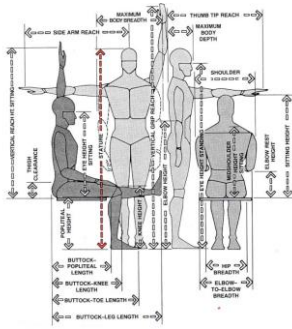


What is Anthropometry?

Anthropometry refers to the measurement of the human individual.

What is Anthropometrics?

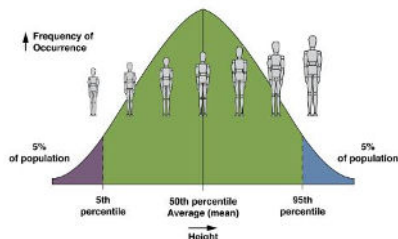
Anthropometrics is the practice of taking measurements of the human body and provides categorised data that can be used by designers.



The 5th and 95th percentile

The 5th percentile is a value associated with the location within the data where 5% of data is below that value. The 95th Percentile is the location where 5% of data is above that value.

The 5th% female value for a particular dimension (e.g. sitting height) usually represents the smallest measurement for design in a population. Conversely, a 95th% male value may represent the largest dimension for which one is designing



Application of anthropometric data

Selecting data

Data to be used needs to be selected carefully and must consider the population who will use the product, this may be specific age groups. Think about the data used to design a chair for an infant school

Design for extremes

Designing with the maximum value is the appropriate strategy if a given maximum value of a design should accommodate all people, for example a door.

Designing for the minimum value is appropriate if a given minimum value of a design feature should accommodate all people, for example the distance to a control button.

Designing for the average is very rare as nobody is average, instead products are often designed to be adjustable. An adjustable range is the most preferred method for designing



- Anthropometrics
- Percentile
- Extremes
- Average
- Adjustable
- Range
- Users
- Ergonomics
- Efficient
- Discomfort
- Comfort
- Stress
- Force

What is Ergonomics?

Defined as the science of fitting a workplace to the user's needs, ergonomics aims to increase efficiency and productivity and reduce discomfort

Efficiency can be achieved by doing the following

- Reducing the weight of a product making it easier to lift or use for prolonged periods.
- Making a product simple to understand (visual prompts)
- Improving the comfort of a product.
- Considering body mechanics when designing products.
- Considering the users strength
- Reducing the need for excessive force

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It is important to remember that you need to select data based on the intended user of the product.

Comfort is only one factor that makes a product ergonomic, there are many others

Anthropometrics and Ergonomics

Design and Technology

