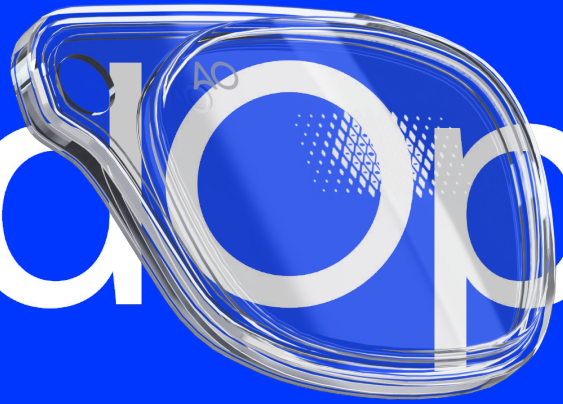
AddOptics



The next big thing in AR

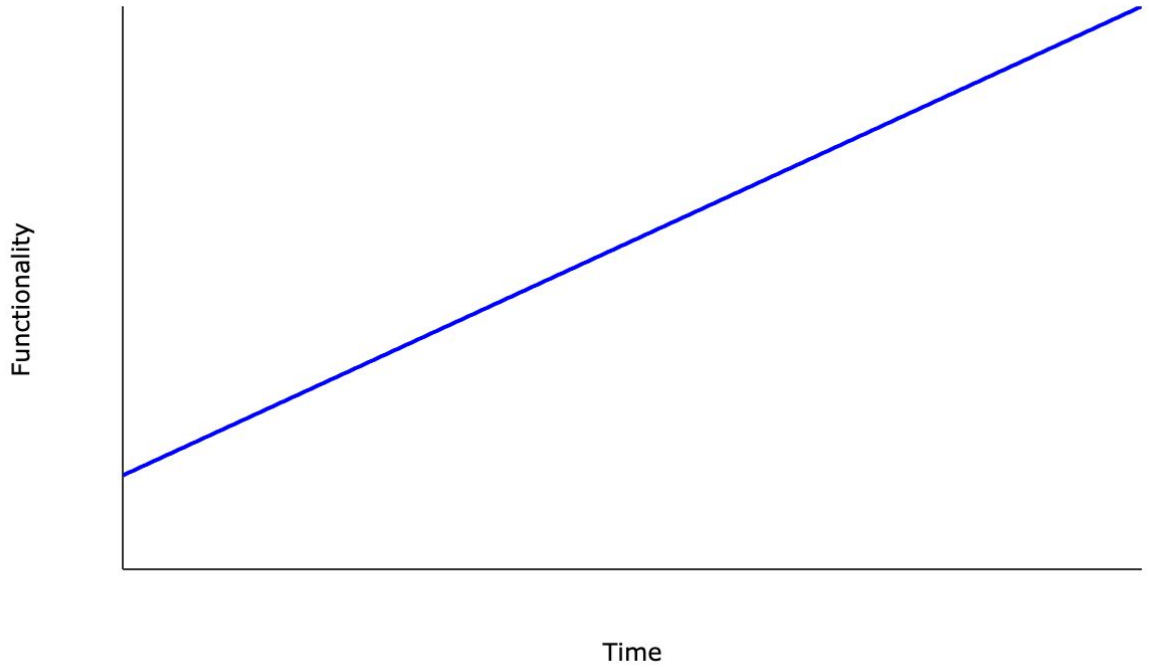
Prescription Augmented Reality glasses

AddOptics.com

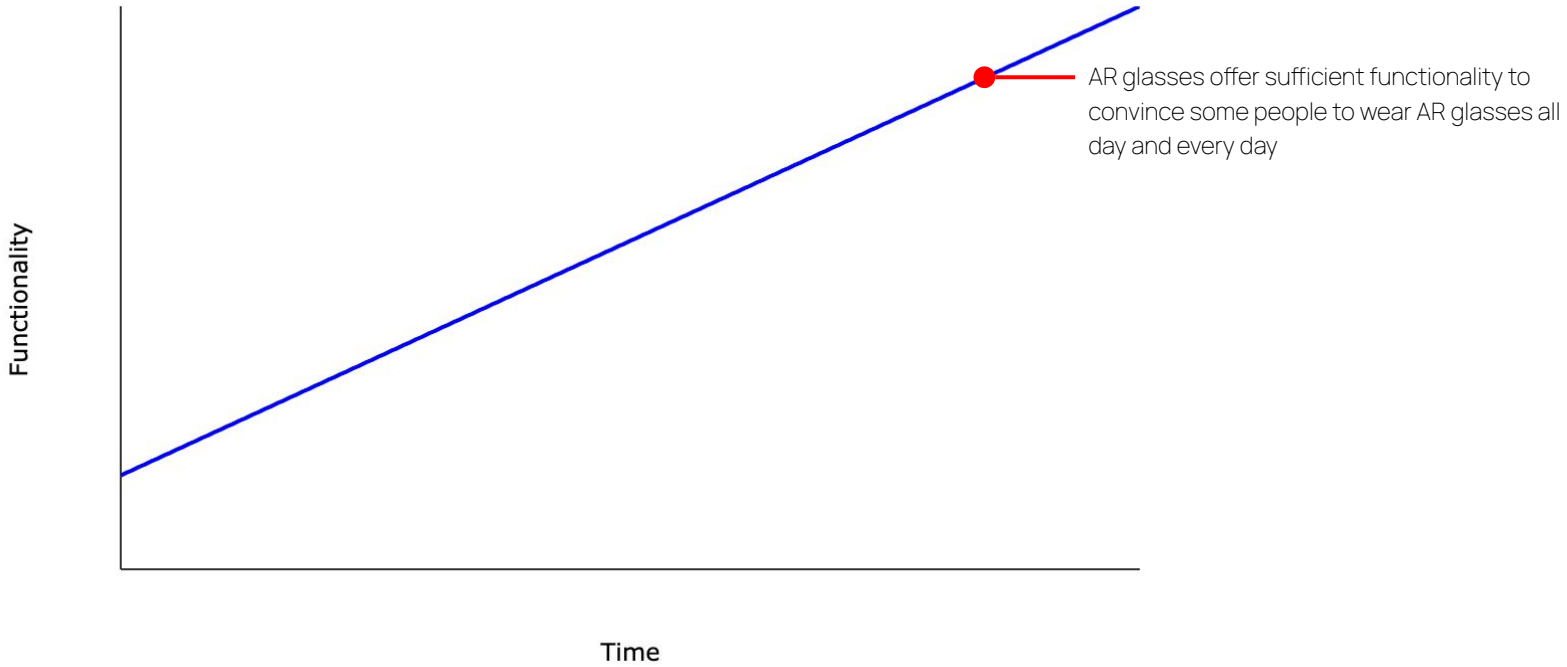
Why Prescription is Key

of people in Western countries require vision correction

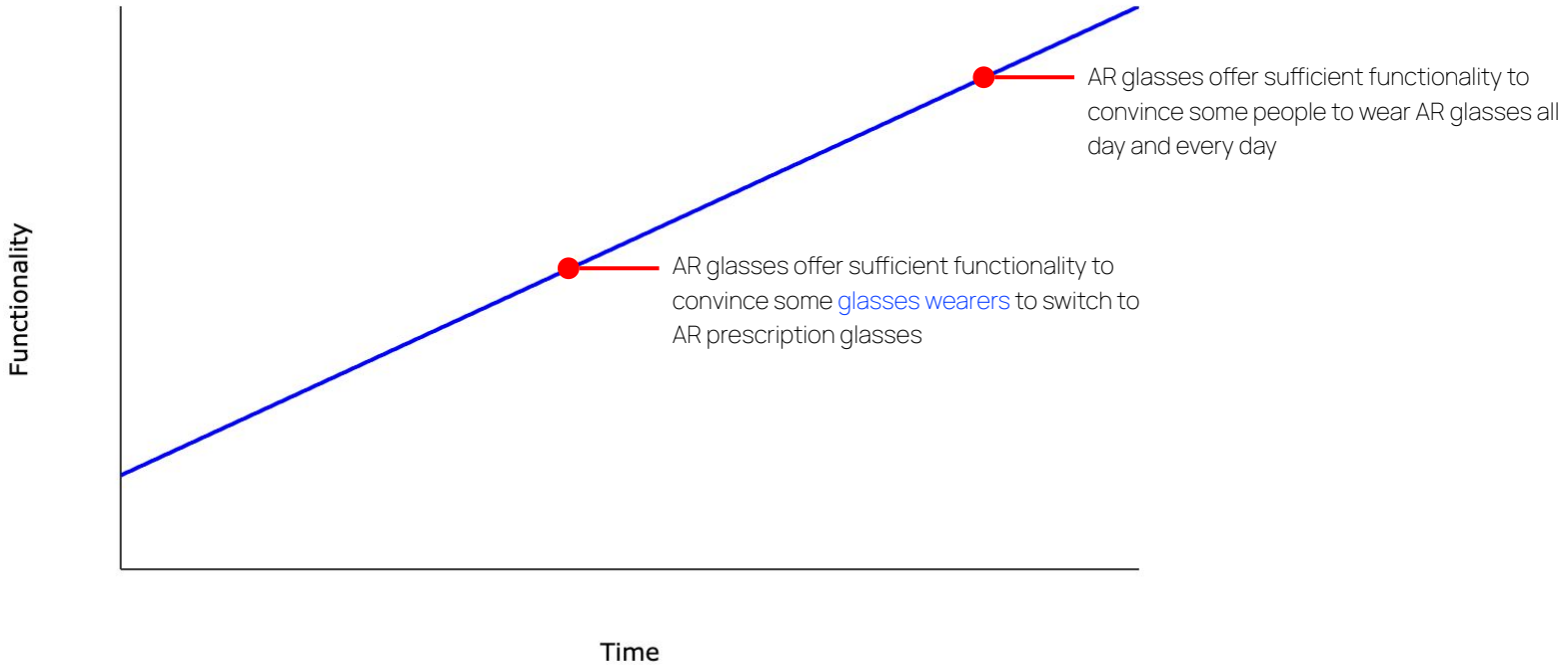
AR Technology timeline



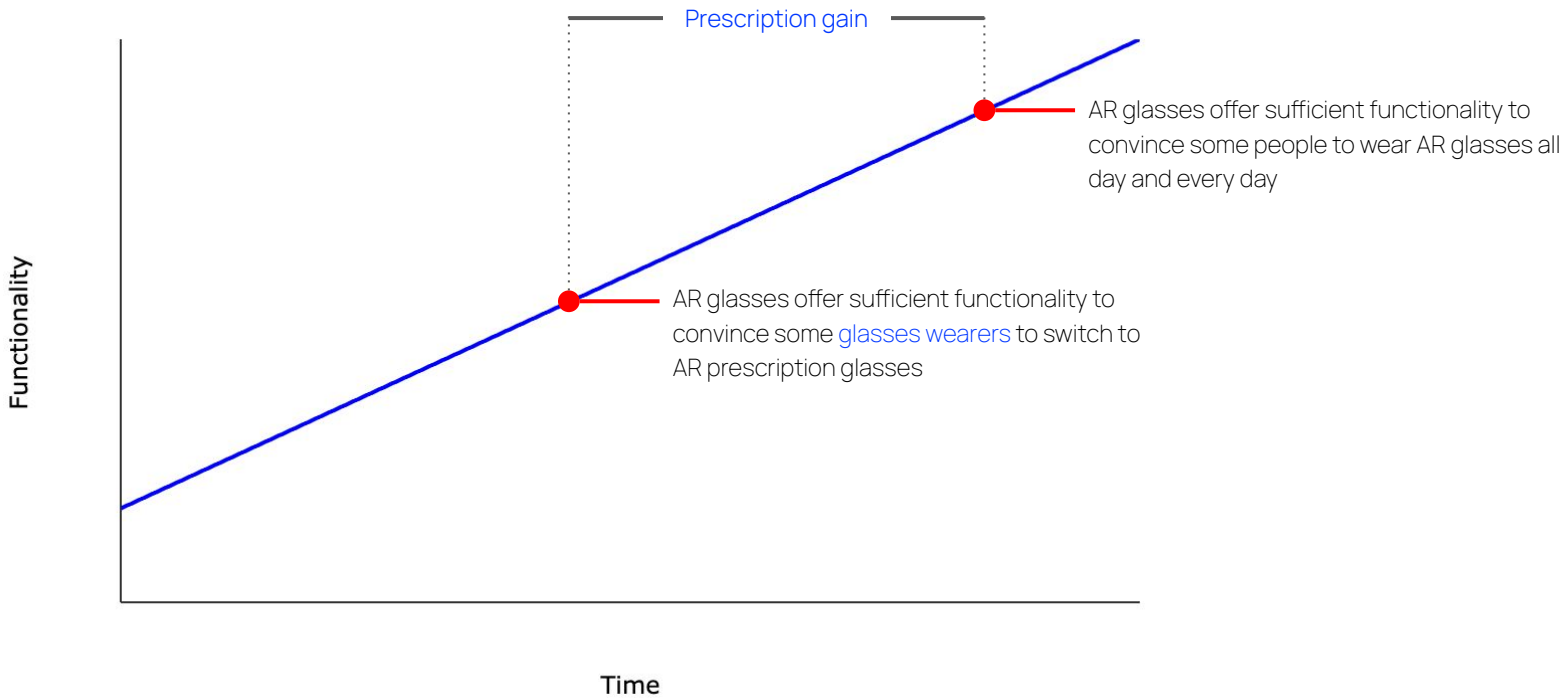
AR Technology timeline



AR Technology timeline



AR Technology timeline



First full time adopters of AR will be individuals that wear eyeglasses

