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## Car Seat Heater

### Applications

- Automotive seating and interiors
- Radiant heat can be applied to car interior surfaces

### Features

- Bespoke Design
- Washable
- Durable
- Energy Efficient
- Lightweight & Soft feel
- Size up to 900mm x 600mm

## Our Technology



ElastaTherm® was initially designed as a printed heater for smart textiles which has evolved as a unique technology for the automotive sector. In comparison with today's heating element wires or mats, ElastaTherm® heaters reach operating temperatures quicker, use less power, are thinner and lighter. ElastaTherm® technology is again protected with granted patents.



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## Case Study

### Discoveries

One of our recent R&D projects has been developing a better car seat heater.

Over the course of this research we have discovered that CTI car seat heaters:

- Reach temperature quicker than traditional car seat heaters
- Use significantly less power
- Bespoke designs to fit any shape



### Heater Specification

- Target Temperature: 40°C - 45°C
- Substrate: Leather
- Print Method: Heat Transfer
- Automotive Heater Size: 300mm x 300mm
- Voltage: 12V
- Power: 18W (two heaters)

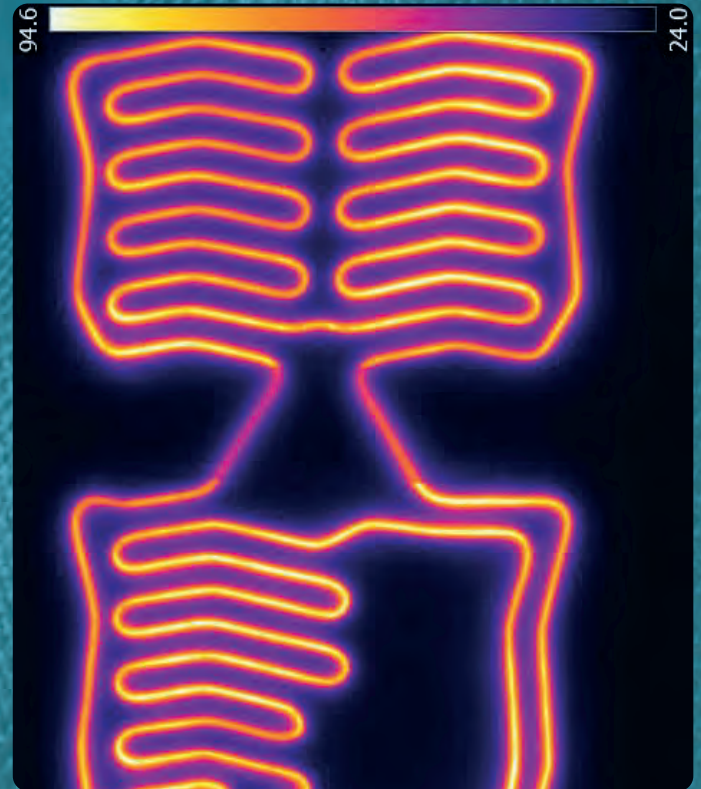


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## Our Technology vs Traditional Wired Heaters



### CTI HEATERS

- Reaches temp in 1 minute
- Power used 9 watts
- On or under the surface
- The CTI heater is sandwiched directly between the leather and the foam
- Creates a more uniform heat

### WIRED HEATERS

- Reaches temp in 5 mins
- Power used 84 watts
- Under 13mm of foam and leather
- Wired heaters have to reach over 100 degrees to achieve 43 degrees at the seat surface



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## Bespoke Design Services

### From prototype to production.

#### Design Support

Our design department can support you with designing your project with our heater technology. Either creating artwork from scratch or working with existing designs provided by you.

#### Prototyping

We can work closely with your team to design, manufacture, assemble and test smart circuits for your proof of concept.

#### Testing

Our Instron Universal column tester and a Keysight LCR meter, allow simultaneous capture of a smart circuit's mechanical properties, such as tensile strain and electrical parameters, highlighting resistance for reliability engineering and product lifetime analysis.

CTI can also provide wash testing on the circuits to ISO standard using a wascator machine.

#### Production & Supply

Our modern 1100m<sup>2</sup> UK facility has a production cylinder screen printing line, that can produce sheets up to 100cm x 70cm. We complement this with our in-house circuit design, screen preparation facilities including a CST (direct to screen) machine, sophisticated test equipment and a selection of heat presses.

Our team brings a wealth of technical expertise in printing and electronics.

### CONTACT US

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