



UNIVERSIDAD TÉCNICA DEL NORTE

**FACULTAD DE INGENIERÍA EN CIENCIAS
APLICADAS**

**CARRERA DE INGENIERÍA EN DISEÑO TEXTIL Y
MODA**

**TRABAJO DE GRADO PREVIA A LA OBTENCIÓN DEL
TÍTULO DE INGENIERÍA EN DISEÑO TEXTIL Y MODA**

TEMA:

**DISEÑO Y CONSTRUCCIÓN DEL TELAR MAYA PARA LA
ELABORACIÓN DE CUBRECAMAS UTILIZANDO HILO DE
ACRÍLICO**

AUTORA: MIRIAN CECILIA TABANGO NIPAS

DIRECTOR DE TESIS: ING. SANDRA ÁLVAREZ

IBARRA - ECUADOR

2014

DISEÑO Y CONSTRUCCIÓN DEL TELAR MAYA PARA LA ELABORACIÓN DE CUBRECAMAS UTILIZANDO HILO DE ACRÍLICO

Autor- Mirian Cecilia Tabango Nipas

Universidad Técnica del Norte, Av. 17 de Julio, Ibarra, Imbabura

cielita_20@hotmail.es

Abstract. In the course of time had happened a lot of changes and evolution in the things. In the old days, the Indian people used tools to hunt, to fish and in this case tools crates by themselves to weave. The woman made the housework and also they dedicated their time to elaborate fabrics and clothes for their families with beautiful colors and unique designs.

Therefore, with this project I want to show that long time ago had hand looms and these are very easy to build. But, nowadays these tools have been forgotten due to the consumerism. There are not initiative to propose something new and better or created by our own hands. For these reasons, I have proposed the construction of Loom Maya, buy is necessary to emphasized that it will have modifications to get a new product like bedspread.

Resumen. En el transcurso del tiempo han sucedido muchos cambios y evolución en las cosas. En la antigüedad las personas indígenas utilizaban herramientas para cazar, pescar y en este caso herramientas creadas por ellos mismos para tejer. Las mujeres hacían las labores de la casa y también dedicaban su tiempo a elaborar telas y ropa para su familia con hermosos colores y diseños únicos.

Por lo tanto, con este proyecto yo quiero mostrar que, hace mucho tiempo había telares manuales y estos son fáciles de

construir. Pero hoy en día estas herramientas han sido olvidadas debido al consumismo.

No hay iniciativa para proponer algo nuevo y mejor o creado por nuestras manos. Por estas razones, yo he propuesto la construcción de un telar maya pero es necesario enfatizar que esto tendrá modificaciones para obtener un nuevo producto, como los cubrecamas.

LOOMS.

BACKGROUND The loom is as old as humanity, has lasted to the present day almost with the same format. (Nehuel, 2011). In other words, it is a structure of sticks, where will be weaving and is forming the fabric, using as a raw material wool of the animals he had in the Andean zone as a sheep, llama, guanaco and vicuna. To build the loom you can use wood or metal, can be local or industrial, according to the need and economy of the person.

HANDLOOMS

We do not know the true origin of the looms but the studies indicate that the handloom goes back to the ancient era and was used in the Chinese civilizations and the Middle East before reaching Europe. Its use is widespread in the underdeveloped countries, and in the industrialized countries is also used to weave cloth craft that are used in decoration (Galeon.com, n.d.) inside of the handlooms we have the following:

Telar De Cintura
 Telar Mapuche O Huítral
 Telar Egipcio O Tejido Con Tarjetas
 Telar De Peine Telar De Bastidor

1. MAYAN LOOM

The Maya developed a resplendent civilization, of which there are known all over the world aspects as the monumental architecture or its complex writing, but also they had a rich textile tradition that has managed to survive despite the passage of time. (Guiarte.com, s.f). The diversity of the clothing of the Maya corresponds to its cultural complexity. The pledges shut up cultural codes, sociopolitical status, apart from showing a technical refinement. The status, the lineage, the prestige was marked in this “social skin” that is the clothing, both in man and in women. In the step of the centuries, this people has been capable of supporting in the ambience of the clothing - the influence of the new fashions, receiving with slowness part of the innovations. Therefore the textile will always be the connection to remember the past of our natives. Before constructing, it is necessary to take into consideration that the size of the looms that is constructed, can change in accordance with the needs. Another point is in the textile, after withdrawing it from the loom, he will suffer a diminution or the textile will increase. It is anticipated that this one would be in the order of 25 up to 100 % to increase the textile.