AR glasses without a prescription solution can only be used by people who don't wear glasses.

Glasses wearers are most likely to be first to adopt AR glasses full time, as they already wear a device on their face, all day, every day.

AddOptics' Mission

Accelerate the transition to a world where augmented reality is a part of everyday life

Our novel, revolutionary lens manufacturing technology will be key in facilitating this transition

Currenct Prescription Solutions

Aftermarket Rx solutions

Prescription can be changed / swapped.
Makes it possible for multiple users to use the same device.

Inserts

Double glasses

Clip-ons

Prescription First

Current, aftermarket solutions don't result in glasses that consumers feel confident wearing in public, all day, every day.

Integrated prescription is key to tackle this hurdle. This is commonly referred to as the prescription first approach.

Prescription First

The prescription first approach comes with a tradeoff between form factor and usability

Just like with regular glasses, prescription first AR glasses are unique, and personalised to one user

Prescription First Performance benefits

Key benefits of integrated prescription:

- Aesthetics
- Image quality
- Weight and thickness

Challenges with integrated prescription

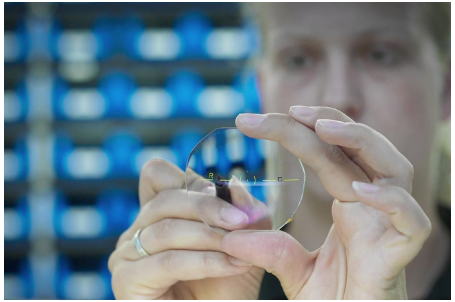
Building AR glasses with personalised prescription is a challenge not seen before

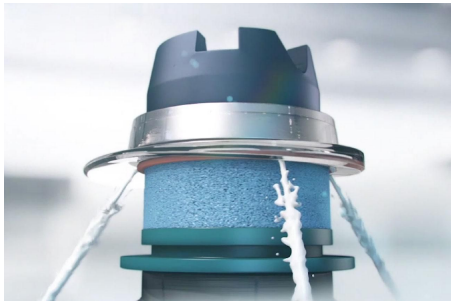
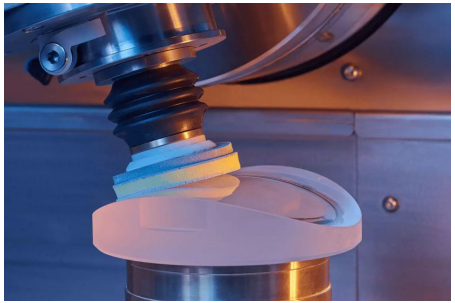
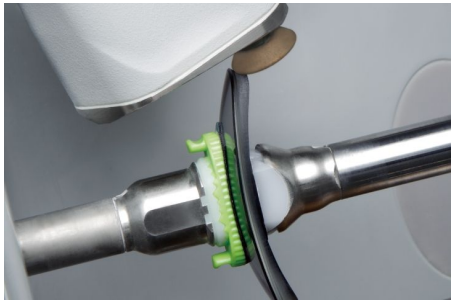
We need to build a complex electronic device that is completely unique to each user.
Or at least, the lenses must be.

Existing lens manufacturing technology

How current lens manufacturing is done

All prescription lenses in the world are made using essentially the same manufacturing technology.

