

# **“R\_projecte” workshop: upcycling**



*"R\_projecte" workshop: upcycling* is as a **collaborative activity** that encourages partnership among different **social actors** (higher education institutions, non-profit organization, local companies, regional government) and promotes Community active participation.

The Escola Superior de Disseny de les Illes Balears is specially interested in **Community-Based Research activities** a kind of innovative research related to **Project-Based Learning**, that is the most important Learning-Teaching Method used in design and a type of **Design-Based Approach** that includes research and action.

This is an interesting exercise of  
Community-Based Research, a way to  
develop Project-Based Learning  
engaged with Community and its  
social actors, that contributes to local  
economic development.



This is also a great opportunity for **networking**, especially for students who want to **start-up business**.

Ecology and the respect the environment are the best background to face the future, especially during this period of crisis.

In this context the promoters propose students and lecturers to develop a collaborative project about **upcycling** (or supra-recycling), that is the art to create new and useful objects from waste materials or unwanted items. It's the process of transforming old (waste, outdated, unwanted, and useless) stuff into useful items of equal or greater value than the original..

The "*R\_projecte*" *workshop: upcycling* presents innovative proposals of re-use and re-purpose old stuff into something new and useful through design. In this context, this experience proposes different solutions, adapted to participants background, knowledge and skills, and learning & teaching process.

Innovation has always been linked to technology, but **non-technological innovation** is particularly linked to **design**, which does not innovate in science, but provides new knowledge in everyday activity, and it's the most economical way of innovation that exists.

The main goal of the "*R\_projecte*" *workshop: upcycling* is to introduce design in order to give a second chance to second hand products rejected by its owners and make new designs.

The **objectives** are:

- Promote creativity and entrepreneurship among participants.
- Find innovative new possibilities for the garbage.
- Promote synergies between different social actors.

## **Fundació Deixalles**

(a non-profit organization, created in 1986 by Acció Social del Bisbat de Mallorca & PiME Mallorca)

## **Escola Superior de Disseny de les Illes Balears**

(a state higher education institution, created in 1779)



# description of the initiative

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## September 2012

The persons in charge for each partners involved in the "*R\_projecte*" *workshop: upcycling* maintain different meetings to coordinate its development.

# description of the initiative

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**7th November 2012**

The coordinators of the Project presents this action at the ESDIB to students and lecturers of different specialties taught at the school (graphic, interior, fashion, and product) as a collaborative work, a Large-Scale Integrated Research Project using Project-Based Learning Method, to promote social actors active participation.

# description of the initiative





# description of the initiative



# description of the initiative

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**12th November 2012**

Students and lecturers visit Deixalles Foundation, one of the centers in Palma, in order to gather information and learn the operation of the foundation.



# description of the initiative





# description of the initiative





# description of the initiative





# description of the initiative





# Working with students

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- **Upcycling** is the process of converting waste materials or useless products into new materials or products of better quality or for better environmental value.
- The first recorded use of the term upcycling was by Reiner Pilz of Pilz GmbH in an article by Thornton Kay of Salvo in 1994

# Working with students

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"Recycling," he said, "I call it downcycling. They smash bricks, they smash everything.

What we need is upcycling, where old products are given more value, not less."

# Working with students

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Up-Cycling occurs when a new use is found for an old item, helping to reduce waste and have a positive effect on the environment.

This can refer to any form of reuse, such as from finding creative new purposes for an item, or even just donating goods

## UP-CYCLING and DOWN-CYCLING

The down cycling is the process of converting waste materials or useless products into new materials or products of lesser quality and reduced functionality.

# Working with students

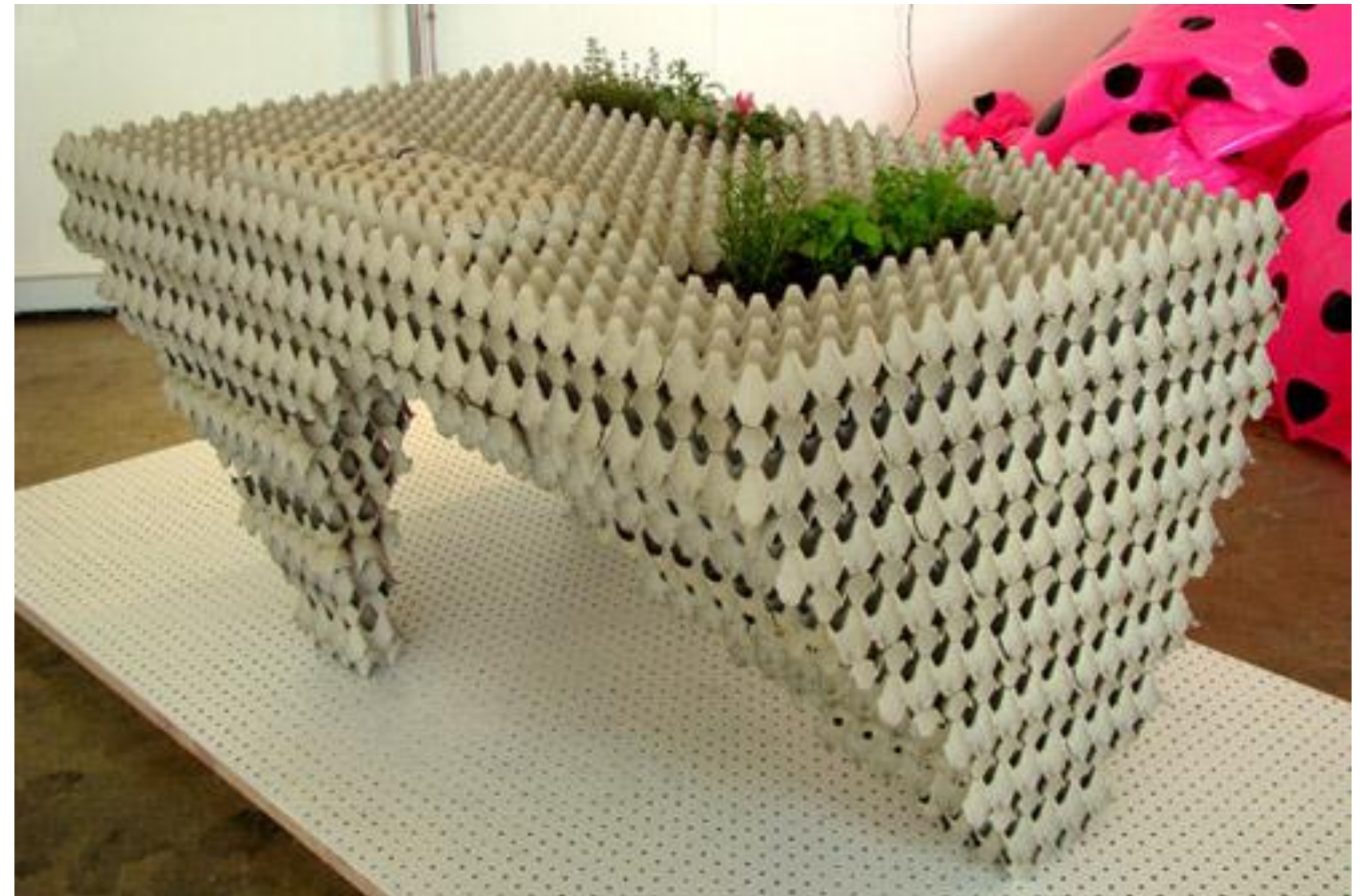
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One example is recycling of plastic, which is converted into the plastic material of lesser quality.

Most recycling is actually down-cycling, which reduces the quality of a material with time. When plastic is recycled and mixed with other plastics to produce a hybrid of lower quality, which is then molded into something amorphous and cheap, like a park bench or a choke speed to the streets.



# Product Up-Cycling





# Product Up-Cycling



*Gabarage Upcycling, lamp Red Delight.*



# Fashion Up-Cycling





# Jewelry Up-Cycling



# description of the initiative

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## **Academic year 2012-2013**

Students and lecturers, from the first year to the fourth year, in classroom or at home, alone or together in team, work with these recycled materials and develop innovative different proposals, according to participants background, knowledge and skills, and learning & teaching process.



# description of the initiative

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Ways to participate in the project:

- Scholar project.
- Personal project.
- Interdisciplinary project.

# description of the initiative

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Scholar project (Third year product design)

Teacher Toni Riera.

Some examples...



