



## How Uniform Manufacturers and Suppliers Can Address Sizing Complexity

The apparel industry has struggled with a lack of reliable sizing standards since the US government began mass-producing military uniforms in the 19th century. At that time, rudimentary body sizing "systems" were developed manually, by taking chest, waist, and leg measurements from thousands of male recruits and identifying patterns between them. The data was used to derive other parameters based on a single chest measurement, and eventually formed the basis for civilian men's sizing labels — although it was never truly standardized.

Developing a universal sizing system for women has been even more challenging. The 19th century saw the first standardized methods for women's sizing labels based on generic patterns of a range of body types. However, proportional variations in bust and waist measurements among women complicated the standardization process and to date, no standard size labeling has been widely adopted.

During the 20th century, size labeling with numbers ranging from 8 to 42 was introduced and adjusted to account for changes in consumer tastes and body types to improve acceptance. However, in the retail clothing industry, vanity sizing became increasingly prevalent. Clothing manufacturers started downgrading size labels and adding lower sizes like 2, 0, and 00. A size 12 in the 1950s could be a size 6 today. This is done to appeal to customers' body image, making them feel slimmer and more likely to purchase. In the retail clothing industry, sizing has become a marketing tactic rather than a metric to help customers find the right fit.

### The Sizing Complexity of Modern-Day Uniforms

Sizing remains a major problem for uniform manufacturers and suppliers.

As the population becomes more diverse and continues to grow physically larger, it becomes more difficult to fit uniforms to wearers with ever-changing body shapes and measurements. Often, the size charts being used do not adequately consider different body shapes, sizes, and proportions. In some



instances, they blanket the entire uniform category and fail to account for the different fit of each individual style.

As noted, vanity sizing has grown in retail clothing. This has made it difficult for uniform wearers to know which size will fit them best without first physically trying on multiple sizes. Widespread vanity sizing has led to confusion since a wearer who fits a size 4 pant in retail may need a size 10 uniform pant.

In addition to the vanity sizing issue, uniforms are often designed based on a standard size, and the grade is increased or decreased linearly by a few inches to cover the size range. However, these grading rules are inadequate as body shapes and sizes do not increase or decrease linearly. And sizing conventions vary around the world, adding to potential confusion as naming rules and grading scales are often tailored to particular geographies.



Uniform manufacturers also have to consider legacy and contemporary patterns and industry-specific fitting trends. What would have been considered an ideal style and fit 10-15 years ago is significantly different today. And legacy patterns tend to have different size label conventions compared to modern styles, often with larger size labels for smaller measurements.

Uniform providers are trying to fit an almost infinite variety of body shapes and measurements into a limited number of clothing styles. This results in returns that have significant costs associated with reverse logistics, environmental impact, and excess inventories.

## Addressing Sizing Complexity with 3D Body Measurement & Size-Matching Solutions

Creating an accepted universal sizing standard is unlikely to happen. However, with the right contact-free, 3D body measurement and size-matching technology, uniform manufacturers can generate the data needed to optimize their garment specifications to better fit a greater proportion of their wearer population.



[BodiData®](#) has 4 contact-free, body measurement and size-matching solutions. Its [BodiSafari® solution](#) helps uniform companies improve the design of their uniforms so they fit their wearers better. BodiData's database can be segmented to represent any target wearer demographic. By virtually fitting garments on the targeted wearer, BodiSafari is able to complete analysis and generate reports that help uniform companies improve the sizing and fit of their styles. These reports include suggestions for patterning improvements, such as changing a crotch curve or the pant rise, to optimize grading and achieve a better fit for a larger population of wearers.

Uniform manufacturers can also compare legacy styles to target populations and adjust their grading scale accordingly. By applying BodiSafari® recommendations, manufacturers can optimize legacy styles to better fit their customer demographic while reducing the number of alterations required. BodiSafari® reduces development costs and reduces losses from styles with relatively poor fit. The reports include data trends that can help determine production volumes of different sizes so that inventory is optimized.

Using any of BodiData's 4 contact-free measurement technologies, BodiSafari® makes it easy for clients to gather aggregate data of actual customer workforces to further optimize existing designs or to create new patterns. The technical specifications can be developed with excellent knowledge of the true body shapes and dimensions of the actual customer workforce, resulting in modifications to better fit the shape of the wearers, a more bespoke appearance, fewer alterations, and improved fit quality.

Visit [BodiData.com](https://www.bodidata.com) to learn more about our unique multi-modal technology-based 3D body measurement and size-matching solutions.