





The presented approach evolved from the previously developed approaches is based on the special stationary device for scanning the surface of a customer's head which includes a mass produced camera or a smartphone. The presented approach is the innovative technology for the selection of individual headwear and clothing.

The advantage of the presented method and the means is the combined use of information and data on available size ranges of headwear and protective sports headgear together with individual size and shape of a customer's head, which guarantees reasonable price/quality ratio and allows a customer to choose that precise item among the mass-produced goods which provides maximum comfort.

Another distinctive feature of the presented approach is that it allows fast selection of the required item by means of creation and further use of the unique code index which defines the shape, size and other individual characteristics of a particular customer.

To sum up, the devoted solutions which are introduced in this presentation combine the advantages of the customized approach and the selection from the mass-produced gear thus providing the fast and accurate way to choose a particular sports gear item or headwear that best matches the individual requirements of a customer.

The research shows that when using a mobile phone the current calculating error for linear values when scanning individual parts of the body is less than 1%. When using a stationary scanner, the error of less than 0.7% hence the accuracy can potentially be increased approximately twice due to the implementation of new algorithms not mentioned in this paper.

Thus, the introduced technical solution allows to create a compact, coded, accurate description of a customer's anthropometric characteristics in accordance with the selected item of clothing, footwear or protective equipment. The introduced solution allows a customer to perform an accurate measurement of his/her body or body part and to choose in a short time the best matching item to him of clothing or equipment without complicated technical means.