



MASS CUSTOMIZATION-AN EXPERIMENT IN DESIGN AND PRODUCTION

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Mass customized apparel gives the consumer choices in style, fabric, and fit but is factory produced using new technologies. The design of mass customized apparel requires a different approach than design of ready-to-wear. A group project was developed to teach designers these differences. For this project standard-sized denim garments were offered to the consumer (undergraduates in the TXA department) with choices of size, style, and fabric. Garments were designed, "sold," and produced. VF Jeans donated denim for the project.

The class was a senior level design class. Six seniors and two graduate students met once a week for a full semester. The students designed a line of 13 styles and produced a flyer to "sell" the concept to their undergraduate peers. The garments were offered in 12 fabrics and 7 sizes. The students created graded patterns using a CAD system for the 5 final designs. They developed specification sheets and a manufacturing sequence for the garments. They tested each fabric for shrinkage and incorporated the appropriate shrinkage amount into each pattern.

Eleven students signed up to participate in the production phase of the project. These students worked in the apparel lab for six hours in exchange for a customized denim garment. Industrial sergers, single needle overlock machines, and a double needle chainstitcher were used for production. The students acquired a better understanding of the issues involved in both mass customization and the design of ready-to-wear, including the importance of consistent specifications between styles, organizational issues related to cutting and tracking individual garment pieces, and the implications of choosing an appropriate fit model.