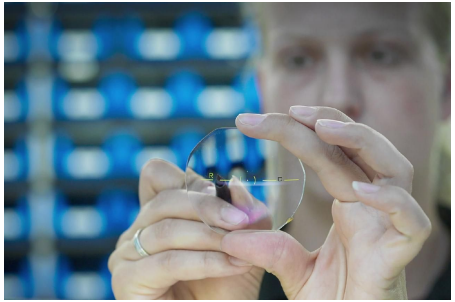


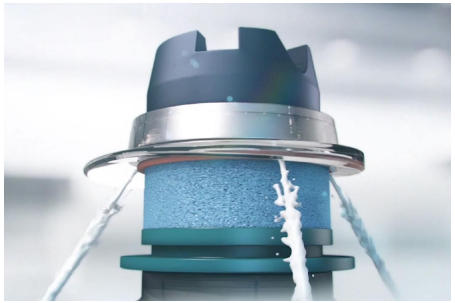
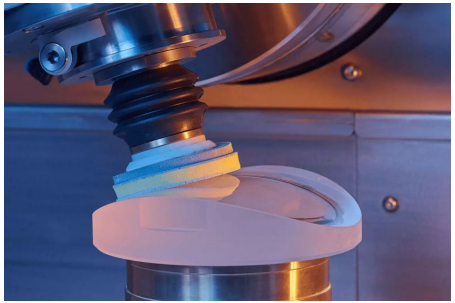
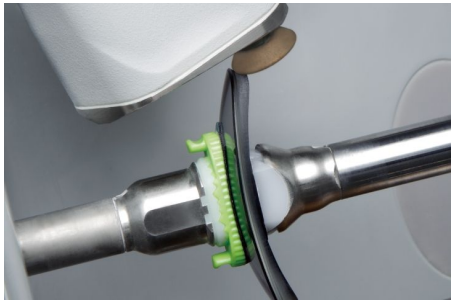





How current lens manufacturing is done

All prescription lenses in the world are made using essentially the same manufacturing technology.

Unfortunately, this technology suffers from a number of fundamental flaws



Requirements

Prescription lenses for AR glasses

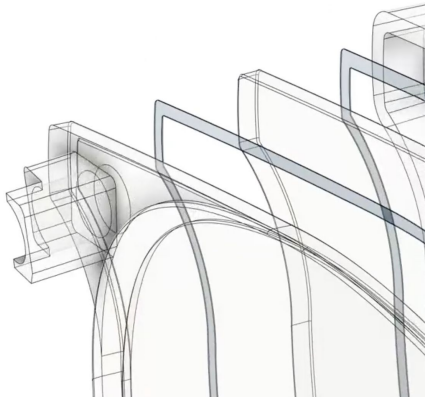
Waveguide

Micro projector

Worldside Cover

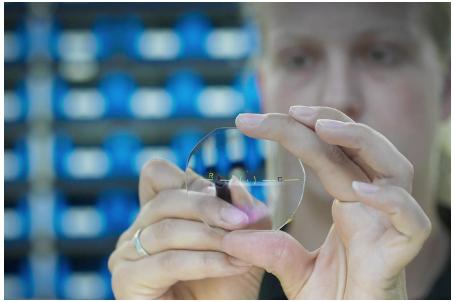
Eye Side Cover
(prescription)

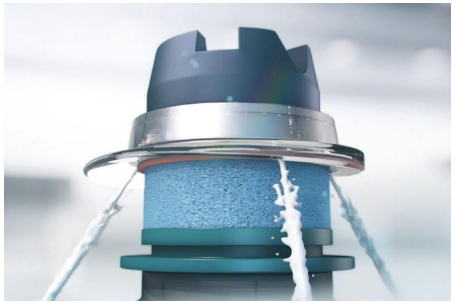
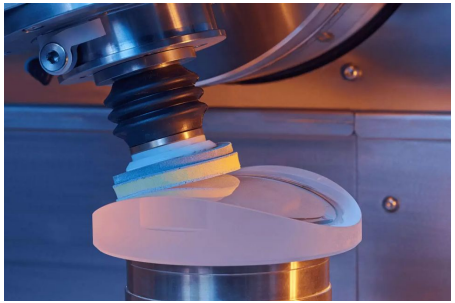
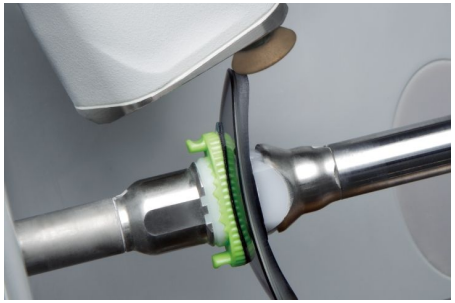
Micro projector
integration



