

A Study on Marking Efficiency for One-piece Dress Pattern

Kim, Hye-Kyung* · Cho, Eun-Jeoung**

*Assistant Professor, Dept. of Clothing, Wonkwang University

**Assistant Professor, Fashion Design, Ansung Women's Polytechnic College

An equipment automation is introduced actively in clothing industry which is changing to a more specialized and high value-added industry. The range of utilizing computer in clothing industry is wide from planning to output and sales of clothing products. Apparel CAD system is being used mainly in a process of pattern making, grading, and marking. The purpose of this study is to examine marking efficiency according to collar grain line, facing and center back line, in order to reduce textile loss by pattern marking. The results of this study can be utilized for the CAD/CAM system in the clothing industry with scientific and systematic data obtained for marking an one-piece dress pattern. This study attempted to suggest the most efficient method for marking an one-piece dress pattern.

This study was performed by a following method: First, a basic one-piece dress pattern is made and saved to the Yuka CAD System, and graded with different sizes on CAD, then, the pattern is arranged for industrial purpose to calculate the marking efficiency in different conditions. Marking experiments were done using fabric of 110cm width and in three different pattern sizes(S. M. L) for an one-piece dress.

The results of this study are as follows:

1. In comparison of the marking efficiency rates between the separate facing and self facing, it was found that the former showed a higher rate than the latter. In case of a separate facing, the separated seam at center

back was appeared to have a higher marking efficiency than the extended seam by 1.09%.

2. When comparing the marking efficiency between the pattern with seam and without seam at center back, the efficiency rate was higher in the pattern without seam at center back. In case of pattern without seam at center back, the separate facing showed a higher marking efficiency than the self facing by 0.28%.

3. The marking with a horizontally-loaded collar was compared with a vertically-loaded collar in the efficiency rate. The efficiency rate was higher when the collar was loaded horizontally than vertically loaded. In case of separate facing and seamed pattern at center back pattern, the comparison between a horizontally loaded and a vertically loaded collar showed the result that a horizontally loaded collar has 2.21% higher marking efficiency. In case of a pattern with a separate facing and without seam at center back, the comparison between a horizontally loaded and a vertically loaded collar, the former showed a higher marking efficiency than the latter by 1.08%.

Therefore, the results of this study showed efficient ways of making for one-piece dress pattern. The factors directly related to increasing marking efficiency were a separate facing, without seam at center back, and a horizontally loaded collar. Patterns with a higher efficiency rate in terms of the types of facing and seam and collar treatments can reduce fabric loss by marking and shorten the time needed for marking process.