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## Analysis of the Structural Char1cteristics and Their Effect Fit and Performance of Men's Chino Pants

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The purpose of this project was to compare similar men's chino pants from three different brands at various price points in order to determine whether or not there are differences in quality based on the individual design and construction properties of each garment.

The garment label, construction characteristics, sizing and fit, and the cost to manufacture three pairs of men's chinos, from three different brands were evaluated. For each brand, the construction characteristics, sizing and fit measurements, and cost of an original pair, and a pair of pants washed 10 times were examined. The cost to manufacture a pair of pants from each brand was determined based on the construction characteristics of the pants including material and trimmings, labor, packaging, as well as duties and taxes. Construction characteristics such as embroidery, stitch types, and seam types. Each brand was visually evaluated to determine construction techniques. The original and washed pants for each brand were measured at the waist, hip, leg in-seam, leg out-seam, and crotch and the measurements were recorded. The original and washed measurements were compared to each other as well as to the standard sizing measurement to determine fit for each brand.

Upon concluding our analysis of each garment, we found varying measurements among the original, standard, and washed pants. Each garment incurred shrinkage throughout each of the measured areas. Of the three garments, Faded Glory had the least amount of overall shrinkage, while H&M and Roundtree and Yorke had comparable shrinkage. The construction of each of the garments analyzed were very similar. The use of different materials and techniques used in each garment is reflected in the price point with Roundtree and Yorke being the most expensive brand. Further research confirmed that the fit of each garment will vary slightly after several wash cycles, but share comparable ratios of original to wash measurements.

After completing the analysis of men's chino pants, the results confirmed that all three brands are very similar. Despite the cheaper price point of Faded Glory and the claimed higher quality of Roundtree and Yorke, H&M yielded measurements and construction similar to that of the other brands, while maintaining the closest measurements to the original sizing, as well as at a reasonable price point, making it the best option for meeting customer serviceability.