

1. Problem definition: Design a sunglasses

- ❖ *Define target population:* Kids 7-8 years
Sex Male
- ❖ *Context of use:* **Posture sitting or standing**
Use on sunny days
Use with comfortable clothes
- ❖ *Anthropometric resources*

In this design we use the DINED anthropometric database

Main measures used: *Head height*
Head breadth
Head depth
Nose bridge length
Nose width
Face length
Face width
Nasal root breadth



2. Product ideas

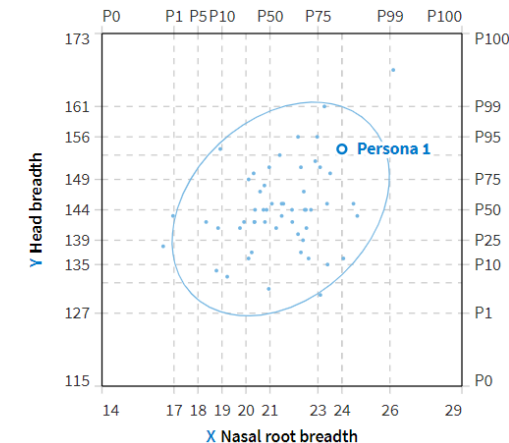
The appropriate type of anthropometric accomodation

Based on a 90-92% percentil

| | | | | | | | |
|--------------------|----|--------|-----|--------------------|----|--------|-----|
| Head height | 7 | 206 mm | P91 | Nose width | 97 | 31 mm | P91 |
| Head breadth | 23 | 154 mm | P92 | Face length | 85 | 117 mm | P90 |
| Head depth | 28 | 188 mm | P90 | Face width | 89 | 120 mm | P90 |
| Nose bridge length | 95 | 31 mm | P92 | Nasal root breadth | 93 | 24 mm | P92 |

Measure

Percentil



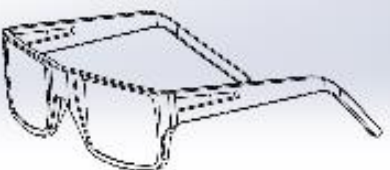
3. Design concepts

Anthropometric design guideline



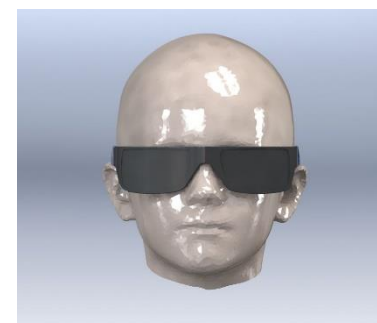
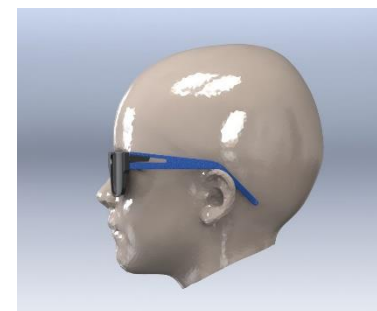
Anthropometric requirements

Maniqui 3D



Preliminary design

3. Final Design



Material: Polycarbonate
Resistent material
Ideal for sunny days

Color: Black frame
Blue paw