

## **Development of the traditional method for filling the dress stand and its conformity with the women's body**

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### **Summary:**

A dress stand is a template that represents the human body, and it matches it in terms of the body dimensions and shape, and it is bought to be a little smaller than the human body measurements required to prepare clothes for it, in order simulate the body and shape of the individual body. There are multiple types; made of wood, cardboard, metal, wire, rubber material, or sponge, and it is made according to the standard specifications of the standardization of each country, so the woman's body does not match, but it is made in a standard harmonic parts, then the dress stand is prepared before forming it according to the measurements and shape of a specific human body, giving the shape of the details of this body as much as possible in special technical methods.

### **Research problem:**

The dress stand is an essential tool within the course of preparing the industrial body for the seventh level in the Department of Fashion Design - College of Designs, Qassim University, through which the standard mannequin is transformed into an individual dress stand that matches the student's body, so the current research is interested in providing development of the traditional method to ensure ease and taking into account the individual differences between female students in transferring the details of their bodies to the dress stand and the focus was on the chest area and the ending and fixing of the filling.

### **Research aims:**

- 1- Development of the traditional method for filling the dress stand.
- 2- The dress stand measurements match the body measurements.
- 3- Matching both sides of the dress stand to the shape and size of some.

### **Research importance:**

- 1- Development of the industrial body preparation course.
- 2- Contributing to solving some problems that face female students while filling the dress stand.
- 3- Forming models on the dress stand that are distinguished by the good.

### **Research hypotheses:**

- 1- There were statistically significant differences at the level of significance 0.01 between the opinions of the members of the sample in matching the measurements of dress stand rotations and measurements of target body rotations.
- 2- There were statistically significant differences at the level of significance 0.01 between the opinions of the members of the sample in matching the measurements of the dress stand lengths and the measurements of the target body lengths.

- 3- There were statistically significant differences at the level of significance 0.01 between the opinions of the sample members in matching the measurements of both sides of the dress stand.
- 4- There were statistically significant differences at the level of significance 0.01 among the opinions of the sample members regarding the quality of the proposed development of the traditional method during dress stand filling.

**Search limits:**

Development of the traditional method for filling the dress stand in the chest area and fixing the cotton.

**Research Methodology:**

A semi-experimental approach was used.

**Search tools:**

A note card to measure the conformity between the dress stand and female measurements.

**Procedural steps for the research:**

It included the proposed development of the traditional dress stand filling method - building research tools.

**Keywords:**



the dress stand ,filling the dress stand ,conformity

**First: The proposed development of the traditional method of dress stand filling:**

The proposed development has been applied in the course of preparing the industrial body taught at the seventh level Bachelor of Fashion Design in the College of Designs Qassim University.

The following table shows the difference between the traditional method and the proposed development in the proposed items for modification.

Field	traditional method	proposed development
Adjust the shape of the chest	The chest height oils are adjusted by measuring the length from the shoulder to the highest chest height. And measuring the distance between the chest height and fixing two crossed pins at this point, then two small balls are placed at this point and fixed with pins, then consecutive round layers of cotton are placed and the size between them is approximately (2cm). Image (1)	Adjust the shape of the chest, the bra is placed on the dress stand in a personal size and lined with a sponge, and we measure the length of the bodice, which is the distance from the shoulder to the top protrusion of the chest to the target body and the chest strap is moved to give the same size and then be installed. Picture 2 and 3. After fixing the bra with the personal size on the mannequin, we press it, if it is empty, it is stuffed with cotton, if the measurement of rotation of the chest needs an increase, the cotton layers are placed around the body at the chest area on the side and back and put a cotton layer on top of the chest area and the shoulders so that the gradient is taken between the height of the lift and the area above it.

	 <p style="text-align: center;"><b>Picture 1</b> traditional chest</p> <p style="text-align: center;"><b>Defects:</b></p> <ul style="list-style-type: none"> <li>-Difficulty reaching the accuracy of the chest size and height, as well as the distance between the highest prominence of the chest on both sides, and the complete tolerance between the two sides.</li> <li>-Difficulty in achieving perfect fit in the chest area of the dress stand with the body.</li> </ul>	<p>If the chest rotation is identical to the body, a light cotton layer is placed around the dress stand and above the shoulders.</p>  <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p><b>Picture (3)</b> development from the back</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p><b>Picture (2)</b> development from the front</p> </div> </div> <p style="text-align: center;"><b>Features:</b></p> <ul style="list-style-type: none"> <li>- Get a match on both sides of the chest</li> <li>-Obtaining the chest shape is completely identical to the body in terms of chest size, height, and the distance between the highest protrusions with ease, because the bra used in a personal size is worn under the design that was formed on the dress stand, which achieves the settings of the executed designs.</li> </ul>
<p style="text-align: center;"><b>Final fixing for the mannequin</b></p>	<p>Cotton is fixed to the dress stand by wrapping the white sewing thread around the mannequin to fix the cotton and pressing the dress stand Image (4).</p> <p>The winding is done starting from the middle to the bottom of the manikin in a regular and parallel circular manner, where the distance between the threads is about half a centimeter, then the thread is wrapped from the middle to the bottom of the chest And, in the chest area, the</p>	<p>The cotton is fixed to the dress stand using a short transparent cling film roll of 25 cm in length to wrap the entire dress stand with tension and pressure to secure the cotton. The twisting is done with a tensile cross from the bottom of the chest to the end of the dress stand from the bottom, either the chest area is wrapped backwards from the right shoulder to the bottom of the left chest with the turn of the nylon roll and a change of direction during the twisting and that to confirm the depressions and needs from 3 to 5 laps Installable only. Picture (5)</p> <p>After the winding is finished, the front and back half-line are located and an x-tape strip is installed to match the measurements on both sides of the dress stand. The mid-line is</p>

winding is done in reverse from the lower left chest to the right shoulder to the neck and back to the back, bearing in mind that the distance between the thread rolls is about half a centimeter, then it is repeated back to the other side.