2. ACRYLIC YARN

Acrylic fibers are synthetic fibers made from acrylonitrile. These are gentle and do not cause allergies. Are resistant to moths and fungi. Have an excellent resistance to sunlight. AND are particularly suitable for people who are allergic to wool. Fantasy Yarns is difficult to define who is a yarn of fantasy but without doubt we conclude that there is a set of wires to regular and irregular intervals, the latter is the big difference with the normal wires because they have a defined title. Classes of fantasy yarns • The wire loop is characterized by the formation of buclitos rings in the form of twine effect on the length of the wire of soul. • Wires Moline

this thread obtained twisting two-wire or strands of different colors, where one of these will effect and the other tie. • Twine Bony los Cabos of this type can be constructed with or without a soul and are made by interlacing of their beads

BEDSPREADS

The bedspreads are done of only one cloth layer. The cloth in itself can be a native, like the skin, or can be done by the man, including textiles, looms, knitweaves or crochet hook. The textiles made by the man often adorn with embroideries, plush, wall lights, serigraphy and other forms of creation of a design on cloth.

Tabla de Medidas de cubrecamas

Tamaños	Medidas para cubrecama
Twin o 1 plaza	173 cm x 218 cm
Queen Size o matrimonial	218 cm x 218cm
Queen Full o matrimonial	218cm x 218cm
King size o 2 ½ plazas	254cm x 229cm

Labeling

The tag helps to that the clients are sure of the product that they use, as well as it serves to identify, to describe, to differ, to give a service to the client and surely the product that is commercialized is known and also the company. You label for clothes of bed linen as norms INEN According to the norms INEN the tags of the products of clothes bed linen it must contain the following information:

- Number of size, in accordance with NTE INEN 257; NTE INEN 1 873 and NTE INEN 1 874, where I applied.
- Percentage of fibres and/or used materials,
- Social reason of the manufacturer and/or importer,
- Paísdeorigen.
- Instructions of handling and conservation, according to annexes A of the NTE INEN 1875,
- Reference norm: NTE INEN 1 875

3. WOVEN IN A LOOM MAYA

- Cross-stitch
- English
- Stitch. Enhanced cross-stitch

4. Cross-stitch two colors in
5. Stitch two colors in English
6. Stitch English jumping a nail
7. Cross-stitch jumping a nail
8. Combined Point crossed and English
9. Stall Point
10. .Point star

Ventajas y desventajas de tejer en telares maya

En telar 1 y 2	En telar 3 y 4
When is woven with title thread # 2/89.16 tissue is dense semi	When is woven with title thread # 2/89.16 tissue is not dense, the tissue is not defined
When weaves with thread title # 1/37.68 is weaved is compactondo is woven with title thread # 2/89.16 tissue is dense semi	When weaves with thread title # 1/37.68 tissue is compact
In the weaving thread title # 1/37.68 (thickness) has problems when you want to get the points	In the weaving thread title # 1/37.68 (thickness) is performed without any problem
These looms weaving time is greater, for example: When weaves with thread title # 1/89.16 time is less When weaves with thread title # 1/37.68 time is slightly larger	To weave in these looms the time is less When the time is woven by title thread # 1/89.16 it is less When the time is woven by title thread # 1/37.68 it is less, it produces the textile
In terms of raw there is so much difference	In terms of raw there is so much difference
The tissue when it is removed from the loom there is a % of 80-90% raw anto stretch there is so much difference	When the tissue is removed from the loom there is a stretch of 25 to 30 per cent owed to raw material

