

## The Design of the Process Template for the Folding of Garment

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### Abstract

*Collar as a major component of the clothing, the shape of the entire clothing plays a vital role. Garment template technology is one of the most advanced production process technology, it will complicate the process simple, realize the workshop production from the traditional to modern, the majority of garment processing enterprises, the rise of clothing template will directly promote the garment processing enterprises along the modern production mode transformation and upgrading. This paper has completed the development of the collar template, from the development principle to the production steps of the way. In this paper, the methods of collecting information about clothing template combined with the theory of pattern and the shirt collar sewing process knowledge, discusses the principle and method of making clothing collar template. Garment collar template fabrication principle is the collar of the theory of pattern and the collar of the sewing process, in a wide variety of collar, just know a collar pattern making and sewing process, the garment CAD design, intelligent cutting equipment can production mold. Through summarizing and inducing the above conclusions, the clothing collar template has gradually been applied to the clothing enterprise, and it also needs a more thorough study on the clothing collar template. For the research of the collar template will undoubtedly bring great benefits to the enterprise, the development of the collar template will be attached to the garment industry.*

**Keywords:** collar template; template development; sewing process; production efficiency

### 1 Introduction

With the development of garment industry, the technology of equipment and technology industry has been developing; the garment template technology has gradually changed its advantages to the new high point of production standardization. It has played a huge energy and has been concerned and recognized by the garment processing enterprises. Clothing template technology, clothing template automatic sewing equipment, template cutting machine and application software appeared one by one, in which the technology expert Liao Mingjie Mr. clothing applying template technology to help enterprises with the production of insights highly positive, and 909 automatic NC template sewing machine are considered to be a production tool for enterprise development; 201 Hanbang group also attended the seminar, showing the garment template application of CAD and garment template laser cutting machines and other advanced technology industries.

Apparel business representatives on the application of the technology and equipment and software related to the development of technology equipment and software are discussed, the industry agreed that the clothing template technology will lead the workshop production revolution, and the development of the surrounding technology will be better to promote the development of service template technology. At the present stage, the development of the clothing industry requires the production of high efficiency, but also to ensure the fine workmanship of the clothing, so that the clothing template in the clothing production has played an important role. The application of clothing template is more and more extensive.

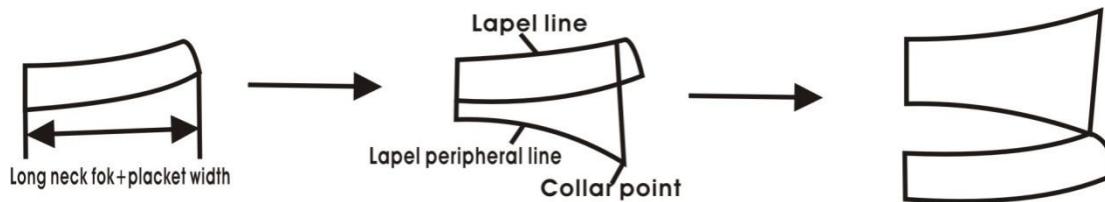
The research on it has more theoretical basis for the development of garment template, and more development of all kinds of garment template to meet market demand. In most clothing production, the sewing of the collar is required to have a fine process, so the research on the collar template is one of the main contents of the research on the clothing template. This paper mainly from clothing collar of the theory of pattern and sewing process of analysis of the principle and method of making the collar template, lists some examples of collar template application.

## 2 Fold Collar Process Template Design Principles

Turn collar is composed of a collar and lapel collar, shirt, coat, commonly used in casual dress. According to the combination with the lapel collar, turndown collar can be divided into conjoined turn collar and split turn collar. Conjoined folding collar refers to the collar and lapel seat in the same cut piece of one-piece collar; split fold over collar refers to is stand collar and lapel separate tailored two-piece collars.

### 2.1 fold collar analysis

As shown in Figure 1-1, from the structure and folding can be understood as in the collar stand collar is arranged on the basis of lapel structure. Therefore, the body fold collar formation can be regarded as a process: first to make the collar stand collar, then the lapel of the outlet line and a catch line alignment, in accordance with the radian of the collar catch line made Lapel line, and then set collar width, usually collar width should be greater than the height of collar stand, forming Lapel can cover the collar stand, finally according to the requirements of shape make Lapel outer line and collar point.



