



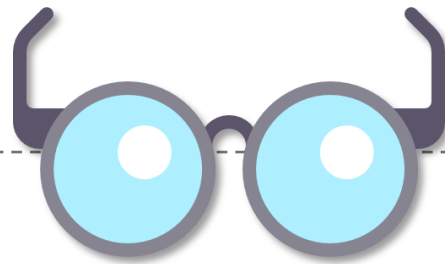
LUXEXCEL®

**3D PRINTING:
GAME CHANGER IN
OPHTHALMIC**

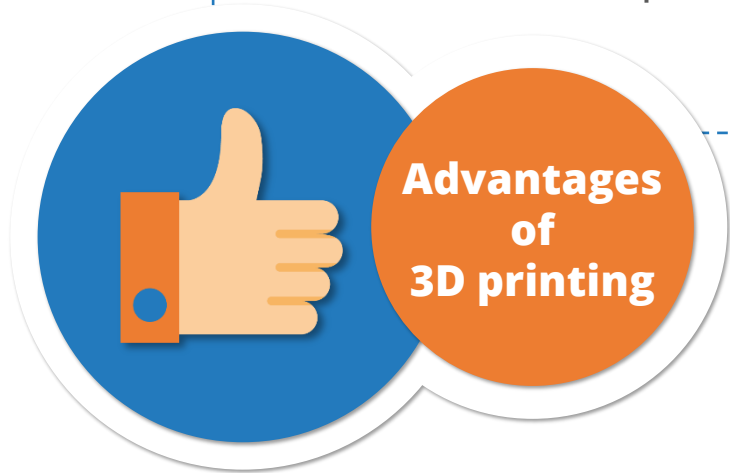
Guido Groet - CCO

LUXEXCEL[®]

**the only company in the world
able to 3D print lenses**



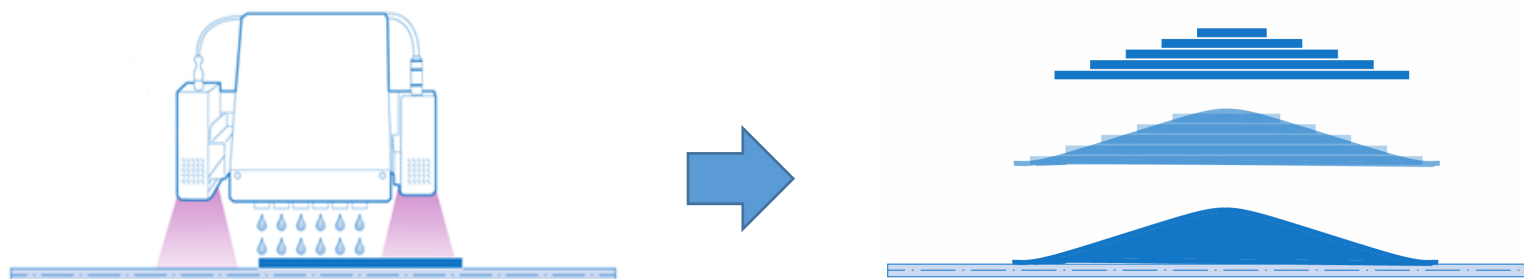
Speed of delivery
No upfront investments no, tooling
Mass Customization
No inventory, less working capital
Freedom of shape and functionality



Fully transparent materials
Smooth surfaces
Accuracy
High speed printing
Integration of electronics



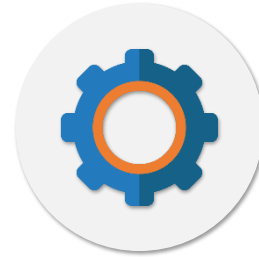
- From design to product in one go
- No polishing
- 50+ patents in 20+ Patent families
- Developed own printers, materials and processes
- Speed: 30-60 lenses per hour





Quick turnaround time

Glasses are unique to a user. We reduce processing to one hour.



Improve efficiency

Eliminate \$2B in stocks in semi finished lenses, 10+ machines and process steps, simplifying processing and reducing cost.



Optimize designs

Progressive lenses are currently only processed on the inside, we do both sides, creating an optimal design.



Green solution

Our process significantly reduces waste, has a lower carbon footprint and eliminates lead and cadmium from the process: make a better world.



Unique features

We can integrate sensors, camera's and active filters in the lens. We also provide freedom in frame shapes



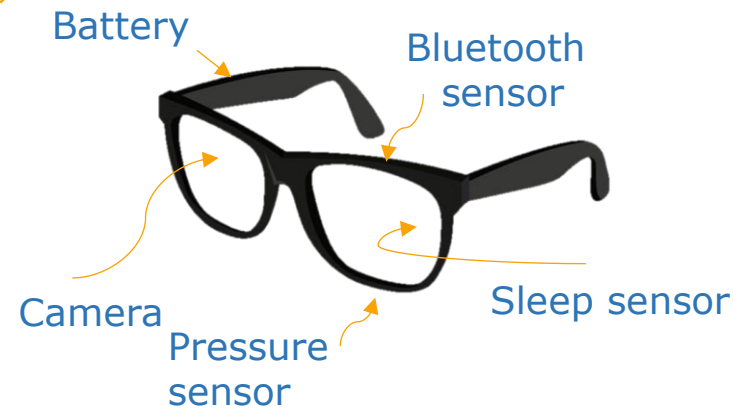
Flatter glasses



Switchable Filters



Unique shapes



Embedded sensors

What is the current status?



Further develop the technology



Run user tests to define unique market segments

Today



Pilot in niche segments

Alpha

Beta H2 - 2016

2017

	LUXEXCEL®	Polycarbonate
Refractive Index	1.53	1.59
Abbe value	45	30
Weight	1.15 g/cm ³	1.20 g/cm ³
Compliant with FDA dropball test		
Compliant with industry coatings		



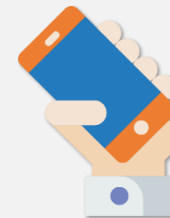
Bring unique benefits to ophthalmic



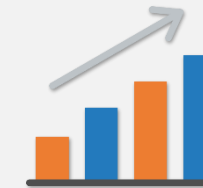
Strong team in place



Benefits for all



Unique technology



Ready for niche
Markets in 2017