



Dresden Optics was established in 2014 and is on their way to disrupting the eyewear market.

They are doing so through a combination of sustainably-made products, a fun attitude, a German-inspired sense of craftsmanship and Australian-born practicality.

The company makes single-style frames, with a goal of eventually doing so completely out of recycled materials, and which allow every part to be swapped out.

Founders Bruce Jeffreys and Jason McDermott, who shared both myopia and a frustration with current eyewear options, teamed up with Astor Industries early on. Astor is a Lakemba NSW-based automotive parts supplier excelling at plastic injection moulding and was happy to collaborate on something new and different to the waning local vehicle assembly sector.

Their partnership has been hailed as an ideal example of a new, more collaborative approach to Australian manufacturing, and as proof that "innovative thinking can be a job creator".

While looking outside their company has been highly productive as well as enjoyable, Jeffreys believes it is the only way to compete against companies, in nations like Germany or South Korea, which exist in extremely dense and capable local supply chains.

"We have got a tiny manufacturing base in Australia. We are the only manufacturers of prescription eyewear. We have to collaborate with the best people in different skill-sets, and we do not have a choice."

Major projects underway at Dresden are focused on the automation required to scale the business and to reach markets that are crying out for low-cost prescription eyewear, such as India, and in addition the material science needed to upcycle a wide range of plastics.

The aim of Dresden, which has experimented in making glasses out of materials such as milk caps and nylon netting, is to eventually use 100 per cent recycled materials.

At the moment, there are several major obstacles around the highly mixed nature of waste materials collected. Some of the issues include sorting and cleaning, and in calibrating the manufacturing process to produce a quality product out of feedstock that is not in the same condition as a virgin polymer.

The company has expanded healthily since its first sale in mid-2015, but there is a long way to go to reach its ambitious goals.

Progress has so far been typical of manufacturing startups, incremental and week by week, says Jeffreys. Breakthroughs might be in tooling advancements or part rejection rates, rather than Eureka moments.

The Advanced Manufacturing Growth Centre's support has been invaluable, he says.

"We are a new manufacturer that wants to be an advanced manufacturer. So the AMGC is critical for us, because essentially we do not know what we are doing, and we need help. That is the reality of it."

He credits the AMGC with helping contextualise and validate work around Industry 4.0 concepts, in making the connections necessary for a couple of highly-ambitious projects, and for backing those who are innovating to create the next wave of jobs and prosperity.

"In reality, everybody just goes to China for product; nobody actually makes stuff themselves here," he offers.

"If you want to make stuff here it is very hard to develop that capability on your own. The AMGC is pretty critical in being a partner for us, in developing that capability."



If you want to make stuff here it is very hard to develop that capability on your own. The AMGC is pretty critical in being a partner for us, in developing that capability.”

Bruce Jeffreys