

COVID-19: Redarc could make ventilator PCBs

Auto electronics manufacturer Redarc in frame to produce medical equipment circuitry

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AUTOMOTIVE electronics manufacturer Redarc could adapt its state-of-the-art printed circuit board production line near Adelaide to build components for medical respirators as part of a nationwide manufacturing response to the COVID-19 pandemic.

Redarc managing director Anthony Kittel told GoAuto the company had been contacted by a government department seeking manufacturers with the capability and capacity to assist in production of an approved respirator design.

Mr Kittel said the proposal was for “three or four companies” to collaborate on a project to produce ventilators, with Redarc’s role being production of electronic circuit boards.

“We could do what’s called a build-to-print service, which is where we make somebody else’s design,” he said.

“That’s where we’re loading the electronics onto a circuit board to be the brains of the unit.”

Mr Kittel clarified that it seemed the Australian government had plans to commission the local manufacture of entire ventilator systems rather than individual components or consumables.

“It was an official request where we went back to say, yes we certainly have the capacity and capability to load the electronics for that particular product,” he said.

“In this case the government would coordinate all that (intellectual property) and I’m only reading between the lines here; if the government has the approval, they could get collaborative businesses together to manufacture products and that way we’d not be infringing intellectual property; they’d have some way of getting us to help.”

Asked whether Redarc had further capabilities that may be brought to bear at the COVID-19 pandemic unfolds locally, Mr Kittel explained how the company could extend to building complete products if required, rather than just providing particular components.

“We could build a complete product for instance, but we’d need to work with some of our supply chain; be it plastics providers and so-forth, to be able to pull together, assemble, test and package the product,” he said.

“We’ve got that capability, but again it comes back to intellectual property and how that is handled in cases of emergency.”

In addition to its advanced Surface Mount Technology circuit board production line, Redarc has electromagnetic compatibility and vibration testing labs.

A 100kW rooftop solar array backed up by 120kWh of Tesla Powerwall batteries also provides resilience to power outages.

The company, known for accessories such as dual battery chargers and trailer brake controllers, started exporting these products to North America and Europe in recent years, as well as diversifying into the defence sector and medical devices.

Mr Kittel described business as “so far, so good” at this stage of the COVID-19 pandemic but foresaw tougher times ahead.

“I expect once the country goes into lockdown that business will drop right off, it has to,” he said.

“We’re thinking we’ll still be able to manufacture; we’re thinking that we’ll have some steady business, it certainly will be a drop, but how long for we don’t know.”

In terms of adapting working practices to reduce risk of employee infection, Mr Kittel said the Redarc production facility had been split into two shifts so that social distancing could be achieved.

“Secondly from a risk mitigation viewpoint, with having two shifts if there’s a problem on a particular shift we can protect the second shift and vice-versa,” he added.

“In terms of our professional staff, obviously our design engineers and people like that wherever possible are working from home.”

Mr Kittel said the company had been well prepared for non-production employees to work from home due to recent completion of a project to build remote access infrastructure and bolster cybersecurity measures.