	there is not such a big difference
--	------------------------------------

3. DESIGN AND CONSTRUCTION OF THE

LOOM MAYA for the design of the loom maya is important to know what we are going to weave. The research has in particular, that the loom is large, measuring more than a meter wide, then it is necessary to test in this case we are going to make a small loom of 40 centimetres to perform tissue samples and this apply to the loom The largest design consists of only two wooden slats, located in them sticks of wood, united by threaded rods and butterflies. When the tissue is removed from the loom there is a stretch of 25 to 30 per cent owed to raw material there is not such a big difference

DIAGRAM OF ASSEMBLAGE OF THE LOOM MAYA



4. ELABORATION OF BEDSPREADS

Para la elaboración de cubrecamas realice fichas técnicas



DESIGNER: Cecilia Tabango
 PRODUCT: bedspread color: Green
 TECH: weaving loom in Maya
 COMPOSITION: acrylic thread
 MEASURE: 2 squares
 TEAM: Loom of Maya 1.5 in diameter

PRODUCT HIGHLIGHTS: The material that was used in the weaving is a yarn with a soft texture that provides comfort and above all do not cause allergy. In addition we use pastel colors that give a touch of tranquility and peace development of bedspreads perform technical sheets

DESCRIPTION OF THE PRODUCT
 WEIGHT: 2000 grams
 LONG: 190 cm
 width: 200 cm
 % STRETCHING AFTER RELEASE OF THE LOOM : 25%

Instrucciones de lavado

Para que dure el producto se recomienda

- lavar a mano
- secar a sombra
- no restregar

Start date

13-12-2013

End date

16-12-2013

Tabla 1. Costos de cubrecamas

	MEASURE	RAW MATERIAL	MANPOWER	DEPRECIATION OF THE LOOM	PACKAGING AND LABELLING	TOTAL
Bedsread #1simple	1.5 plazas	\$ 26.00	\$15.79	0.022	\$ 2.332	\$ 44.144
Bedsread #2 With design	2 plazas	\$ 28.60	\$28.30	0.042	\$ 2.332	\$ 59.274
Bedsread #3 With design	1 plaza	\$ 25.50	\$23.90	0.035	\$ 2.332	\$ 51.767
Bedsread # 4 With design	1 plaza	\$ 20.00	\$10.19	0.015	\$ 2.332	\$ 32.537

5. CONCLUSIONES

- It was designed and constructed the Mayan Loom using materials like: wood and smooth rod for the sticks of the loom, and there were prepared bedspreads of 1 square, 1.5 and 2 squares using thread of acrylic like Thread Moliné, I spin Ringlet and Spin Bony
- In the realized tests the thickness of the textile was well-known, since to weave with thin thread title # 2/89.16 in the looms of 0,5cm and 1cm of diameter the thickness of the textile is semi compact and those of 1,5cm and 2cm of diameter, the thickness of the textile is slack, it is alike the meshes of going fishing, for the opposite if we weave with thick thread title # 1/37.68 in the looms of 0,5cm and 1cm, the thickness of the textile is more compact and in the looms of 1,5cm and 2cm the textile is semi compact, managing to have this way a more definite textile, for such a motive at the moment of weaving in the looms it is necessary to take into consideration the product that it wants to weave, the thread that goes to use for certain product and this way to be able to have a product with good finished.
- Textiles designs were prepared combining threads of colors and types of stitch. Also we form figures in the bedspreads. It is necessary to stress that every bedspread has different design.
- During the development of the thesis we think that the implementation of the Mayan Loom affected positively, concluding that it is possible to weave a variety of products owed

that the breadth of our proposed loom facilitates to realize the weaving from a cap up to a shawl. → It is considered that the new design of the loom is a tool easy to handle, we are sure that it will help to create work sources.

