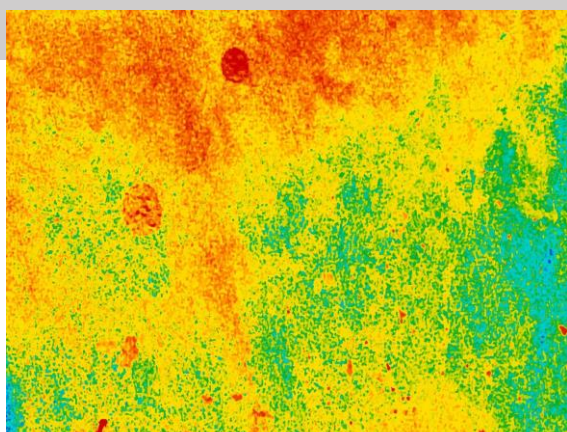
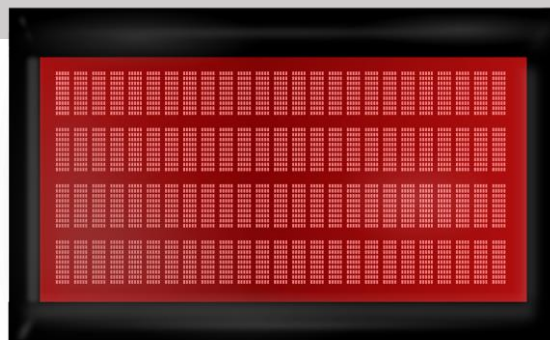


## Client overview

Our client was a global electronic device manufacturer for the consumer market. A number of these devices contained heating elements that were designed to operate at high temperatures of around 300°C. Due to this, it could take a long time for the client's devices to heat up to the required working temperature from room temperature. The client wished to minimise this and was therefore seeking materials and/or technologies that they could incorporate into their devices to speed up the ramp rate of their heating component. Potential solutions may include technologies that enhance thermal radiation (i.e. infrared heating), materials with high thermal conductivity (e.g. ceramics, graphene, diamond, etc.) or coatings that can be applied onto a surface to boost thermal efficiency (e.g. high emissivity coatings).



## The search

Strategic Allies Ltd (SAL) initiated a technology search (using a combination of secondary research and SAL's partner network), to identify technology solutions that could facilitate faster heat ramp-up rate, particularly focusing on those that were already available commercially or close to commercialisation. Companies with relevant technologies were interviewed and evaluated based on their ability to meet the following criteria:

- Durable (e.g. resistance to abrasion, thermal shock with operating temperatures up to 300°C)
- Can be applied onto mild steel surfaces with good adhesion strength
- Enable heating element to reach 300°C in less than 10 seconds
- Capability to supply samples to enable client to proceed with product testing as soon as possible

Opportunities were presented to the client on a fortnightly basis, providing client with regular updates on SAL's research progress while ensuring alignment of scope throughout the project duration.

*"...many promising opportunities that we would be following up on and pursuing with direct discussions"*

*"...great work..... almost all opportunities are of interest to us"*

## Outcome

**SAL presented 13 companies with relevant technological solutions to the client, along with 4 other companies with solutions that may be close to meeting the client's needs** - Detailed technology offerings and company capabilities were presented along with supporting literature.

**The client took up direct contact with 2 of the companies** presented by SAL while the remaining opportunities were being reviewed internally with the client's procurement team.