## 1.- Lamp with marbles, cds and strainer Isabel Navarro





# projects examples





# projects examples



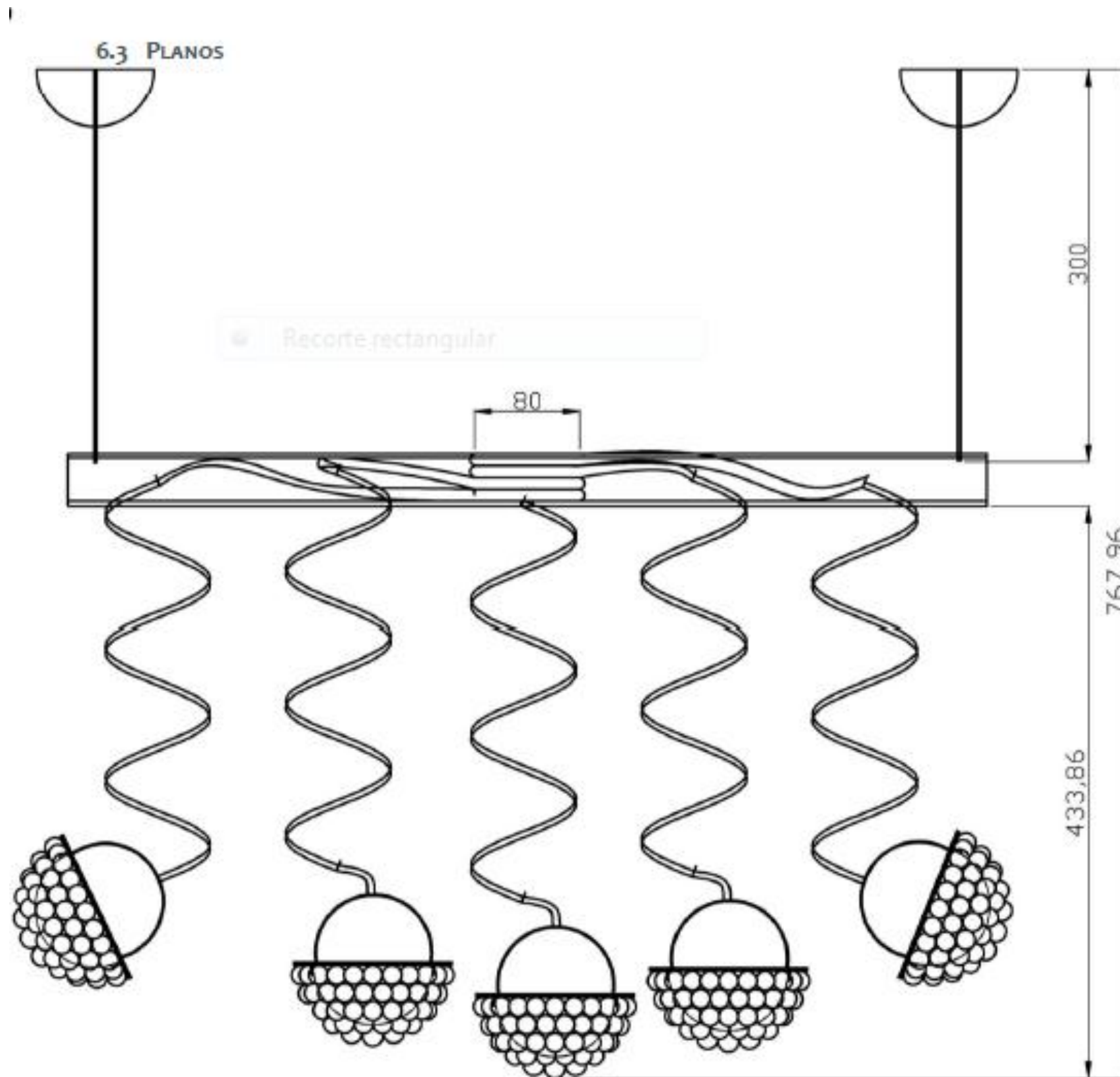


# projects examples

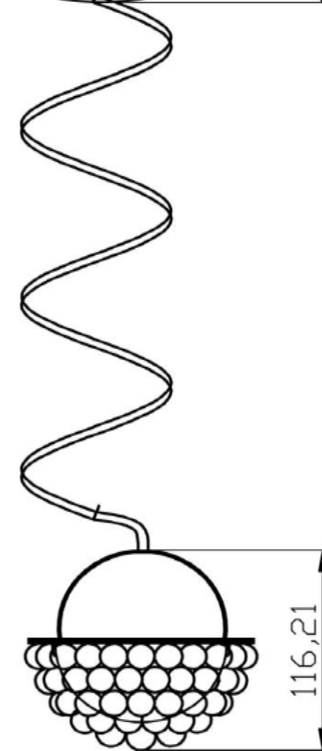
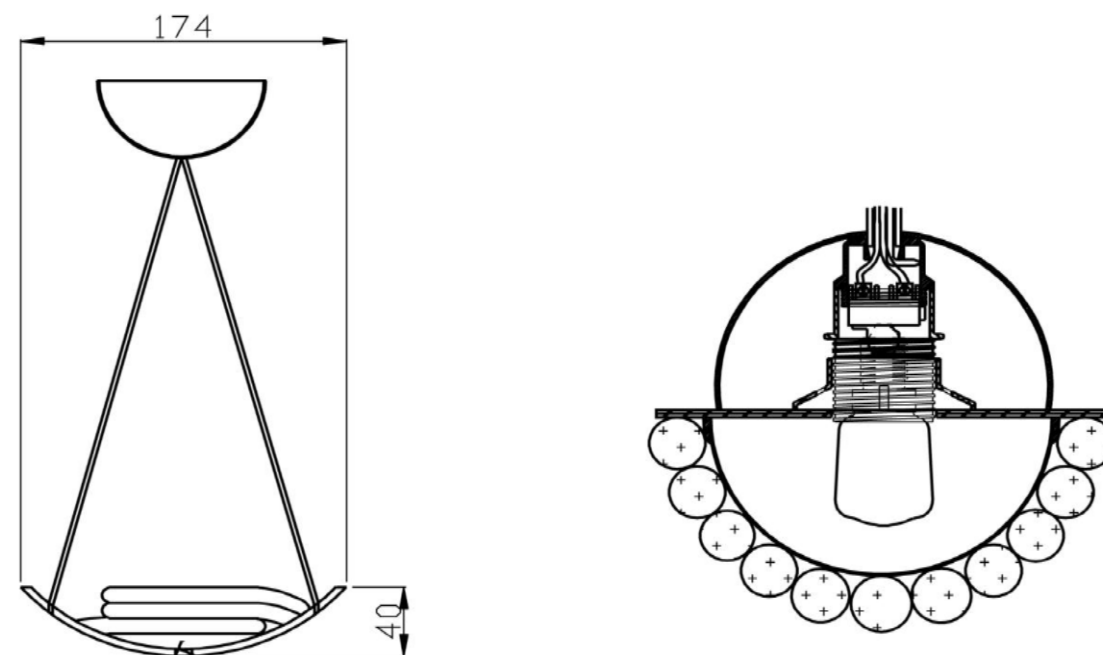




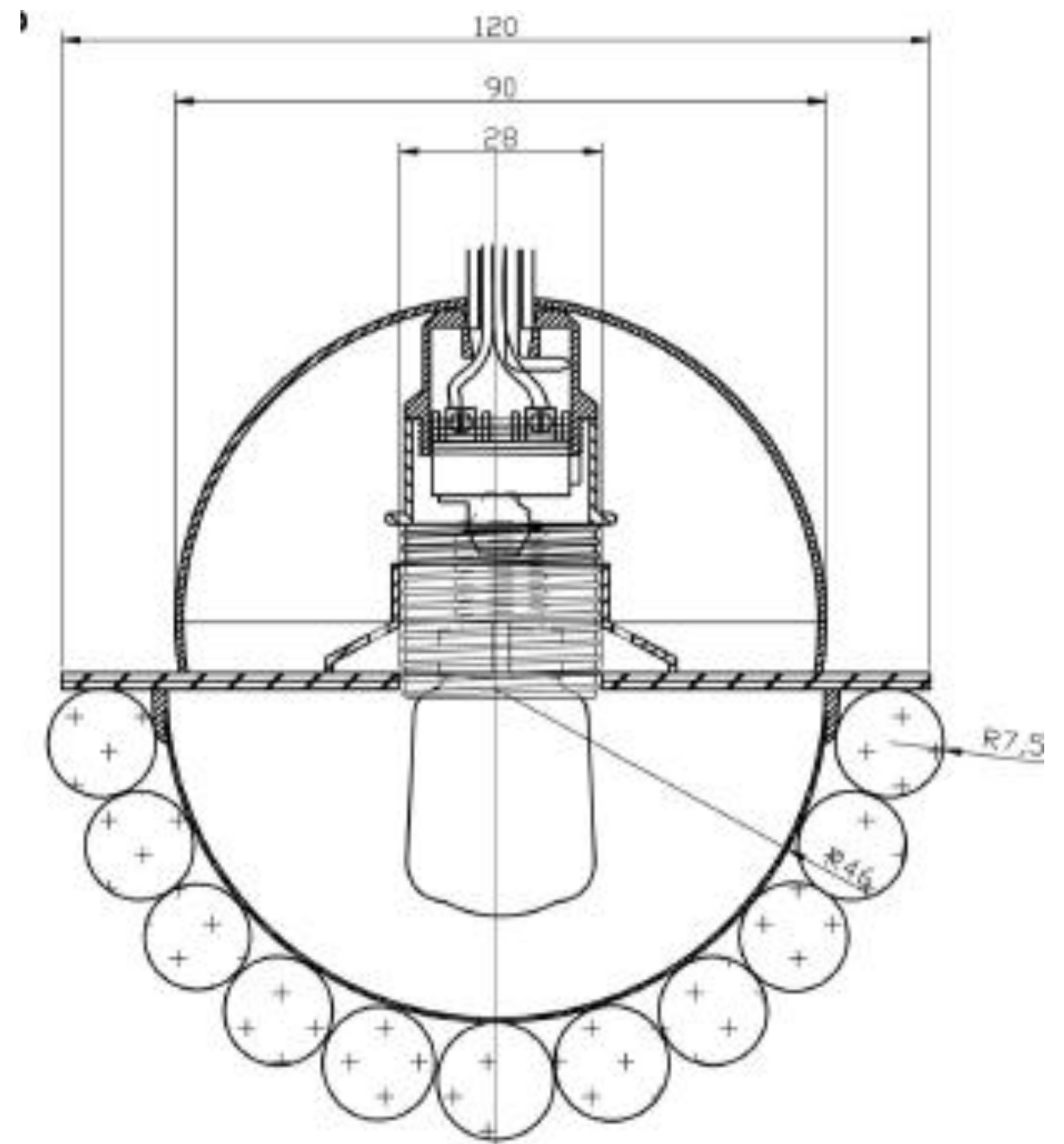
# projects examples



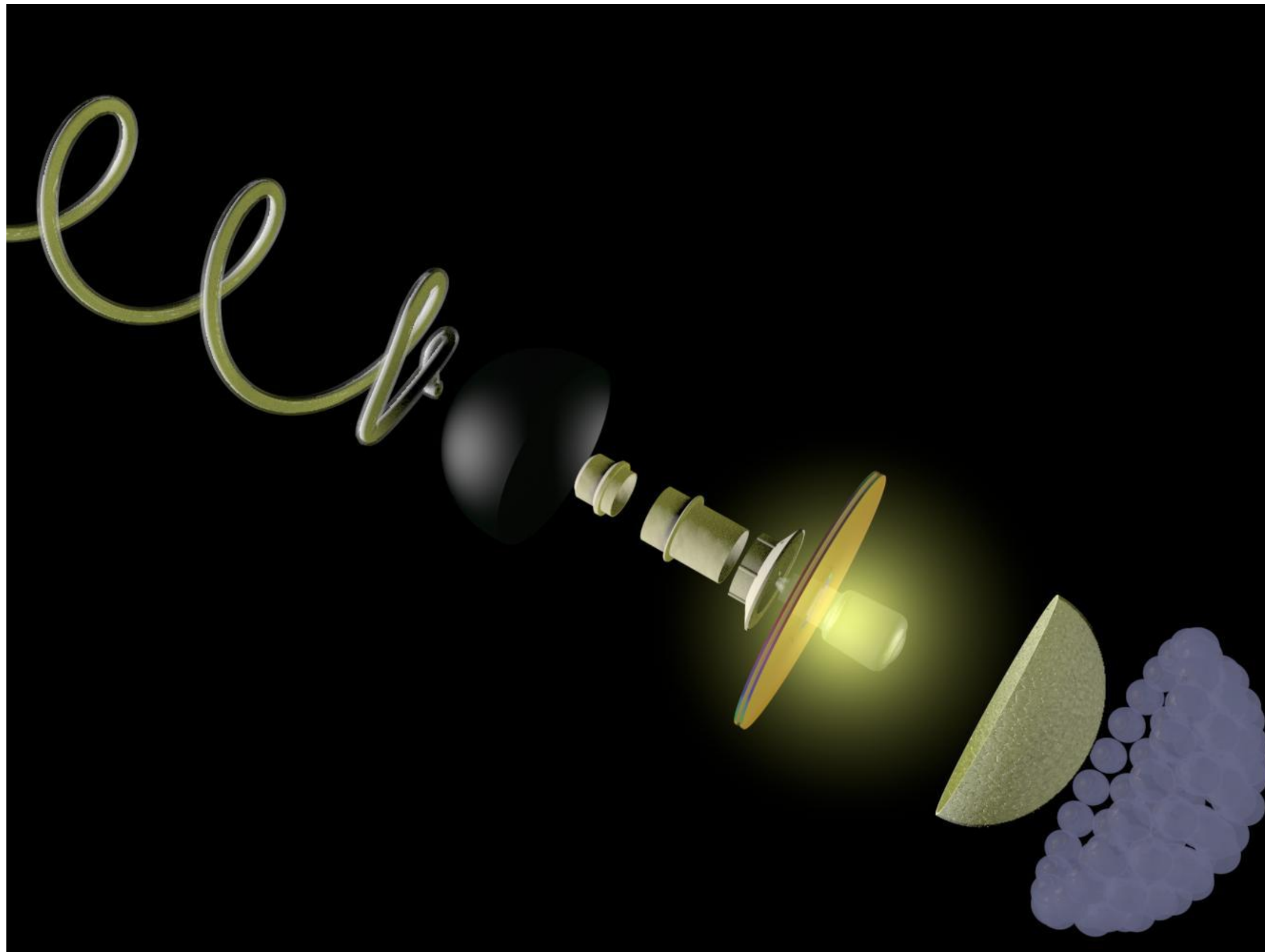
# projects examples



9	6	Cable paralelo $\varnothing$ 1'5 mm	Cobre
15	2	Cáncamo	Acero
14	4	$\varnothing$ 4 x 2 mm	Acero
13	2	Cable acero $\varnothing$ 2mm	Acero
12	1	Soporte lámpara	Metacrilato
11	6	Tubo cristal $\varnothing$ 9 x 6 mm	Plástico
10	6	Alambre $\varnothing$ 1'8 mm	Acero galvanizado
9	6	Cable paralelo $\varnothing$ 1'5 mm	Cobre
8	385	Canicas $\varnothing$ 15 mm	Cristal de murano
7	5	Bombilla nevera 15 w	
6	5	Soporte canicas	Acero y polipropileno
5	10	CD	Metacrilato
4	15	Tornillo de métrica 2'5 x 10 mm	Acero zincado
3	15	Tornillo de métrica 2'5 x 10 mm	Acero zincado
2	5	Portalámpara E14	Plástico
1	7	Embellecedor	Polipropileno
MARCA	Nº PIEZA	DESIGNACIÓN	MATERIAL

