

Ear Mould Material Selection



BSA Education Committee Study Day

Ear mould Symposium: Current and Future Practice and Technology“

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Ear Mould Material Selection

Dreve

- **Function of the ear mould**
- **Ear mould material options**
- **Evaluating the clients needs**
- **How does the production process influences the material selection**
- **What material should I specify**



Ear Mould Material Selection

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Function of the earmould

retain the hearing aid on the pinna

be aesthetically acceptable to the client

be comfortable to wear for an extended period of time



couple the hearing aid to the ear acoustically

provide acoustic seal

modify acoustically the signal produced by the hearing aid

Ear Mould Material Selection

Ear mould material options

Properties of earmold materials:

Appearance

Hardness

Water absorption

tensile strength

Density



Ear Mould Material Selection

The logo for Dreve, consisting of the word "Dreve" in white text inside a red circle.

Ear mould material options

Acrylic

- PMMA (polymethylmethacrylate)
- Light curing resin

Silicone

- Addition vulcanising silicone (A+B)
- Heat vulcanising silicone

Polyurethane

Thermoplastic materials

e.g. polycarbonate, nylon

Metal

e.g. stainless steel, gold, titanium

Ear Mould Material Selection



Evaluating the clients needs

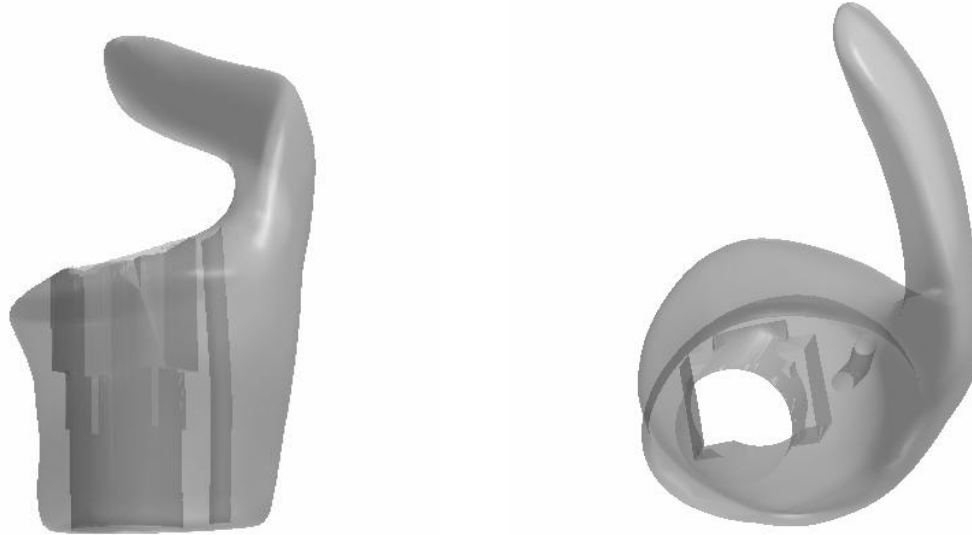
- Type of the hearing aid?
- Power range of the hearing aid?
- Is the pinna hard, medium or soft?
- Any allergic condition?
- Aesthetic expectations?

Ear Mould Material Selection

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How does the production process influences the material selection?