**Figure 1-1 the composition of the fold collar**

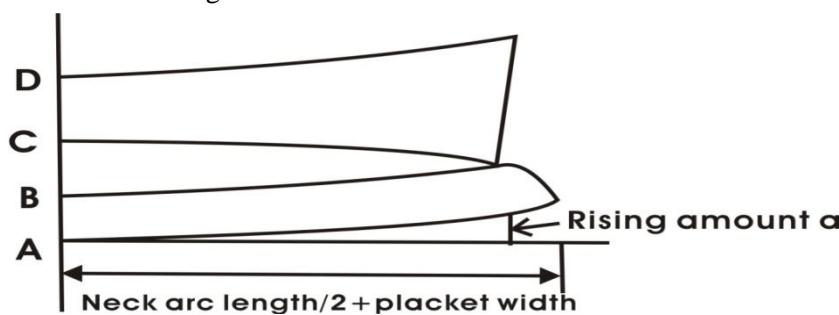
### 2.2 fold collar structure design elements

#### 1 Seat up

Turndown collar structure, collar stand is connected to the intermediate structure of the garment and the lapel, not only affects the turndown collar fit degree, but also related to forming the lapel of beauty. Collar stand under the line is the lead coated tablet and a piece of installation and wiring, from standing collar structure principle knowable, the radian determines the collar neck roll angle, and the radian of the outlet line in general is also the warped volume to regulate the, Qiqiao more, under a line of larger radian, the more fit the neck. Usually turndown collar's collar stand the warping amount of about 2cm in, if the collar from the neck to the sloping shoulder, reduce warp amount, if the lapel tilt from the shoulder to the neck, increases warpage amount.

#### The 2 line of the radian of lapel

As shown in Figure 1-2 and ab is the height of collar stand, CD for lapel width CD general AB 1 cm larger than, to enable lapels folded after can cover the collar stand; ob led a catch line OC Lapel line, OB and OC is the suture between the corresponding part of the, shoulder line OC and brought a catch line ob radian matching system is directly related to the molding collar after the final effect.



**Fig. 1-2 the arc of the lower line of the fold**

when Lapel small line OC and while leading a catch line ob radian equal, lapel outlet line and a catch line between the gap  $BC=2a$  if this as an intermediate state, when the OC curve is less than ob radian, narrowing the gap between BC, turndown forming and lead a joint is tight; when the curvature of the ob OC curve is larger than, increases the amount of clearance BC, forming shoulder and collar seat space larger, natural, random, in line with the current aesthetic requirements.

### 3 Fold Collar Process Template Productions

Fold over collar mold, including the upper template and the lower template, the side of the template and the lower template with one side connected together and between the upper template and the lower template is in the shape of a hinge, the upper template and the lower template are respectively provided with a through groove and the lower through slot, the through groove and the lower through slot on the upper template and the lower template are mutually closed coincide and are appearance with a collar of the same. The utility model has the advantages of simple process steps, high working efficiency, and good quality and product consistency.

#### 3.1 background technology of folding collar process template

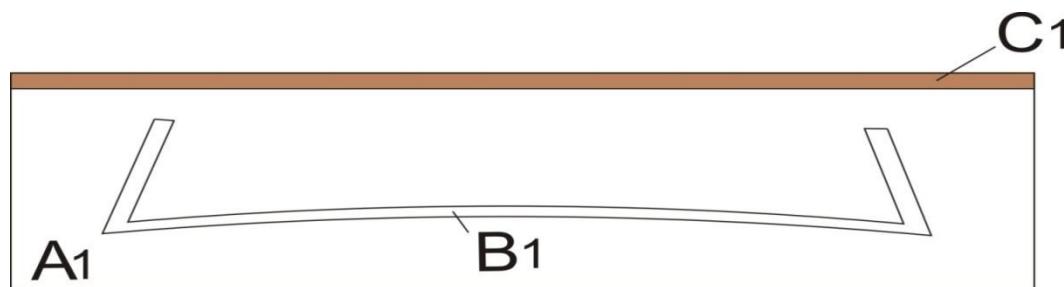
Fold collar, usually a sign of formal clothing, the quality of its own is particularly important. The collar is mostly with workers to operate manual experience hand cutting production, although it usually according to mold the pencil to draw a collar on the cloth shape, and then copy the shape and cut out the collar. However, due to the processing steps are still more complicated, which has the problem of large workload and low efficiency, while the workers in cutting out the collar, and no reference material, which makes the quality and consistency of the collar is difficult to protect, so that the entire service will be affected by the product, resulting in a decline in the quality of clothing.

#### 3.2 The production process of the process template of the folding collar

1 collar template production generally by the main clip, groove, connecting pieces, positioning pieces, non slip parts constitute. The base member has the main clip A, B, C, and other components are a, B,, C,, and other components. Various components are shown in table 1-3, as shown in Figure 1-4 and 1-5.