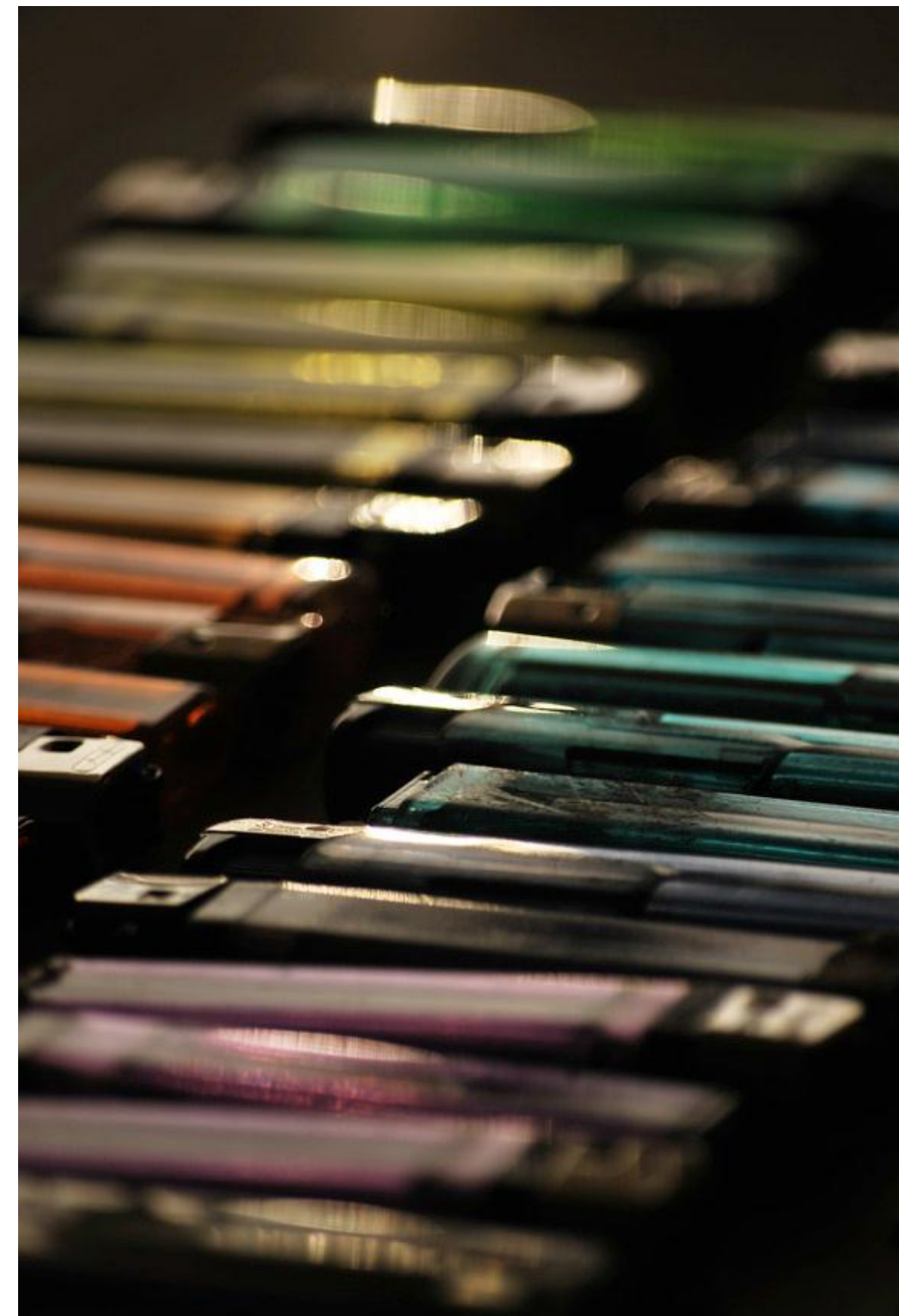
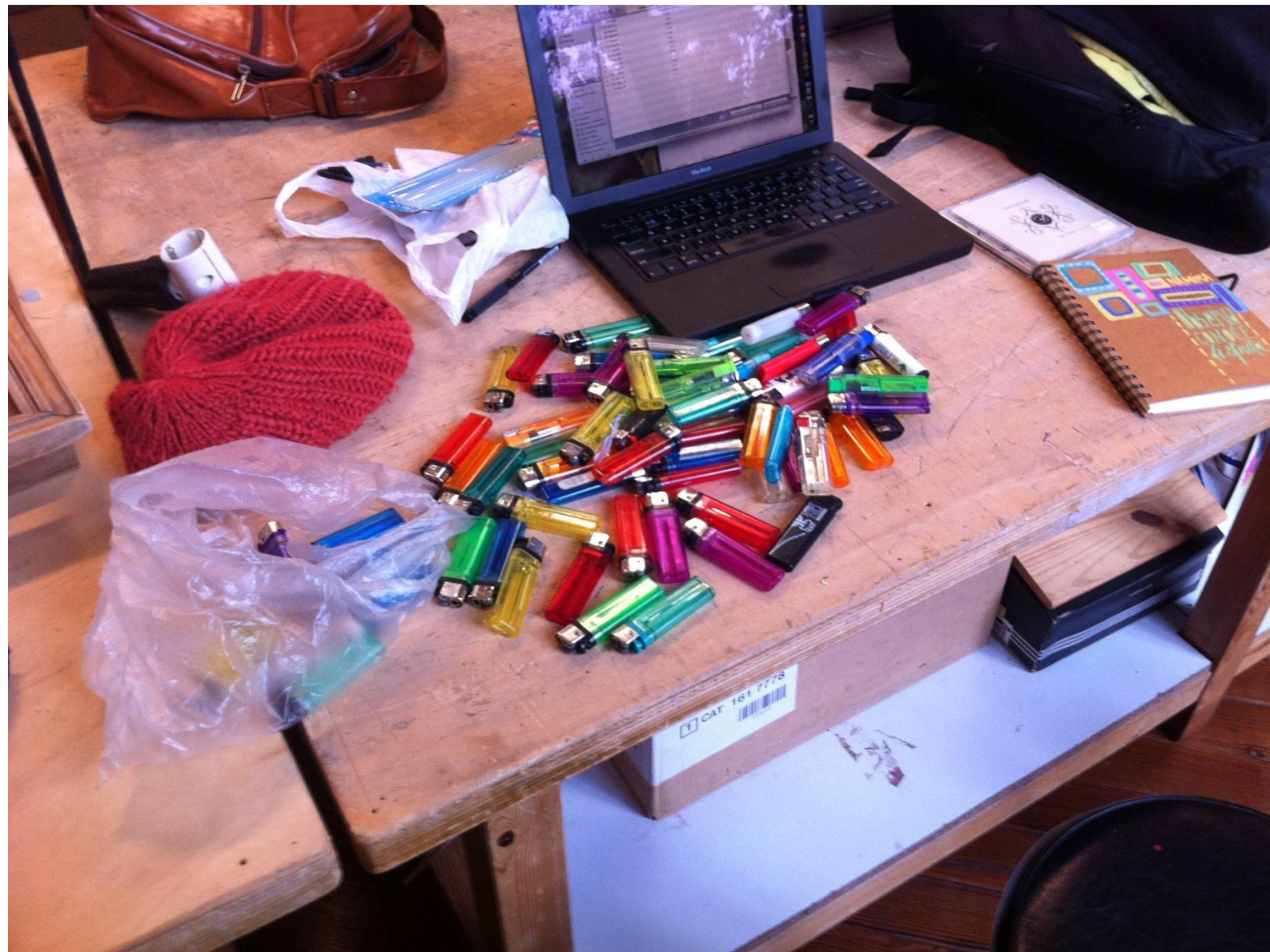


# projects examples





## 2.Lamp made with lighters Martina Miraballes





# projects examples



Una vez que se tiene la plantilla de la lampara desarrollada se colocan los mecheros de forma horizontal pegados con silicona caliente



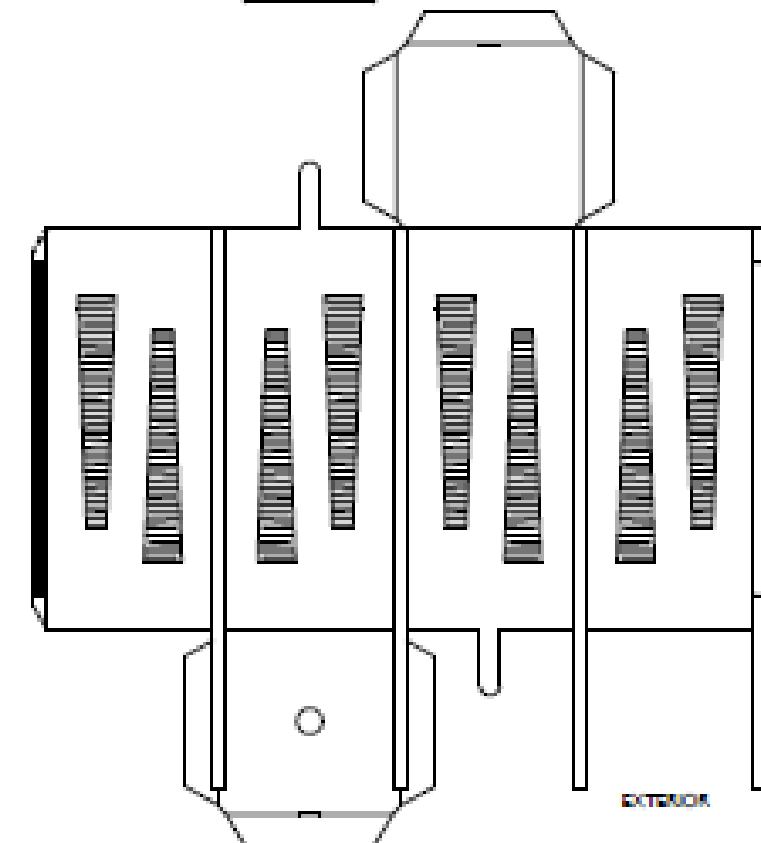
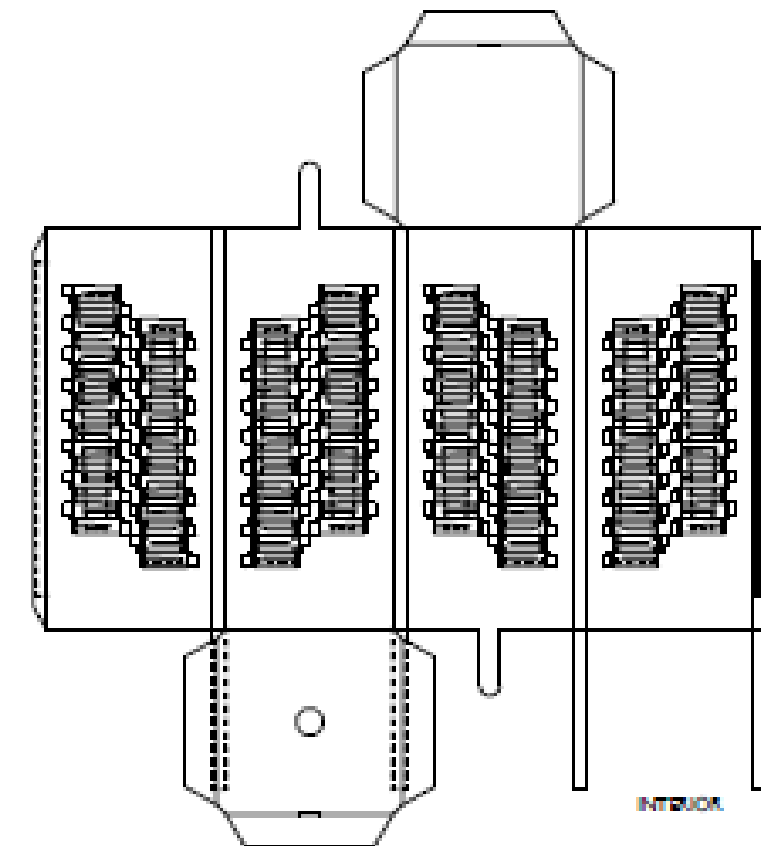