Challenges with current lens manufacturing technology

Smart glasses will require smart lenses

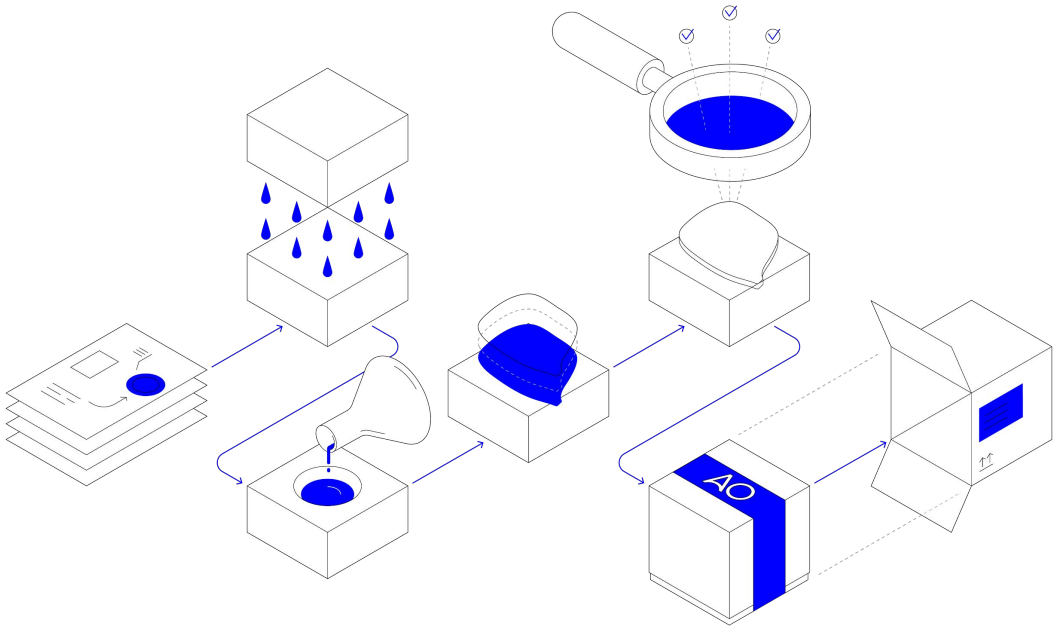


AddOptics' Solution

AddOptics' finished lens casting technology

- The form freedom of injection molding
- The level of personalisation associated with traditional lens making

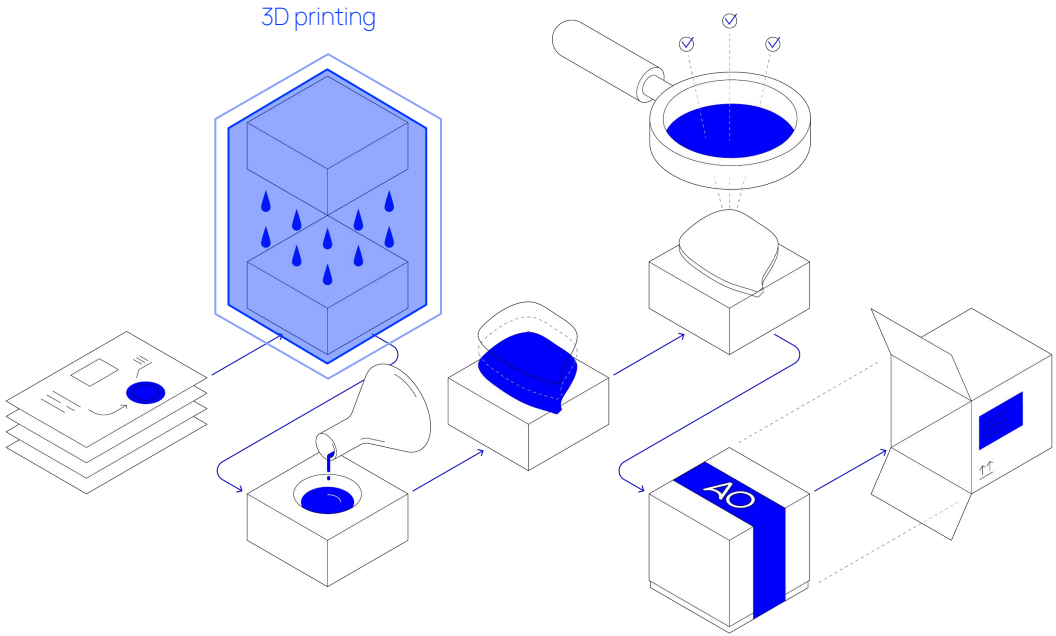


AddOptics' finished lens casting technology

Our technology combines 3D printing with traditional casting technology

3D printing is used to create nanometer level smooth, optical grade molds

Traditional casting is used to create the final lens, requiring no edging or polishing

