## <u>Influence on design of anthropometrics and</u> <u>ergonomics</u>

## Sources and applications of anthropometric data:

- Statistical data available from BSI is associated with heights of men, women and children
- The height of which 5% are shorter is known as the 5<sup>th</sup> percentile
- The height at which only 5% ate taller is known as the 95<sup>th</sup> percentile
- Designers use these values to try and fit a product from the 5<sup>th</sup> to 95<sup>th</sup> percentile
- Anthropometric data will vary for different areas in the world
- Can be gathered by designers for certain genders/groups

Uses: TV remote, PS4 controller

Ergonomic factors for a designer to consider when developing products and environments with which humans react:

- Ergonomics is the study of how people interact with products and their working environment
- Matching the product to user
- Improves people's lives by increasing their comfort and satisfaction
- Data about the size and shape of the human body is required (anthropometrics)

A <u>quantitative</u> (measurable) approach predicts the physical fit of the product to the human body shape, encompassing workload, speed of performance and errors

A <u>qualitative</u> (opinion-based) approach predicts user comfort and their satisfaction with the product, so it has the optimum interaction with the user

Uses: Ergonomic handles, chairs, computer desk heights