# projects examples

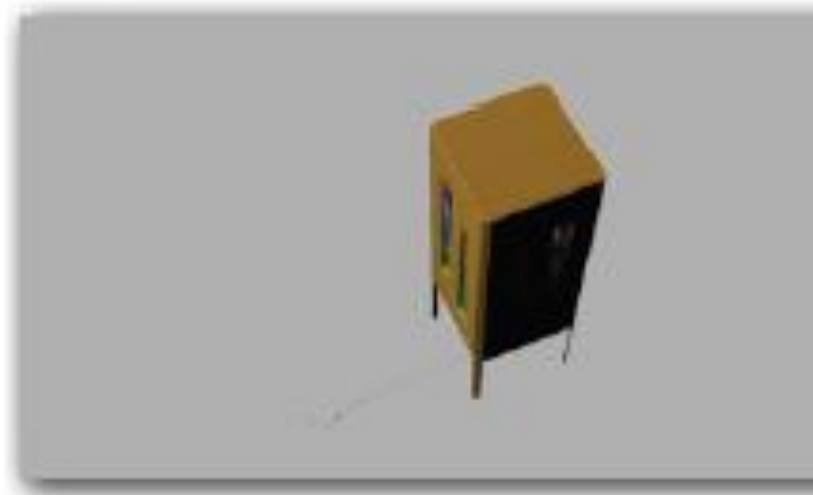




# projects examples



# projects examples



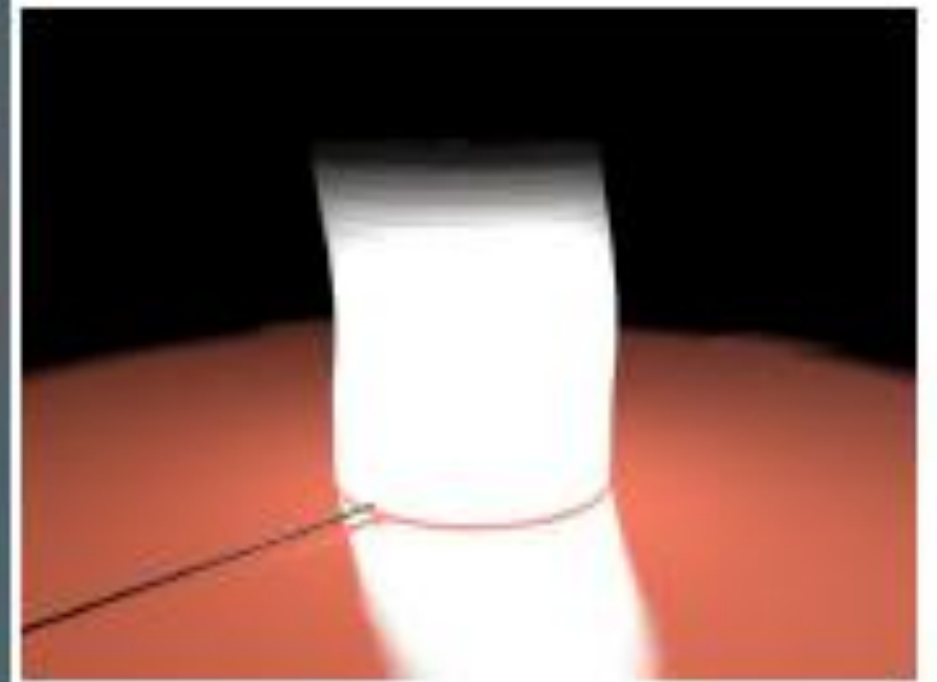
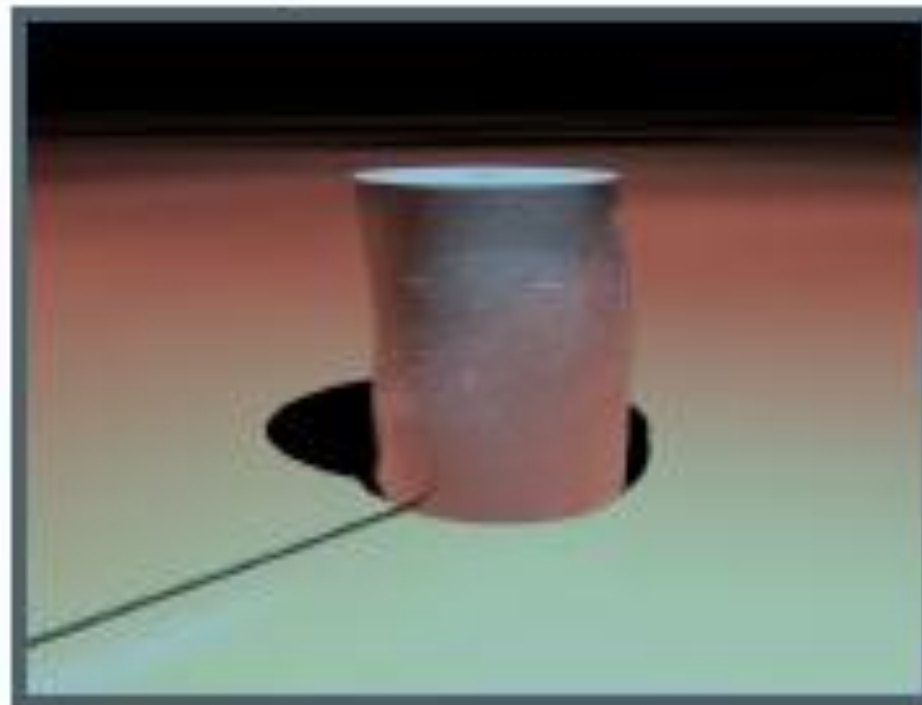
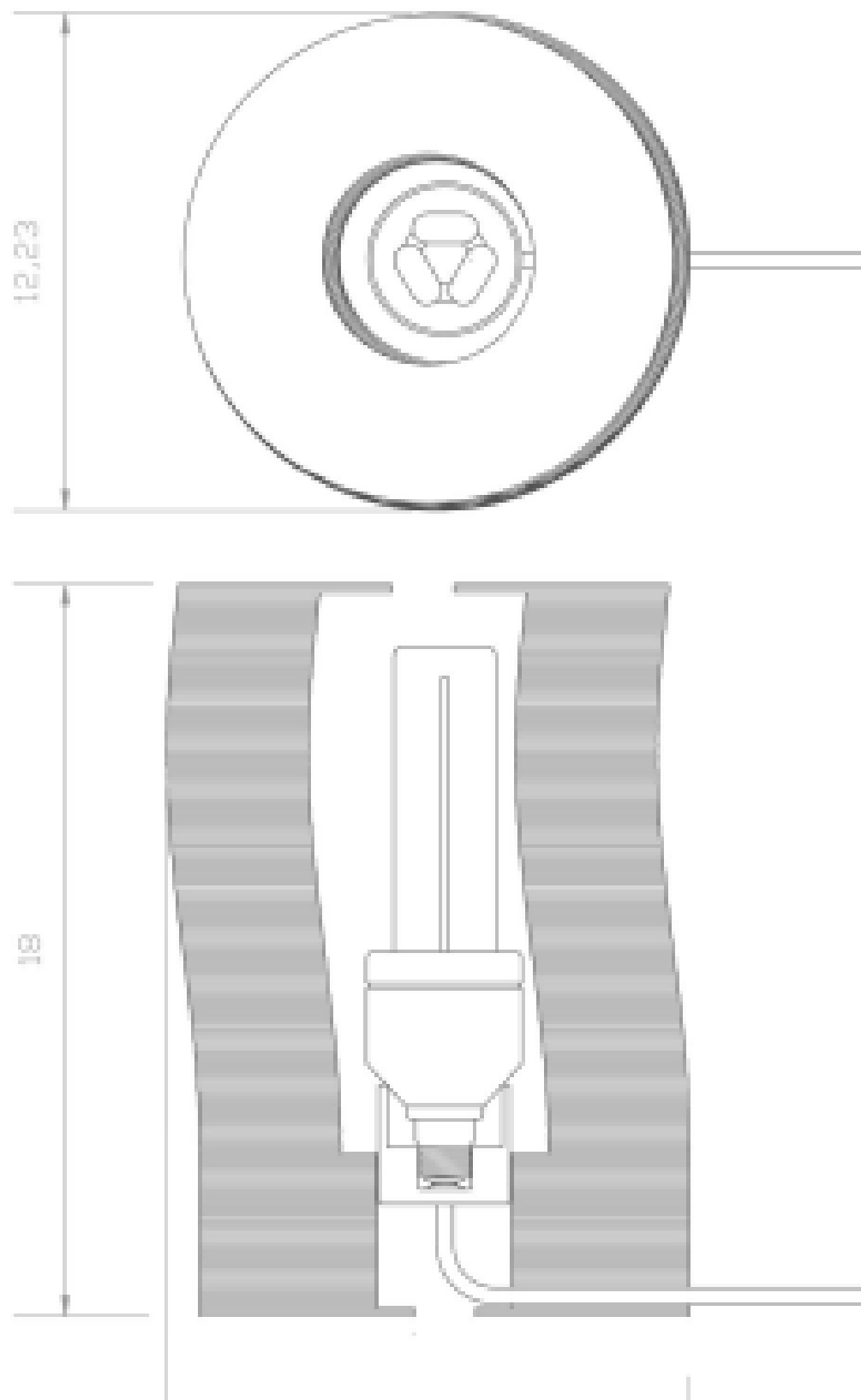
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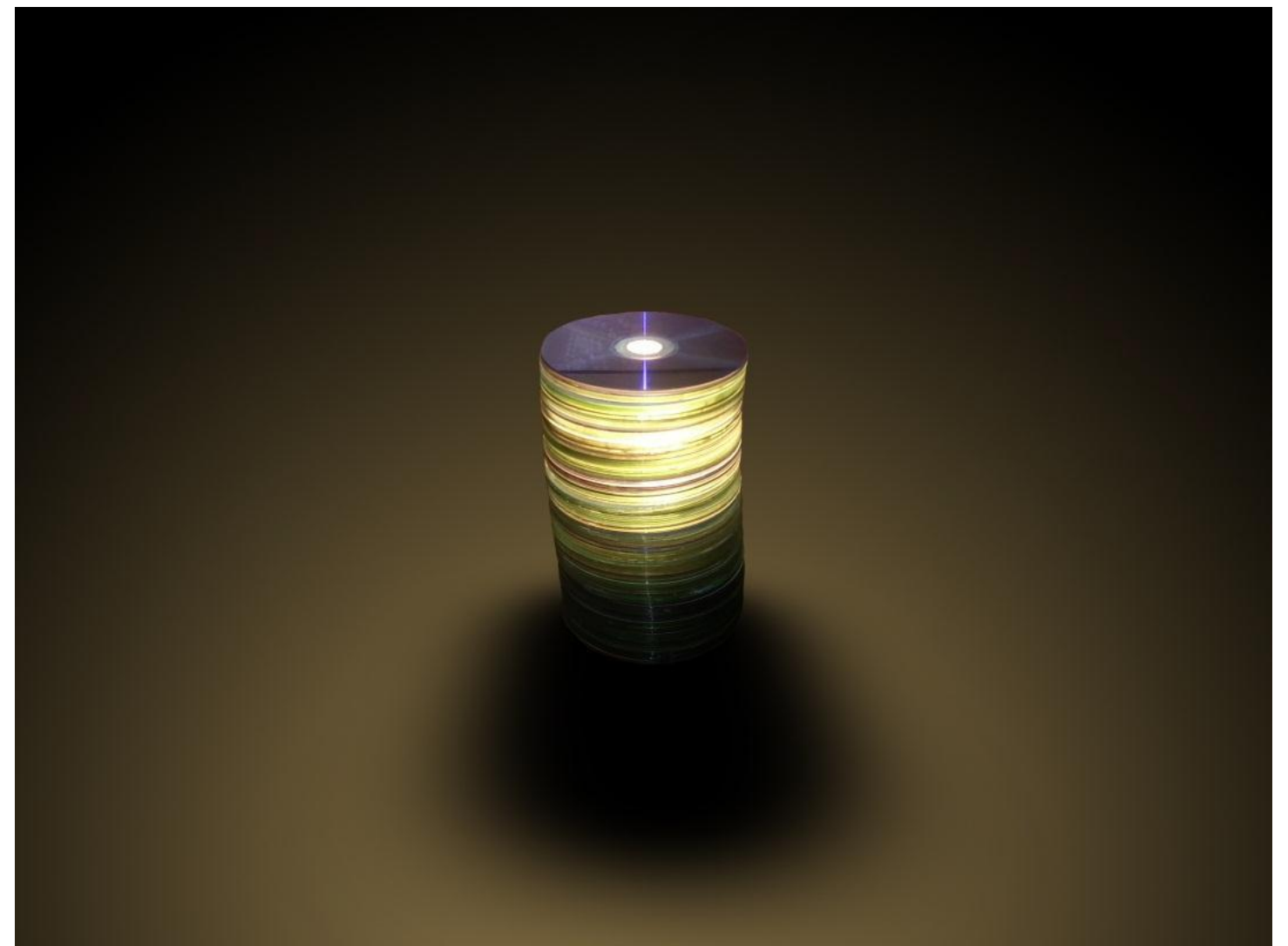
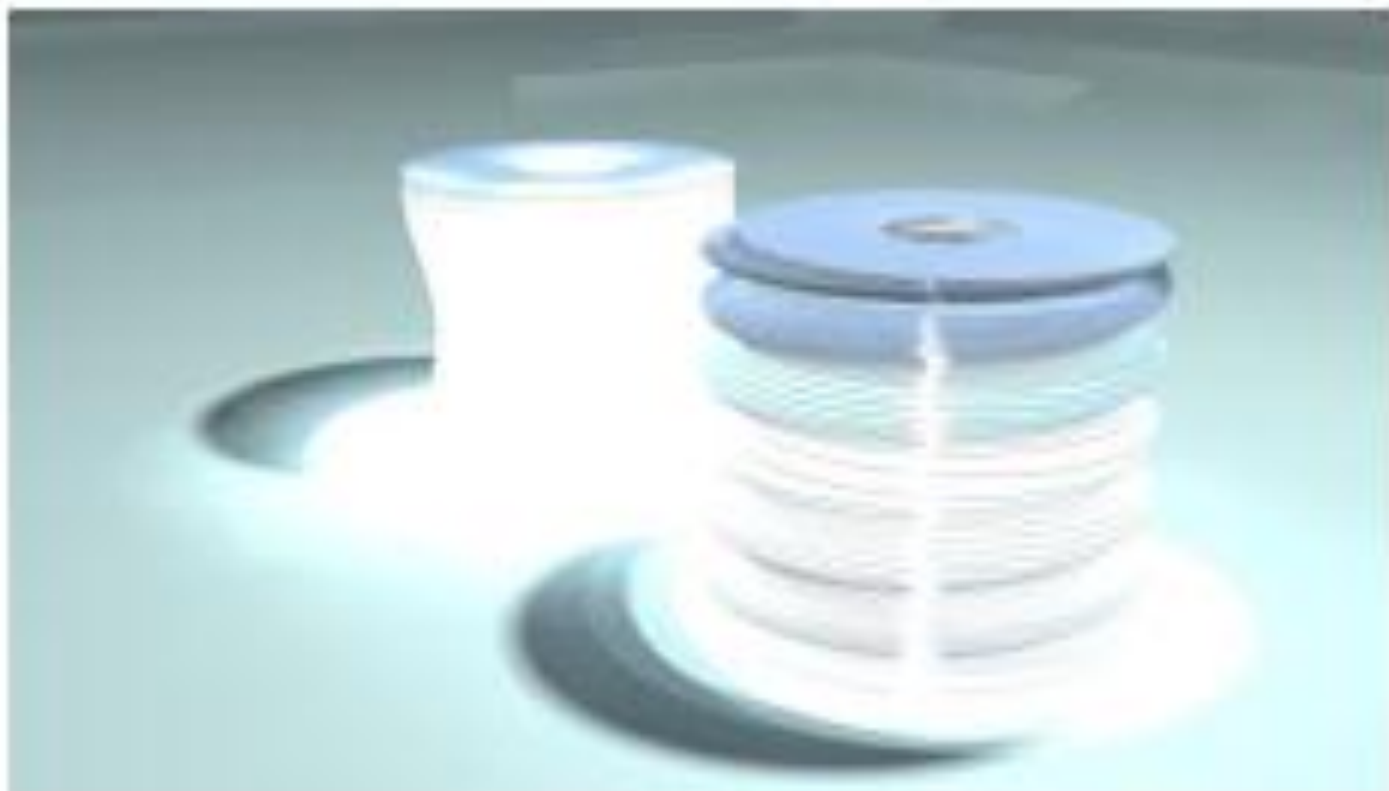
## 3.-Lamp made with CDs Juan Carlos Estelrich



