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 170 x 90 cm / 67 × 35.4”.

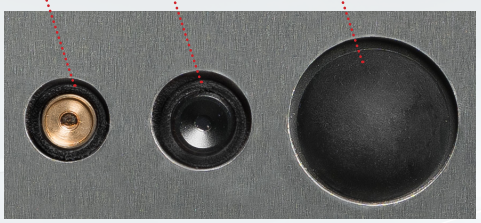
Feed back to control system

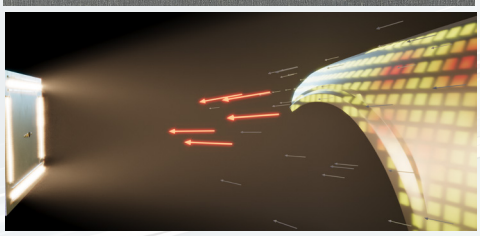
Temperature data is continously fed to the control system, which adjusts IR lamp intensity and exposure time to maintain the desired curing profile.

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.
5×4 cm / 2 × 1.6” (at a distance of 60 cm / 24”).
Surface temperature mapping area 170 × 90 cm / 67 × 35.4”.

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**

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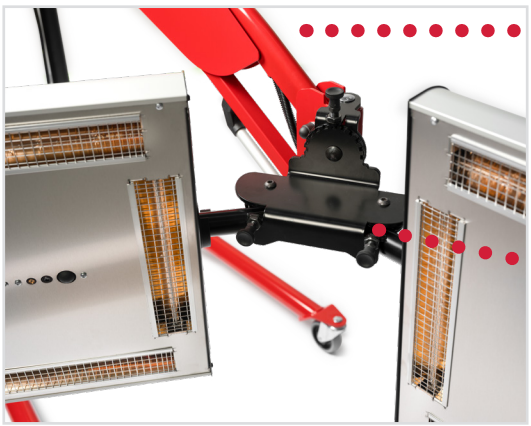
IRT TCR -
5th Generation infrared dryers

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:

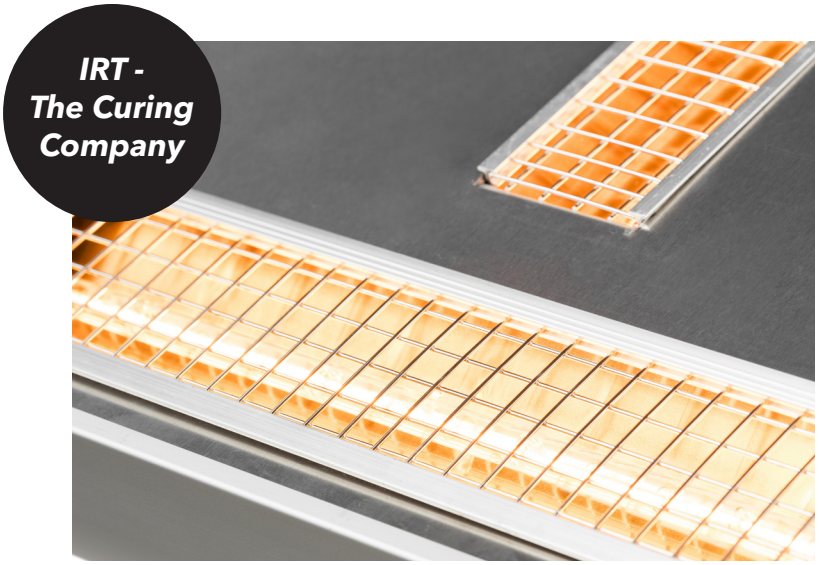
Analog NTC high-precision sensors that continuously monitor the real-time temperature inside the unit.

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:



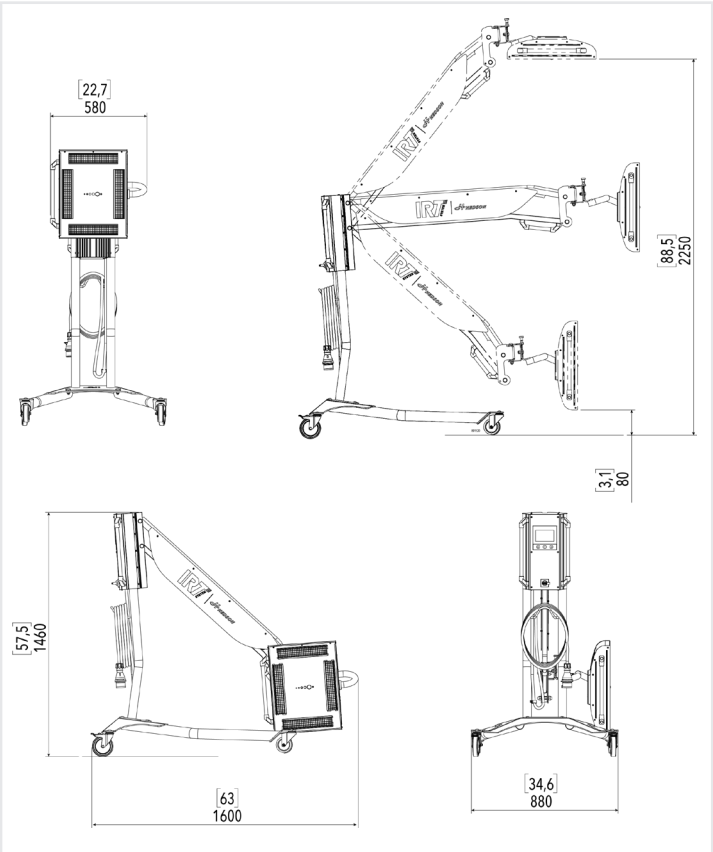
Even heat = faster, better curing.
The IRT ***FreeForm reflector shape*** is carefully designed so that no spots get too hot or too cold.
(Because the coldest part decides how long curing takes, and the hottest part limits the max temperature.)

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.

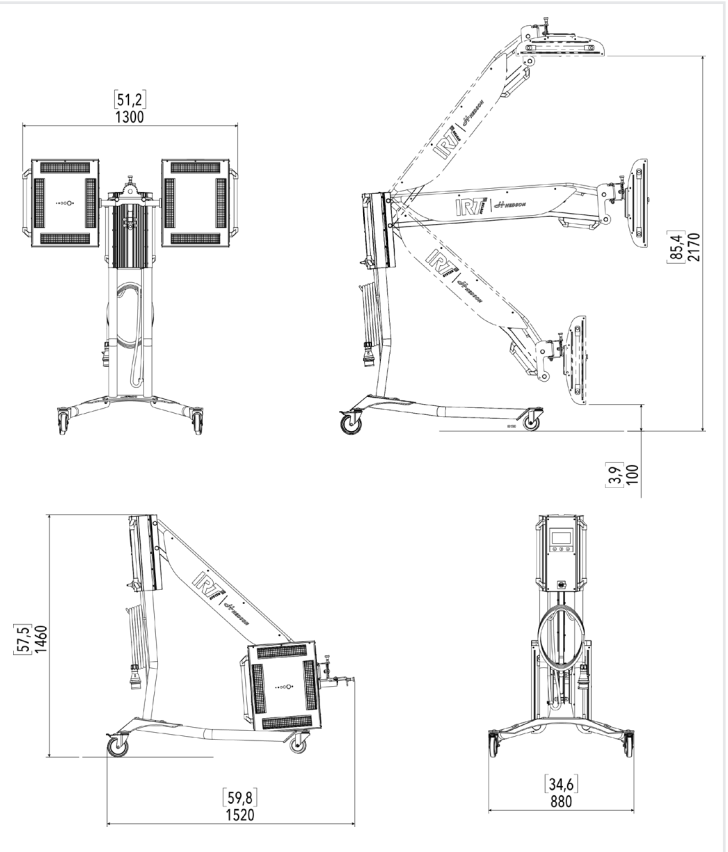
Longlife lamps - low maintenance.
To keep everything running smoothly,
a ***high-quality ventilation system*** prevents overheating.
This helps the lamps last longer (up to 20.000 hrs).

Technical data

4-1 TCR



4-2 TCR



MORE FROM IRT:

IRT UV SPOTCURE²

132 high-quality LED`s
More light intensity - large curing area
Multifunction timer display
Light-weight stand (optional)

IRT UV SMARTCURE

Market leading peak/average light intensity
2 high quality 18V lithium-ion batteries
Balanced and lightweight
Digital display shows cure time and battery life

IRT ICURE 2 - ROBOTIC IR AND UV LED CURING:

For prep station and spray booth
Preprogrammed for IR and UV curing
Operational safety with IRT rail systems, closed rails and integrated cable system
Compact and easy to move manually

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