safeguard all system components.



### Koster and Vinga, designed in-house

*(Our sensor boards are traditionally named after Swedish lighthouses.)*

The Koster main board and Vinga sensor board are custom-designed and fully programmed in-house to manage key system functions.

They include built-in overheat protection through NTC analog temperature sensors.

### Quick Facts ventilation and temperature sensors:

*Analog NTC high-precision sensors that continuously monitor the real-time temperature inside the unit.*

**Position:** Vinga sensor board, Koster board, cassette reflector – strategically placed to capture accurate temperature data from key points in the system.

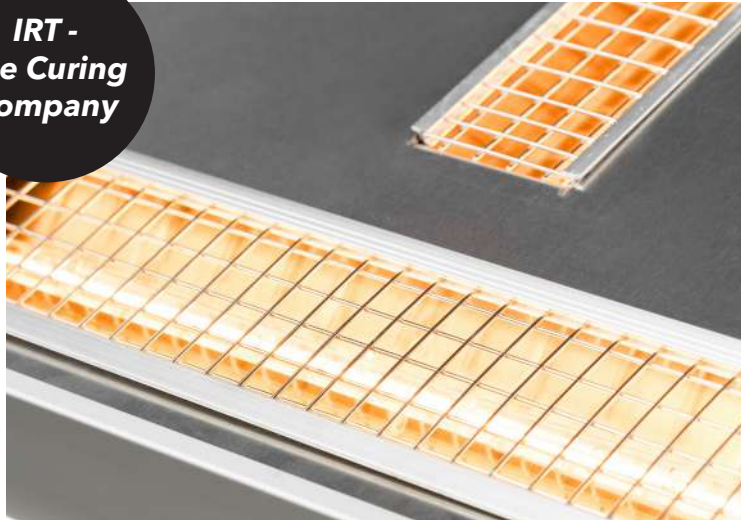
**Activation:** Actual temperature - cooling is triggered automatically when the sensor reaches a defined temperature threshold, ensuring the system responds only when needed.

**Cool-down:** 3 minutes or fixed temperature, whichever comes first. The system runs the cooling cycle just long enough to reach a safe and stable temperature, minimizing energy use and wear.



## **55+ years of infrared curing innovation:**

**IRT -  
The Curing  
Company**



### **Even heat = faster, better curing.**

The IRT **FreeForm reflector shape** is carefully designed so that no spots get too hot or too cold. (Because the coldest part decides how long curing takes, and the hottest part limits the max temperature.)

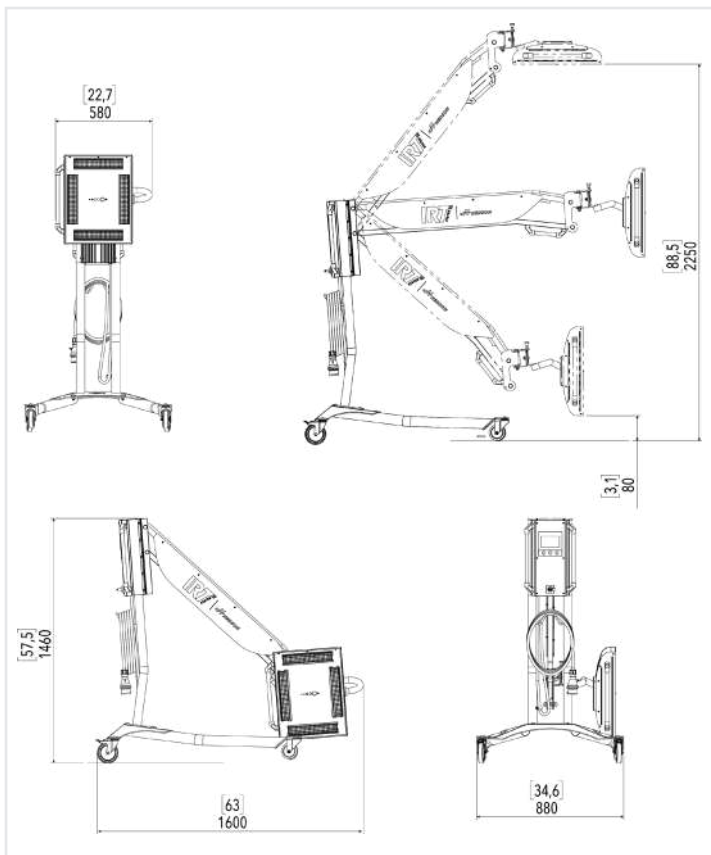
### **Less wasted energy with gold.**

We coat the IRT FreeForm reflector with **gold**. This reflects the infrared energy onto the surface (up to 97%), not the surroundings.