# projects examples

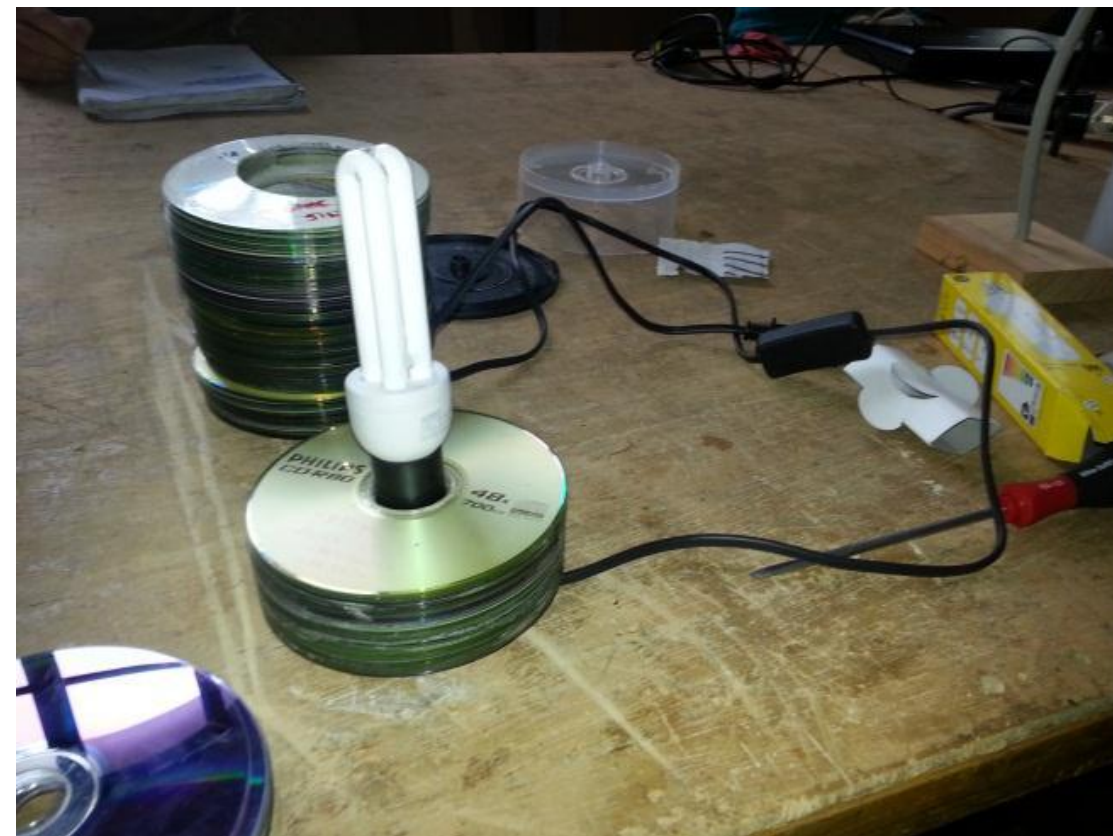


# projects examples





# projects examples





# projects examples



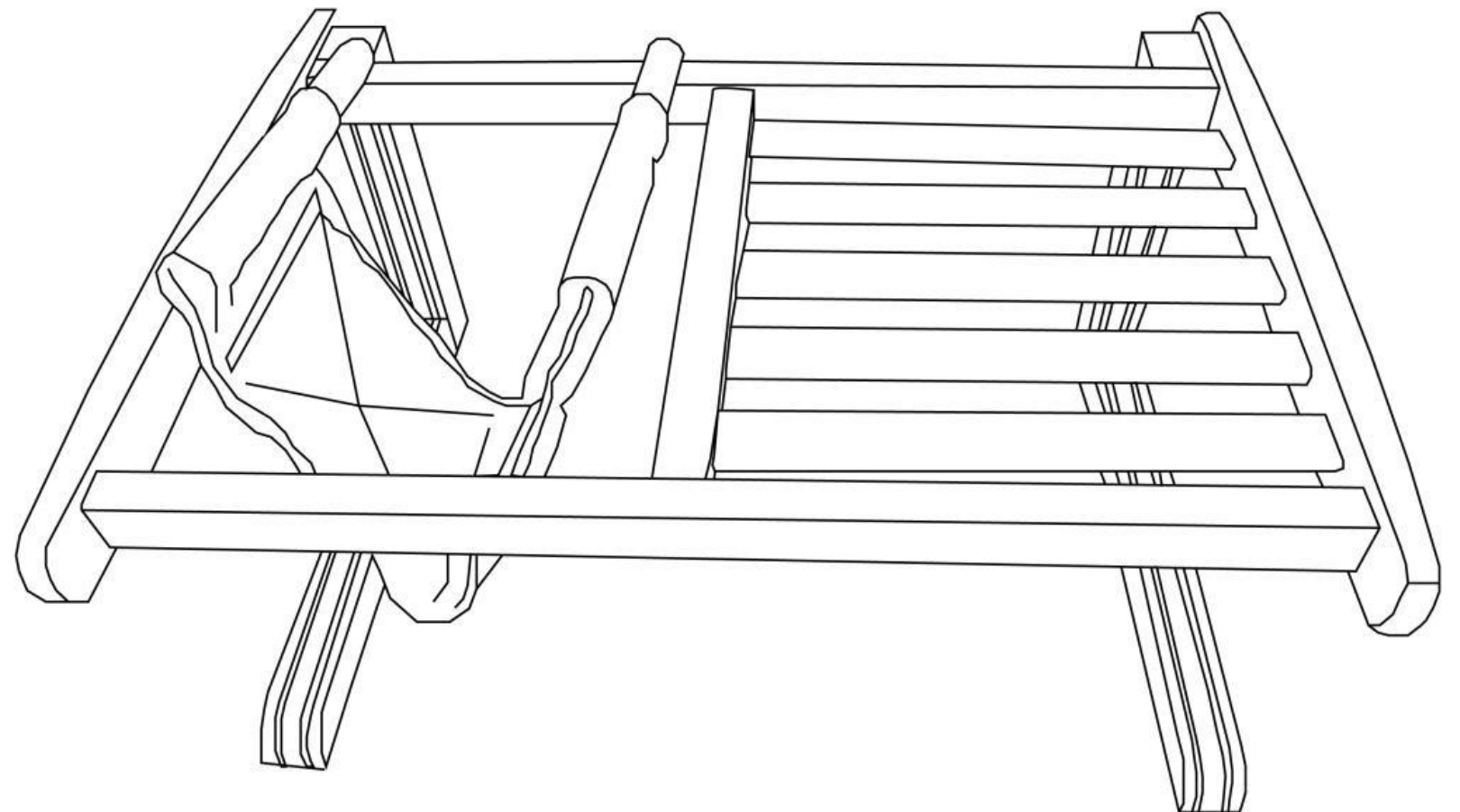


## PROYECTO-R

4.- Magazine  
rack  
with  
parts  
of  
Chairs  
Mamem Font



# projects examples





# projects examples



3.