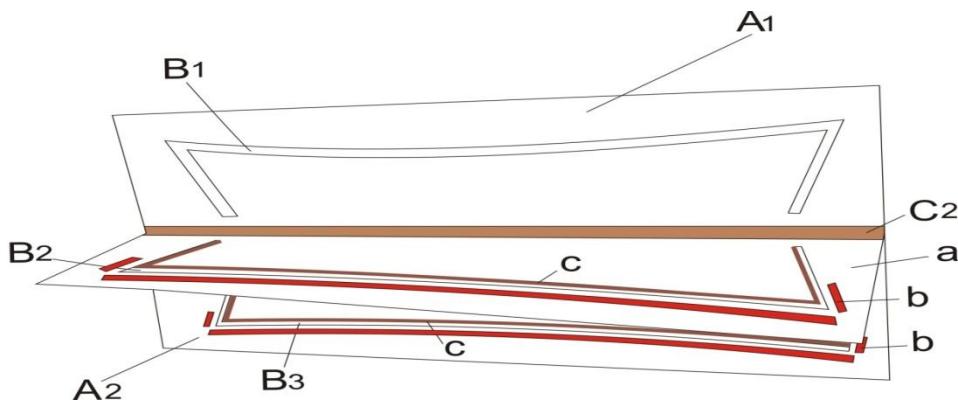
**Table 1-3 flip collar process template**

Member name		The corresponding position in the diagram	Component function
Basic component	Main clip	A1、A2	Used for holding the front piece, easy to sew
	Software	B1、B2、B3	Track groove seam
	Connecting piece	C1、C2	Connect A1 and A2, A1, and a
Other component s	Middle clip	a	Used to place the fabric
	Positioning part	b	Used to control the position of the collar.
	Non slip parts	c	To prevent the front piece in the sewing process of sliding

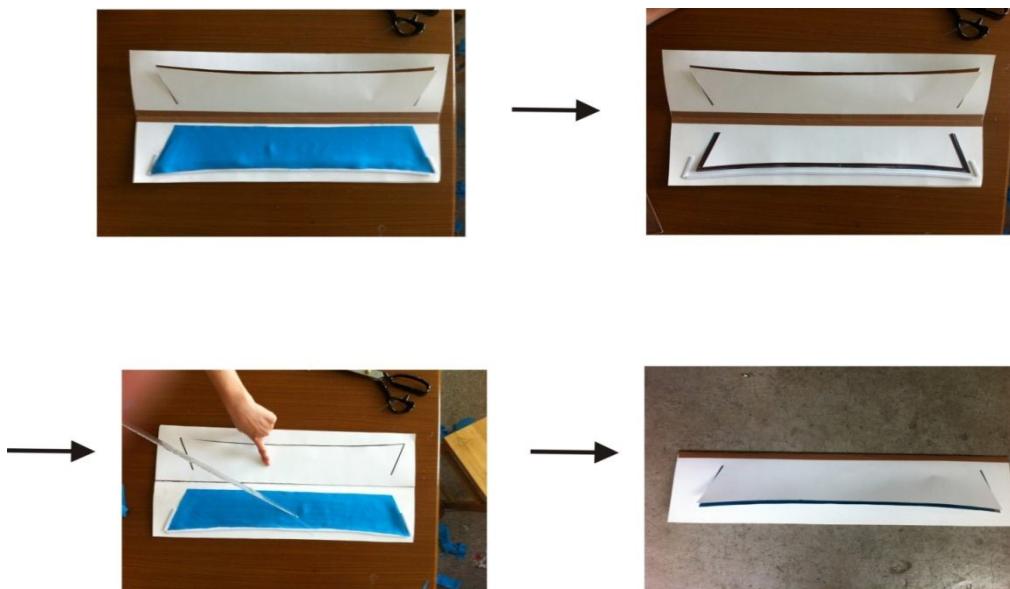


**Figure 1-4 turn off the template A1**

2 the use of the will be to close the collar piece of clothing, a piece of the upper plate and the middle plate, the other between the middle plate and the lower plate, and then placed in the right place, at this time, the anti slip yarn will play a role in positioning, easy to dislocation, anti slip yarn on the solution to solve this problem. Clothes piece on the back after work together on firmly put the clothes in the middle, B1, B2, B3 is actually on the right track is the track, so that the accurate suture collar. See figure 1-6.