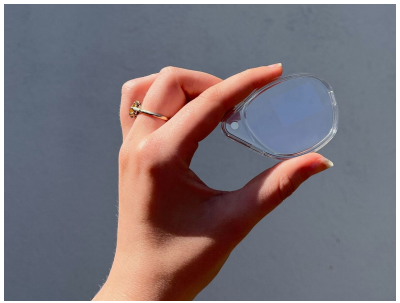


AddOptics AR prescription solutions

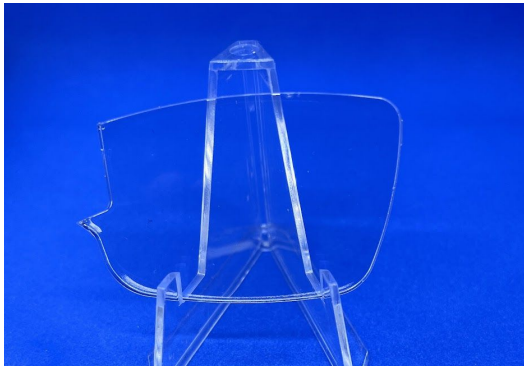
Our technology allows prescription lenses that include mechanical features, reducing the number of components for the device.

Thinner and lighter than is possible with any traditional lens making method.

Casting (overmolding) of electronics / components into personalised prescription lenses

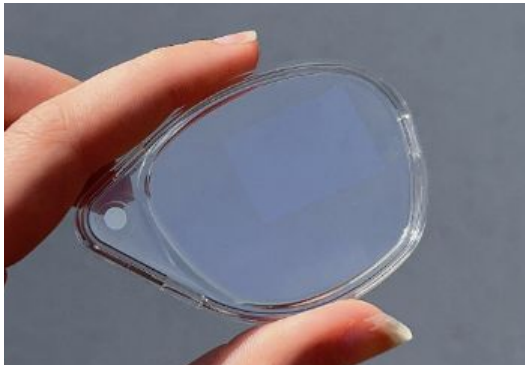


ARx Solution Suite



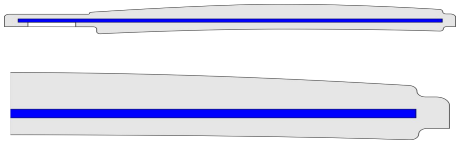
Plano

Ultra thin and lightweight plano- convex / concave lenses, flat on one side



Air

Waveguide is placed between two lenses that leave an air gap



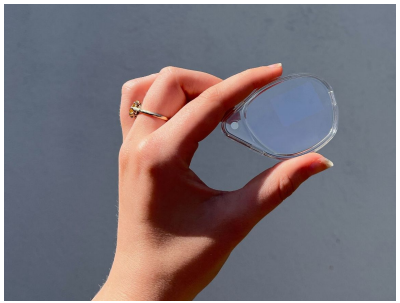
Monolithic

Overmolding / insert molding of components into the lens

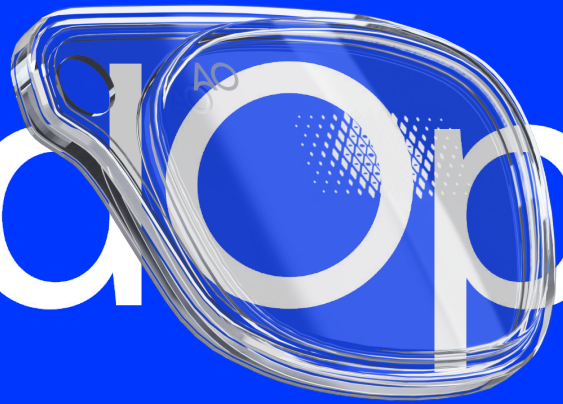
Final notes

The future of eyewear is an augmented one

AR glasses are smart glasses, and smart glasses require smart lenses



AddOptics



Learn more?

frank.marsman@AddOptics.com
+316 810 39 560

www.AddOptics.com