The stereolithographic process allows unique design options for earmoulds

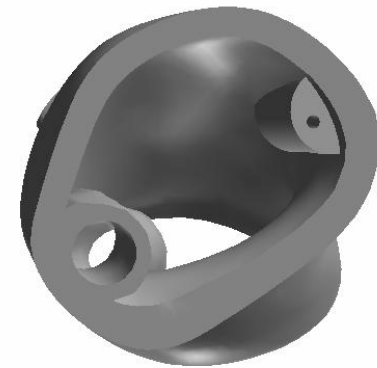
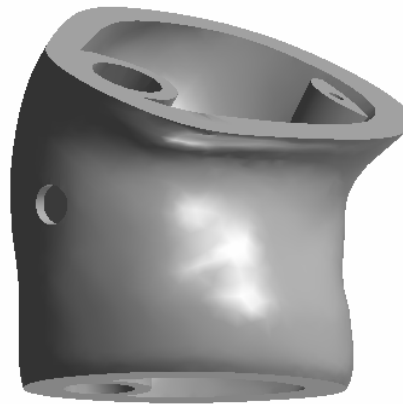
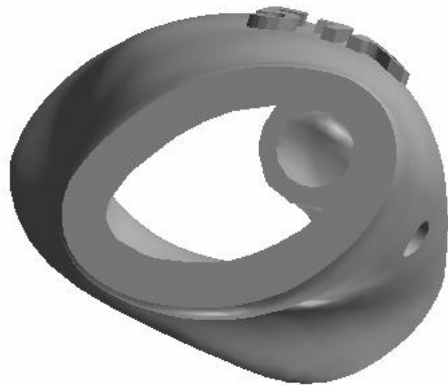


Ear Mould Material Selection

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How does the production process influences material selection?

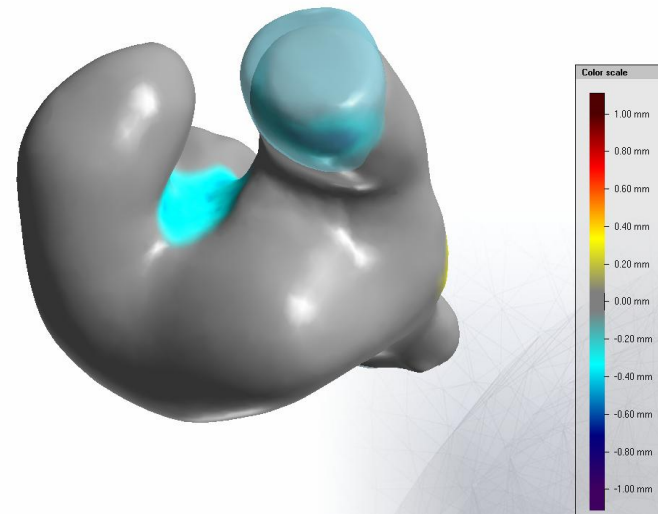
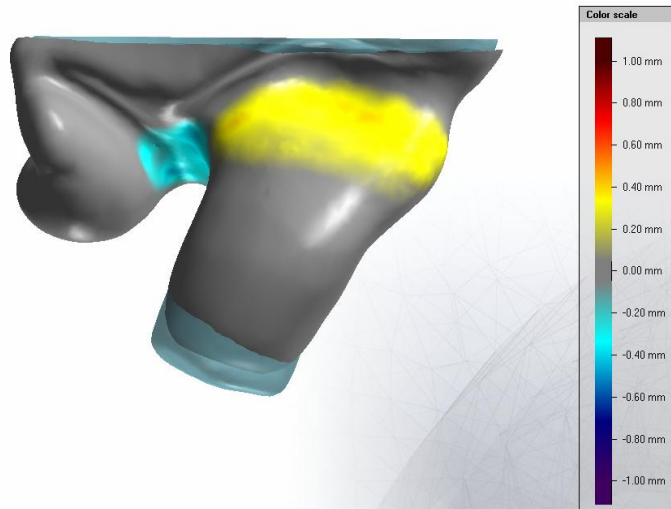
The stereolithographic process allows unique design options for earmoulds



Ear Mould Material Selection

How does the production process influences material selection?

The stereolithographic process allows unique design options for earmoulds



Ear Mould Material Selection

What material should I specify?

As each case must be considered individually, it is difficult to give general guidelines to choose an appropriate material.

- | | |
|--------------------------------|----------|
| - General purpose (adult) | Acrylic |
| - Facial flex problems (adult) | Silicone |
| - General purpose (child) | Silicone |