5.



# projects examples



9.



10.

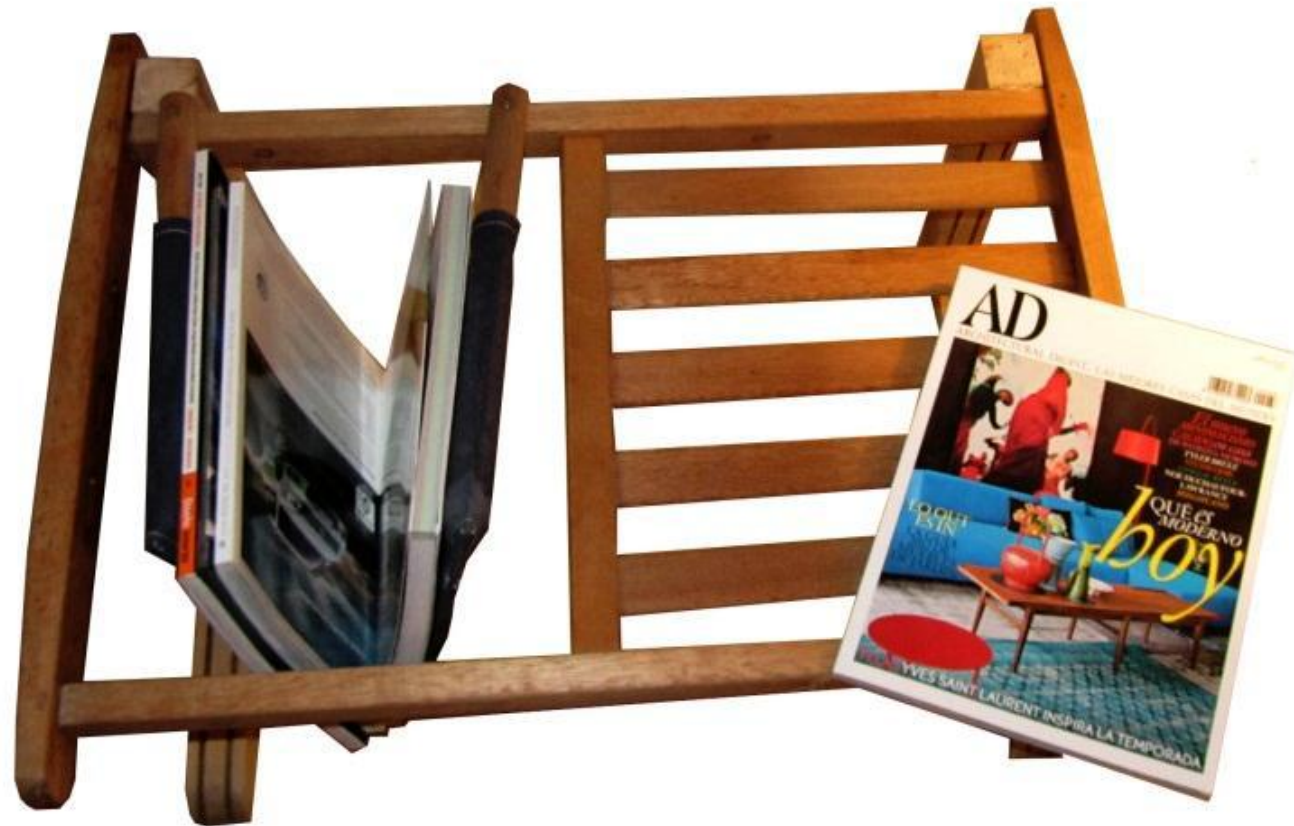


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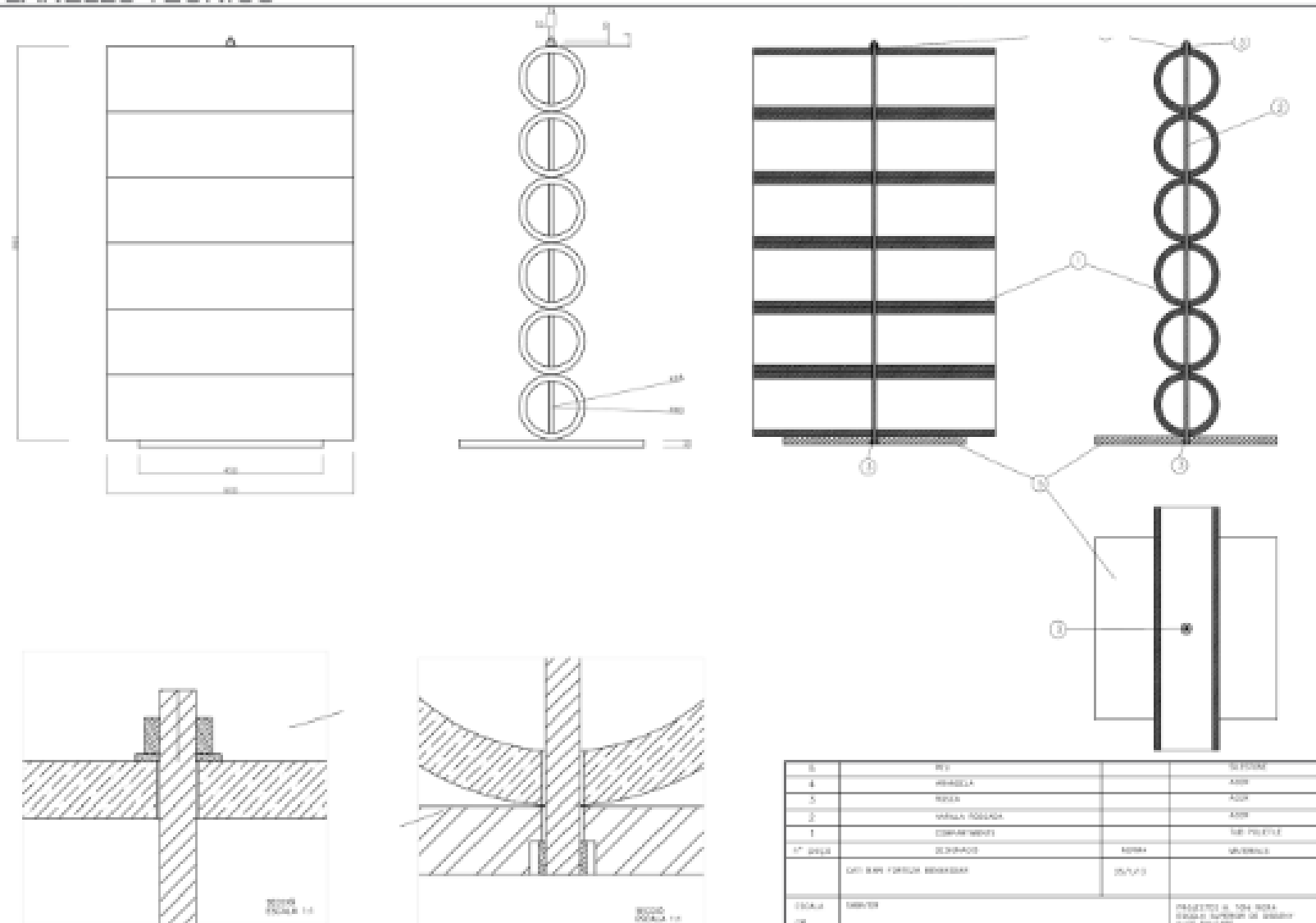


# projects examples



## 5.- Shoe cabinet made by polyethylene tube Catimari Forteza

### PLANELLS TECNICS



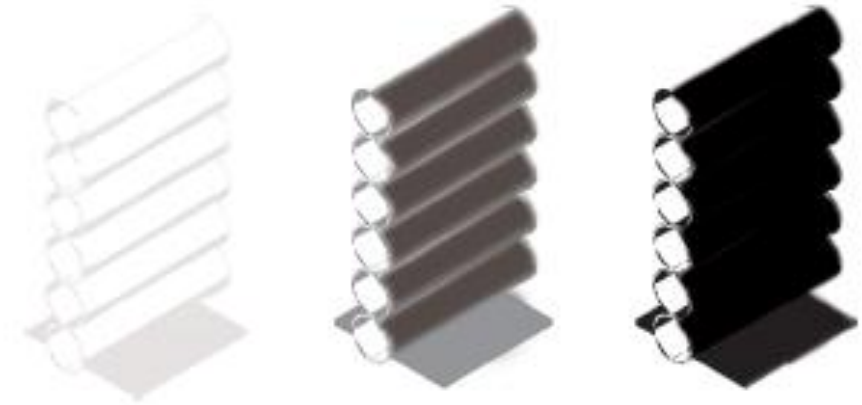
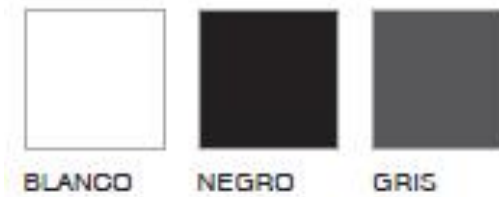
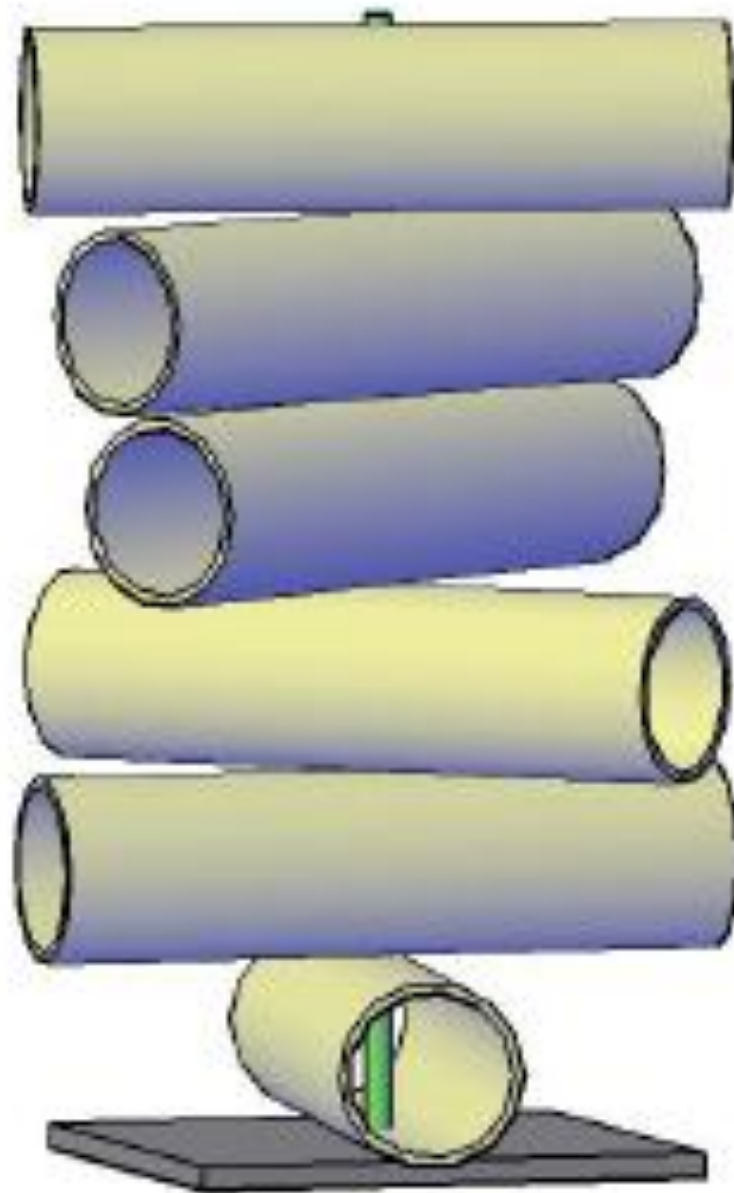
ESBOS TRIDIMENSIONAL