### **Longlife lamps - low maintenance.**

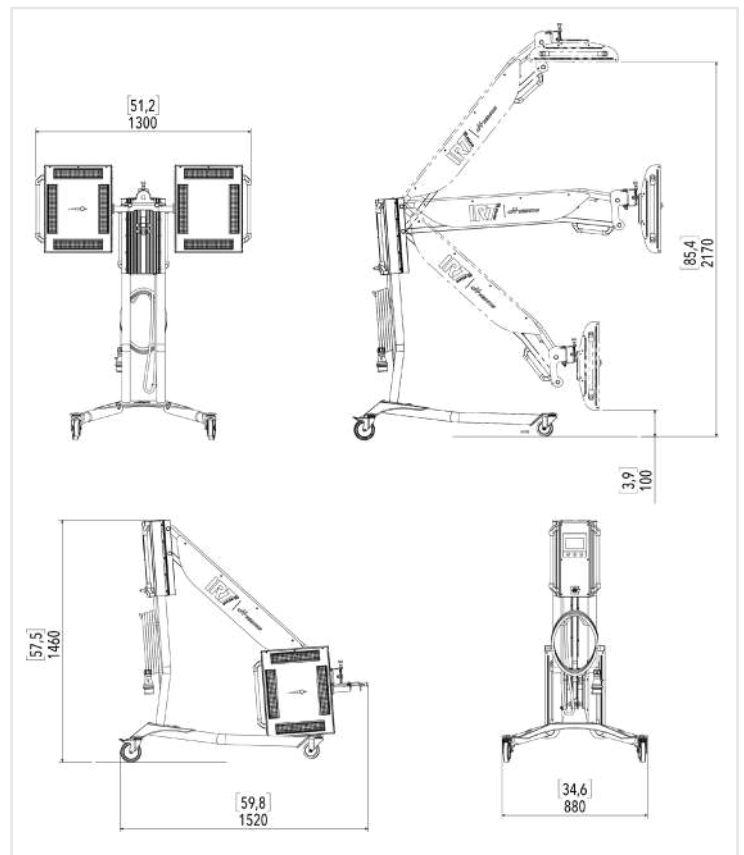
To keep everything running smoothly, a **high-quality ventilation system** prevents overheating. This helps the lamps last longer (up to 20.000 hrs).

## Technical data



**IRT 4-1 TCR**

Part no.	Current	Output power	Fuse	Voltage	Frequency
801524	9 A	6 kW	10 A	400V, 3 PH, 4-pin, EU	50-60 Hz
801520	9 A	6 kW	10 A	400V, 3 PH, 5-pin, EU	50-60 Hz
801522	15 A	6 kW	16 A	230V, 3 PH, EU	50-60 Hz
801523	9 A	6 kW	10 A	400V, 3 PH, AUS	50-60 Hz
801525	15 A	6 kW	16 A	200V, 3 PH, 4P, JP	50-60 Hz



**IRT 4-2 TCR**

Part no.	Current	Output power	Fuse	Voltage	Frequency
801504	16 A	12 kW	16 A	400V, 3 PH, 4-pin, EU	50-60 Hz
801500	16 A	12 kW	16 A	400V, 3 PH, 5-pin, EU	50-60 Hz
801502	30 A	12 kW	32 A	230V, 3 PH, EU	50-60 Hz
801505	30 A	12 kW	32 A	200V, 3 PH, 4P, JP	50-60 Hz
801503	16 A	12 kW	16 A	400V, 3 PH, AUS	50-60 Hz

**MORE FROM IRT:**



**IRT UV SPOTCURE<sup>2</sup>**

- 132 high-quality LED's

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- More light intensity - large curing area

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- Multifunction timer display

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- Light-weight stand (optional)

**IRT UV SMARTCURE**

- Market leading peak/average light intensity

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- 2 high quality 18V lithium-ion batteries

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- Balanced and lightweight

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- Digital display shows cure time and battery life



**IRT ICURE 2 - ROBOTIC IR AND UV LED CURING:**

- For prep station and spray booth

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- Preprogrammed for IR and UV curing

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- Operational safety with IRT rail systems, closed rails and integrated cable system

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- Compact and easy to move manually