**Figure 1-5 turn off the template three-dimensional map**



**Figure 1-6 turn off the template using the step diagram**

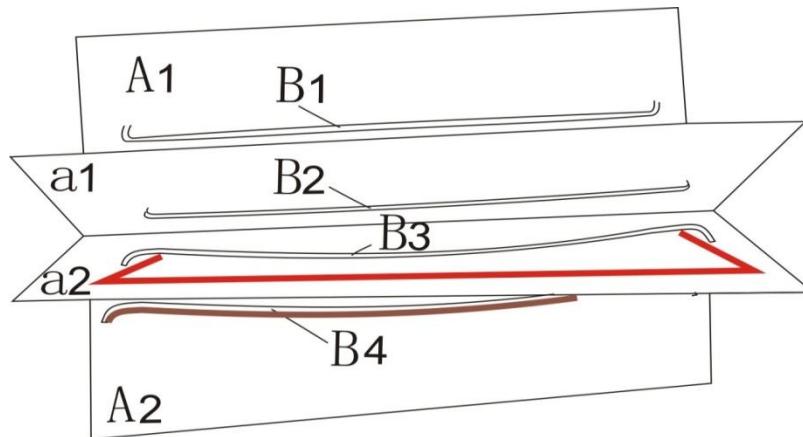
### 3.3 The production process of the process template of the folding collar

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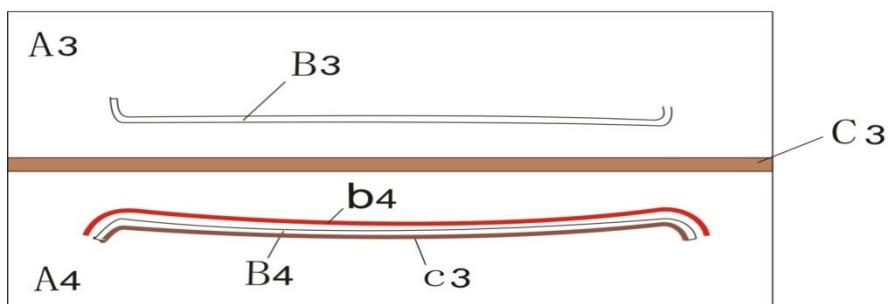
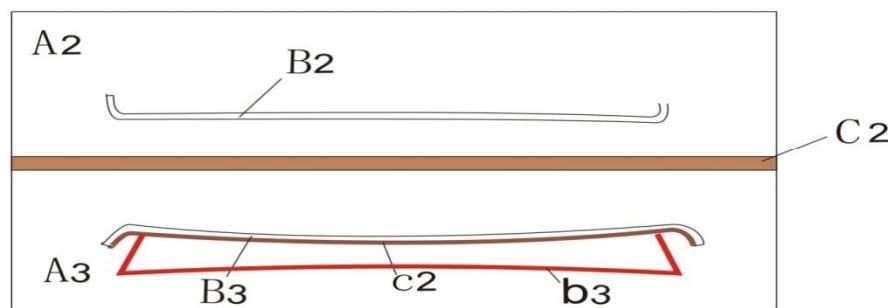
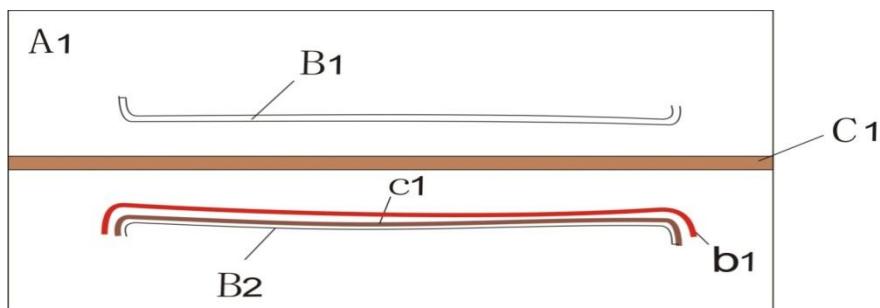
Table 1-7 flip collar process template

Member name		The corresponding position in the diagram	Component function
Basic component	Main clip	A1、A2	Used for holding the front piece, easy to sew
	Slotware	B1、B2、B3、B4	Track groove seam
	Connecting piece	C1、C2、C3	Connect A1, A2, A1, A2
Other components	Middle clip	a1、a2	Used to place the fabric
	Positioning part	b	Used to control the position of the collar
	Non slip parts	c	To prevent the front piece in the sewing process of sliding

2. The template is divided into four layers, collar stand net line transect and galley proof lines in A2 template to draw, draw the suture line and draw the suture collar surface shape on the A3 plate, used to place the suture collar surface, four pieces of plate slotted are and A2 slot. The suture of the collar and the collar. As shown in Figure 5-7 and 5-8.