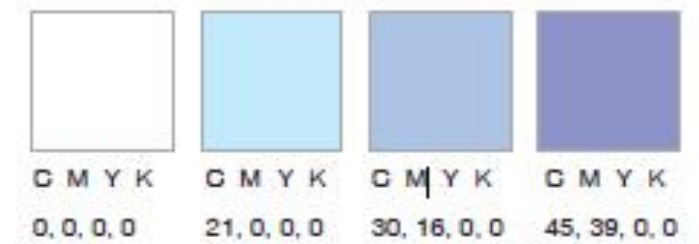
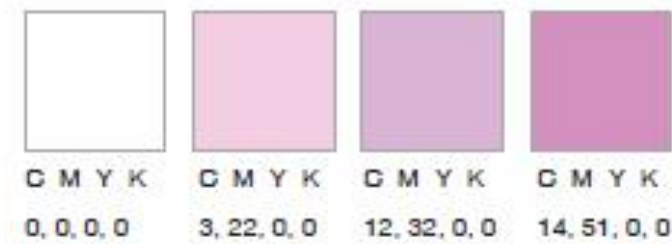
PROTOTIP ESCALA 1:1



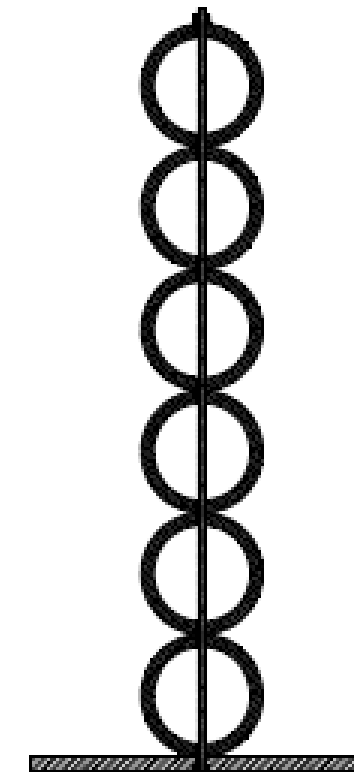
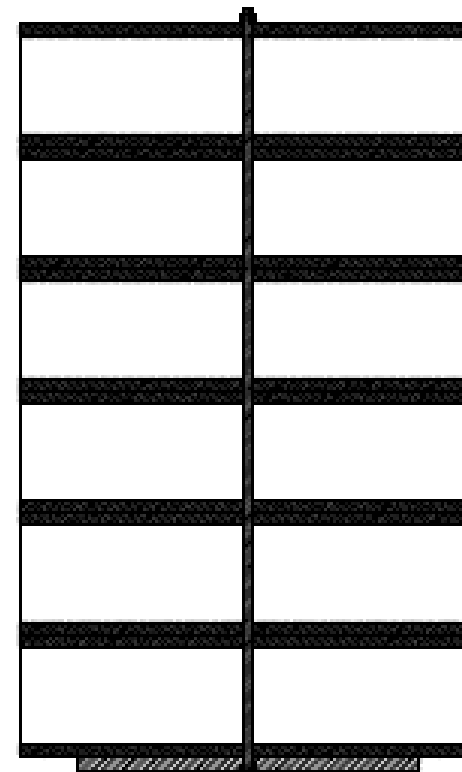
# projects examples



Proposta multicolor per a habitacions infantils per nina i nin



# projects examples





# projects examples





## 6.-Wallet made of Garbage bags Joao Teixeira



ALUMNO: João Teixeira  
PROFESOR: Toni Riera



### PROJECT\_R

una cartera hecha con bolsas de plástico

El Project\_R tenía como objetivo hacer uso del concepto de Up-Cycling, con la demanda de crear productos con uso a partir de la reutilización de otros productos que ya no tenían uso, o materiales que aguardan en las basuras para reciclaje, y luego después darle más valor, cambiando también su función.

Entonces hacia todo el sentido buscar información sobre la reciclaje: ¿Cuál es el material más reciclado? Y ¿cuál es el más reciclable? Para cambiar la revolución de reciclaje por el concepto de Up-Cycling. Estos fueron mis puntos clave para el desarrollo de mi producto,

Vivimos en la era de los plásticos y por eso más de mitad de los productos en el mercado están hechos con este material, dentro de estos productos las bolsas son los más producidos. Se producen 150 bolsas (por persona) anualmente y es también el producto más desaprovechado, siendo que 90% de las bolsas terminan en las basuras. Lo que pasa es que la reciclaje de plástico es la más peligrosa para el medio ambiente, luego, debería ser la más evitada.

Mi proyecto surge como una respuesta a este desaprovecho, usando las bolsas (con un proceso sencillo) para crear una cartera.

E elegí hacer una cartera porque es un objeto de uso diario, y tal como las bolsas, las usamos cada día.

Pasando el hierro por las camadas de plástico se obtiene una textura completamente diferente y muy interesante, dando más rigidez y vida a la bolsa.

**el material MAS**  
reciclado es el plástico

**150** es el número de bolsas de plástico que se hacen por persona en cada año

**90%** es la porcentaje DE BOLSAS DE PLÁSTICO QUE TERMINAN EN LA BASURA

la reciclaje de plástico es la más PELIGROSA

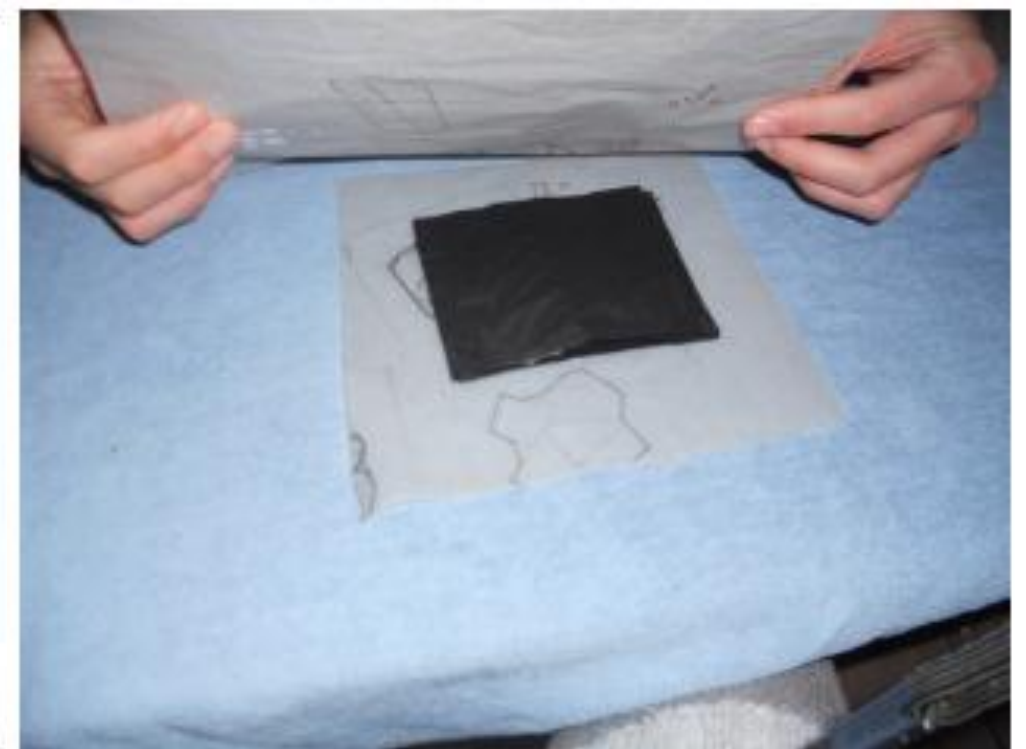
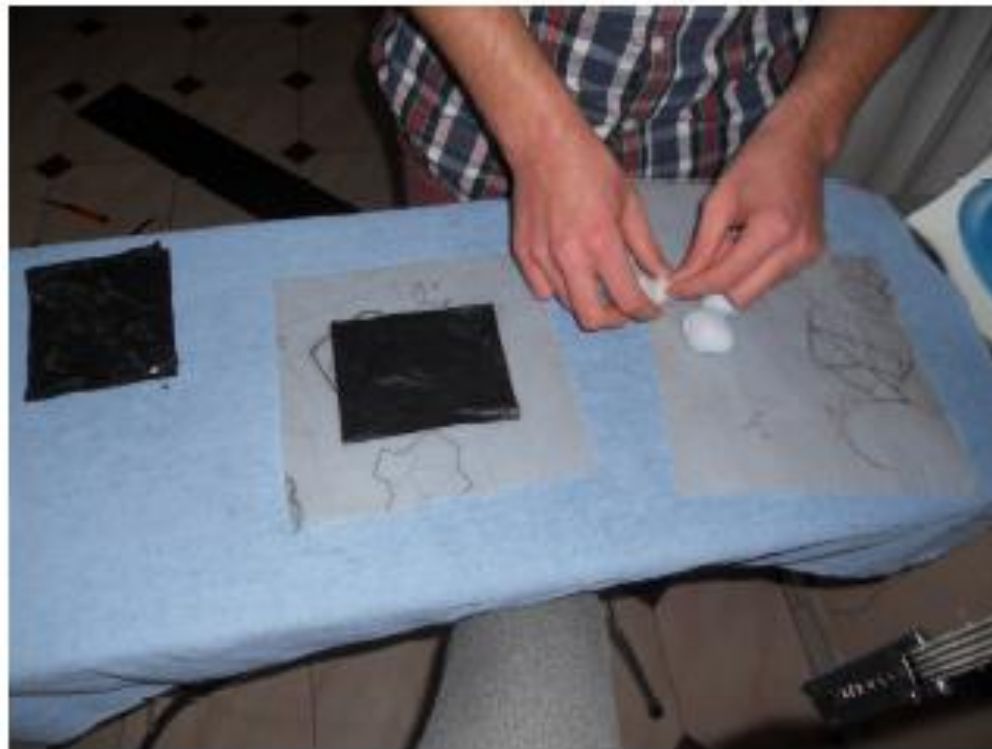
hoy más de mitad de los productos **ESTÁN HECHOS DE PLÁSTICO**

