

# **A Study on the Sleeve Cap Ease of Leather Garment**

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In this study, both kinds of materials, that is, leather and woolen fabrics, which have similar thickness, have been adopted. To determine proper length of ease, not only sleeve cap height but also sleeve width has been adjusted mainly based on 5cm length of the ease, which follows maximum sleeve cap height, and then different lengths of ease, for example, 4cm, 3cm, 2cm and 1cm of ease, have been made. As a result, eighteen kinds in total of sleeves have been made: In other words, each nine kinds of both leather and woolen fabrics have different ease lengths. In addition, each sleeve has been inspected visually and functionally.

Following conclusion has been gotten based on outcome of the study:

1. Visual check on ease contraction, which may vary depending upon ease length, shall be: First, ease contraction, in which there exists difference of ease length due to difference of sleeve width by fixing sleeve cap height, has been visually checked. The outcome of the check shows that the longer ease length of the sleeve of woolen fabrics material the better ease contraction, while the shorter that of leather material the better ease of contraction.

On the other hand, ease contraction, in which there exists difference of sleeve cap height by fixing sleeve width, has been visually checked. The outcome of the check also shows same phenomenon in the above.

In addition, ease contraction, which may vary depending upon sleeve cap height having same material and ease length, has been visually checked. At first, where woolen fabrics material has longer ease length, higher sleeve cap height has better ease contraction than lower one has even if both heights have same ease length. In addition, in the case of 3cm or more of ease length of leather material, higher sleeve cap height has better ease contraction than lower one has, while in the case of woolen fabrics material, the difference is less.

2. Outcome of visual check on sleeve width by each type of material is as follows: In the case of woolen fabrics material, the sleeve with both  $A.H/4+5$ cm of sleeve cap height and +7cm of bicep line has shown the highest rating, while the same

with +2.1cm of bicep line has shown the lowest rating. As a result, the wider sleeve width, the better visual appearance. Like the case of woolen fabrics material, the wider sleeve width of leather material, the better visual appearance.

On the other hand, outcome of visual check on sleeve cap height by each type of material is as follows: In the case of woolen fabrics material, the sleeve with  $A.H/4+5\text{cm}$  of sleeve cap height has shown the highest rating, while that with  $A.H/4+2.6\text{cm}$  of sleeve cap height has shown the lowest rating. As a result, the wider sleeve width, the better visual appearance. Like the case of woolen fabrics material, the higher sleeve cap height of leather material, the higher the rating.

3. Function of sleeve ease has been checked as follows: In the case of sleeve made of woolen fabrics, generally speaking, the wider sleeve width, the higher rating with better function. The case of leather material is also the same. As a result, the wider sleeve width, the better the function.

On the other hand, function depending upon movement angle has been checked as follows: The sleeve, which has been made by using woolen fabrics at all of movement angles, has same sleeve cap height. In the case of the sleeve, which has adjusted ease length with different sleeve width, the narrower sleeve width, the higher the function. In the case of the sleeve, which has adjusted ease length with different sleeve cap height, the lower sleeve cap height, the higher the function.

4. Considering outcome in the above, proper ease length for manufacture of leather garment, which has beauty and good function, is said to be 1~2cm. As a result, ease length with higher sleeve cap length shall be 1~2cm, while the length with lower sleeve cap length shall be 1 cm or less. In addition, wider sleeve width has better function. Considering relations with sleeve cap height, sleeve width shall exceed +4cm of bicep line.

Therefore, to satisfy a variety of those conditions while manufacturing leather garment, sleeve cap height, which is used for the manufacture of full dress and street wear garment, To lessen the ease length, body A.H shall be relatively loose under the arms, or pad shall be supplemented on the shoulder, so that the difference had better be lessened to solve such problems. In addition, to let casual garment with lower sleeve cap height not to exceed 1cm, sleeve cap height of sleeve pattern shall be lowered to let difference between sleeve A.H and body A.H keep 1cm or less and lessen ease length.