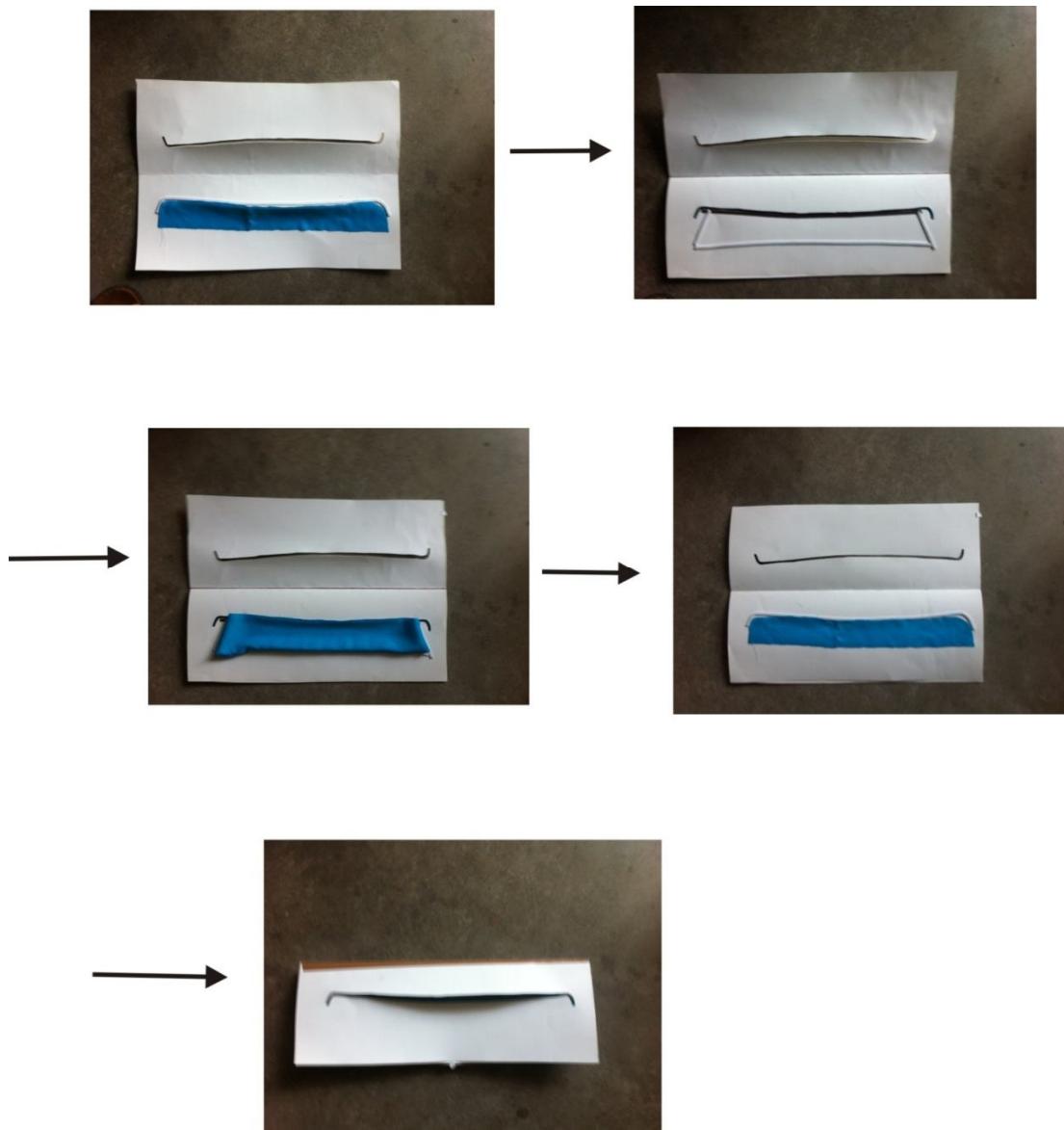


**Figure 1-8 double fold collar seat templates**



**Fig. 1-9 the template decomposition of the lead block**

3 when the use of the will be to stitch collar, collar seat piece placed on the right, the collar placed in the A2 and A3, collar seat fabric is placed between the A2 and A2, A4 and A1 between the positioning, this time to play a role in non slip resistance, easy to dislocation in the suture, non slip yarn to solve this problem. We like along the suture line accurately slotted Ji suture collar and collar. See figure 1-10.



**Figure 1-10 lead block template using step diagram**

### **Summary**

According to the above analysis and conclusion, it can be concluded that the production and development of the process template of clothing collar is a part of the clothing enterprise development pattern, and the clothing collar template is an important part of the clothing template. Now more and more clothing production enterprises begin to use the garment collar process template, and realize the efficient production, so the clothing collar template will be further developed, and then meets the needs of apparel enterprises.

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