**Picture (4) The traditional method for**

**Defects:**

- It takes a very long time for the student to apply the instructions.
- Due to the presence of individual differences between female students during the dress stand filling and the fixation of cotton and the inaccuracy of wrapping the yarns around the dress stand, the cotton comes out from the voids of the yarns and consequently the irregularity of the body shape as in the picture (7)

determined by measuring the length of the back and installing the x-strap to measure the rotation of the middle and making sure it matches.

Picture (6)



**Picture 6 Fixing the strips for**

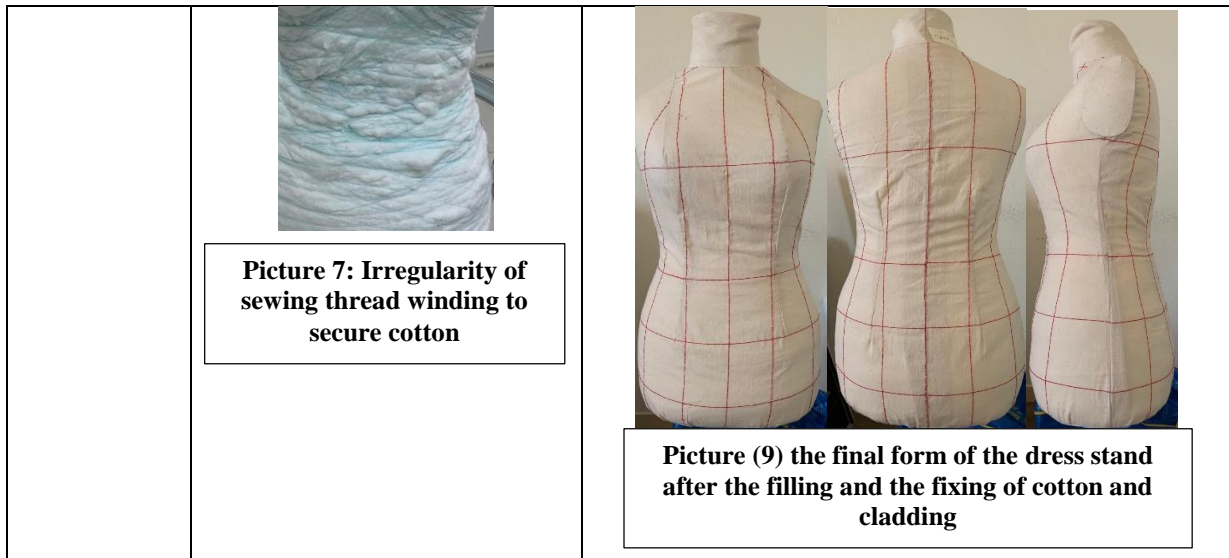
**Picture (5) developing cotton fixation**

**Features:**

- You need less time to reach the final result
- It makes the dress stand surface smooth and cohesive, with full cotton coverage.



**Picture (8) samples of female students 'work for different sizes of dress stand after filling**



## Second: building research tools:

### Building a note card:

A note card is designed to evaluate the performance of female students after filling the dress stand and ensuring that the dress stand matches the student body so that the following assessments are given: appropriate, somewhat appropriate, inappropriate. And consisted of the following axes:

**The first axis:** match the measurements of rotations of the target object.

**The second axis:** match the measurements of the lengths of the target object.

**The third axis:** identical to the two sides of the mannequin.

## Results and discussion:

The first axis questions obtained a quality factor ranging from 99.9% to 96.30%, which indicates that the measurements of the dress stand rotations for the target object are identical due to the presence of statistically significant differences between the opinions of the sample members in matching the dress stand measurements of the target body and thus prove the validity of the first hypothesis.

The second axis questions obtained a quality coefficient ranging from 99.92% to 97.04%, which indicates that the measurements of the lengths of the dress stand for the target object were found. As a result, differences of statistical significance were found at the level of significance 0.01 between the opinions of the members of the sample in matching the measurements of the lengths of the dress stand of the target body and hence the validation of the second hypothesis.

The third axis questions obtained a quality coefficient ranging from 99.63% to 96.3%, which indicates the conformity of the measurements of both sides of the dress stand and the quality of the general form. As a result, differences of statistical significance were found at the level of significance 0.01 between the opinions of the members of the sample in matching the measurements of both sides of the dress stand and the general form, and therefore proof of validity the third hypothesis.

Female students in the evaluation of the observation card as a whole got a quality factor of 98.7%, which is a high percentage, which indicates that the measurements of the dress stand of the target object are identical. Thus proving the validity of the fourth hypothesis.

### **Recommendations:**

- 1- Conducting more studies in simplifying the way the dress stand is prepared.
- 2- Carrying out more studies on devising new ways to prepare the dress stand for shaping more accurately.
- 3- Conducting more studies on new ways to prepare the covering more easily.

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