- We use threads that are soft to the tact and it does not cause allergy, giving an additional touch to this product.
 - We use acrylic yarn for its special characteristics, these threads are bulky and it has no weight, this helps in the weaving so the bedspread is not heavy.
 - In cost analysis we did a comparison of the cost of bedspreads reaching the conclusion that prices vary in the bedspread #1 tissue is therefore simple weaving time is less, by contrast in the bedspread # 2.3 and 4, weather-weaving is higher since it has designs, concluding that producing them exclusive designs in knitting factory labor is high compared to simple tissue. See table number. 33.
 - Finally conclude that you proved difficult to find bibliographic sources, since the research is new.
- ### 6 RECOMMENDATIONS

- It is recommended that you should sand well Woods so there is no problems of wire grips during weaving
- Work in a ventilated and comfortable place.
- Analyze the characteristics of the threads before weaving in order to have the garment or desired product.
- If there is a thread color change make a knot "moreno" to avoid problems when the final review of

quality is made and not release thread

- When you plan on weaving on the loom must take into account that there is a 30% increase in tissue, in other cases there is an increase to 90% of the tissue.
- Loom is adjustable in the opening, we have tested and recommend make the measurement Aperture 1.5 is a standard measure for any type of product.

6. FUENTES BIBLIOGRÁFICAS

- ✓ Nehuel, C. d. (2011). *El tejedor de prendas de telar artesanal*.
- ✓ Hollen, N., & Jane, S. (1989). Introducción a los textiles. En N. Hollen, & S. Jane, *Introducción a los textiles* (págs. 102-104). limusa.
- ✓ Normas "INEN". (s.f.). *NORMAS INEN.COM*.
- ✓ UDALE J, G. C. (2008). *DISEÑO TEXTIL, DISEÑO Y TEJIDOS*.

LINKOGRAFIA

Anónimo, consultado el 27 de noviembre 2013
<http://www.decorablog.com/clases-de-tejidos-y-telas/>

Anónimo, consultada el 30 de noviembre del 2013
<http://www.psicofxp.com/forums/manualidades.198/169747-construccion-de-un-telar-7.html>

Infant Cool Design, revista de bastidor. Consultado el 2 de diciembre del 2013
<http://tejidosytelares.blogspot.com/search/label/Revistas>

Enrique, Telares/ Tapices (2009). Consultado el 2 de diciembre del 2013
<http://artesanas.name/como-construir-un-telar-azteca-o-maya/>

Anónimo, consultado el 2 de diciembre del 2013
http://chacharasytejidos.blogspot.com/2008/05/01_archive.html

Jacky arte , almatelar (2009) consultado el 3 de diciembre del 2013
<http://almatelar.blogspot.com/2009/05/flores-en-telar-telares-maya-v.html>

Telares Cachicadán , consultado el 3 de diciembre del 2013
<http://textilescachicadan.blogspot.com/2011/06/construccion-de-telar-rectangular.html>

Emagister, Telares y Bastidores (2009) consultado el 3 de diciembre del 2013
http://grupos.emagister.com/imagen/telar_maya/1449-199813

[Centro de Servicios para la Capacitación Laboral y el Desarrollo](#), consultado el 3 de diciembre del 2013
<http://es.scribd.com/doc/67354232/6/Historia-del-telar>

Centro de Acción Comunitaria "Nehuel", Historia del telar
<http://eltejedordeprendasentelar.wordpress.com/proyecto/>

Clkud de ensayos (2012) consultado el 6 de diciembre del 2013
<http://clubensayos.com/Acontecimientos-Sociales/Historia-Del-Telar/119628.html>

Rojas Bibiana, Hilados consultado el 6 de diciembre del 2013
<http://rohendezhilados.blogspot.com/2013/11/hilos-de-fantasia.html>

Arleco producciones, Accesorios y camas. Consultado el 12 de enero del 2014
<http://www.blogicasa.com/tamanos-de-camas-ancho-y-largo-de-camas>