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# projects examples



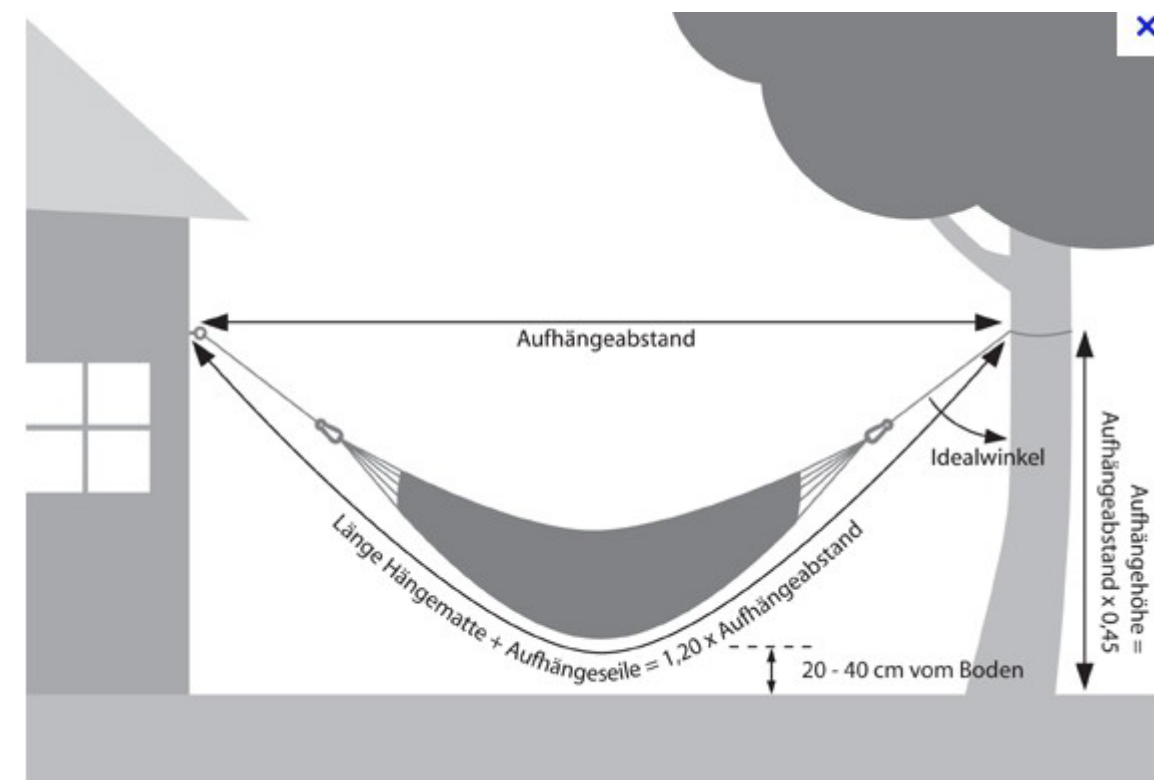


# projects examples

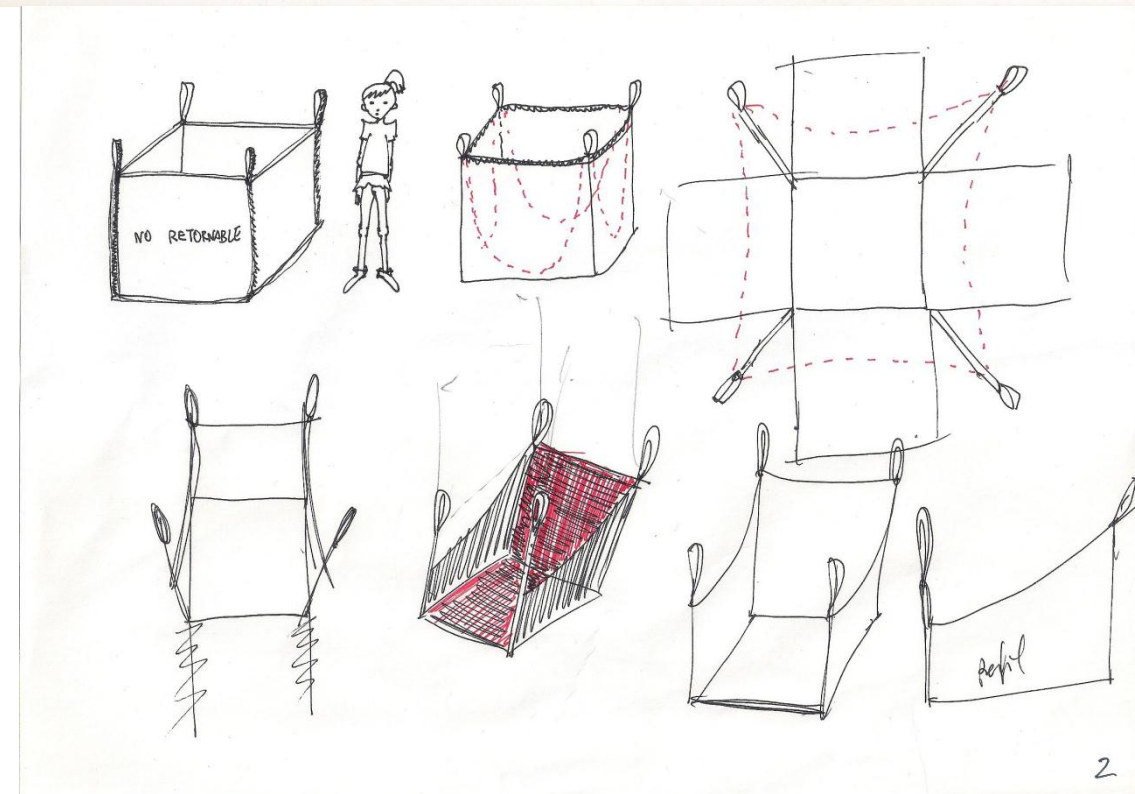
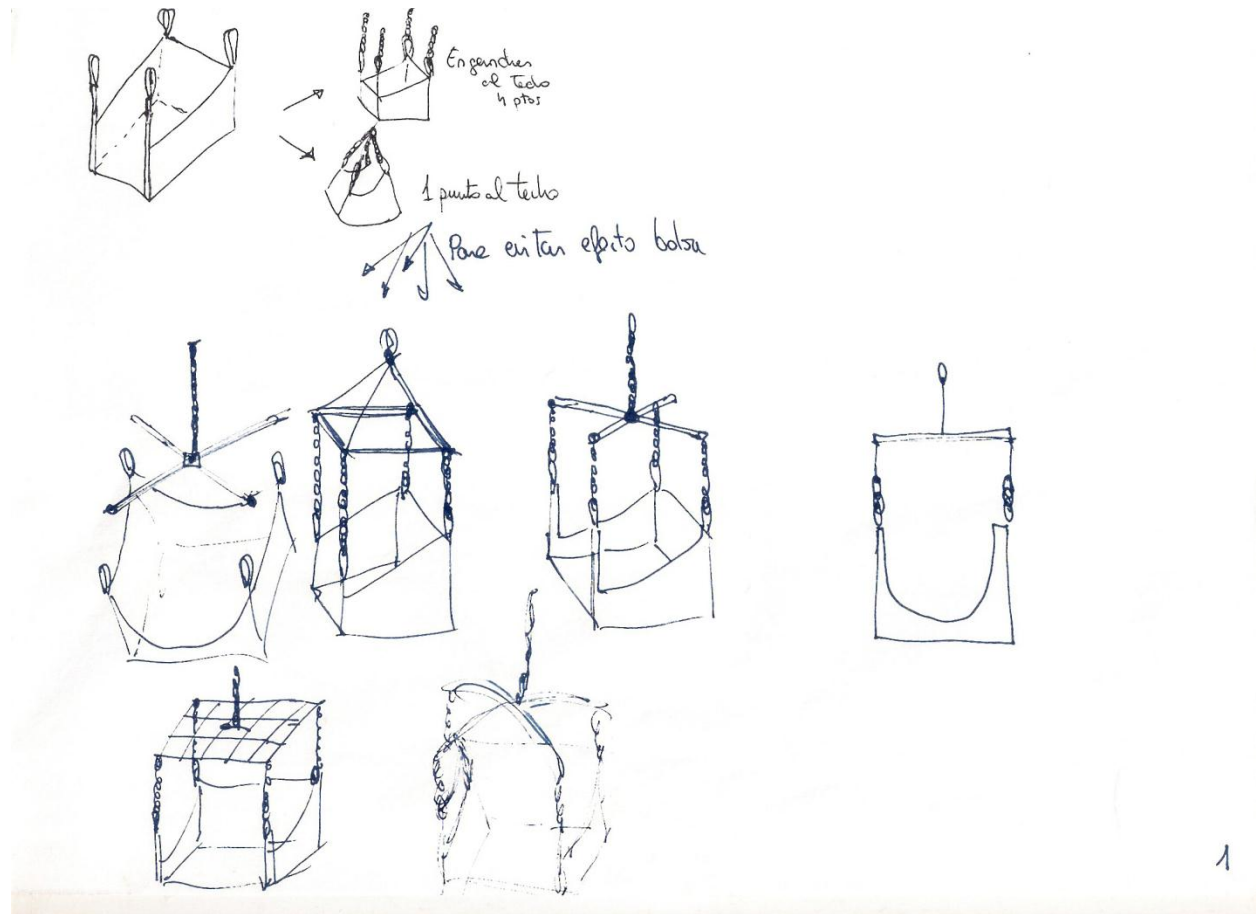
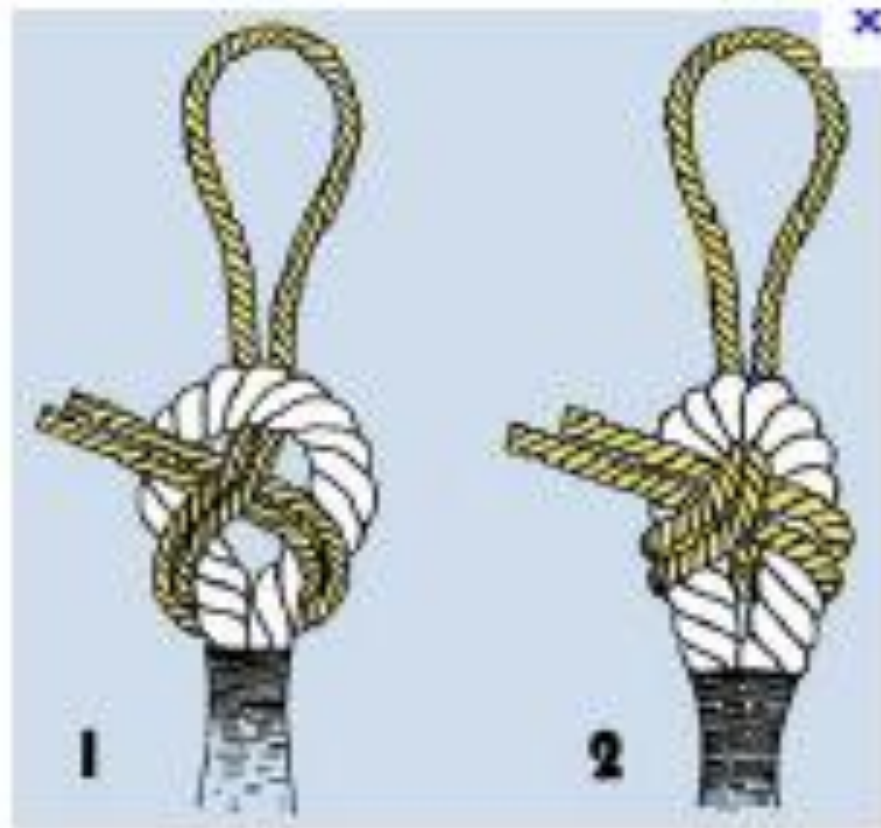




## 7.-Hammock made with bag work Vanesa Mateu



# projects examples

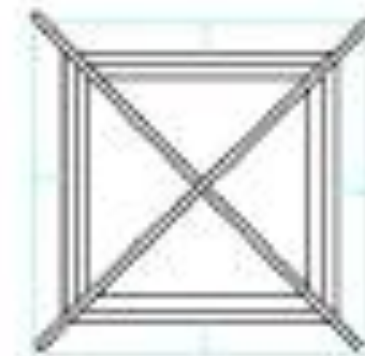
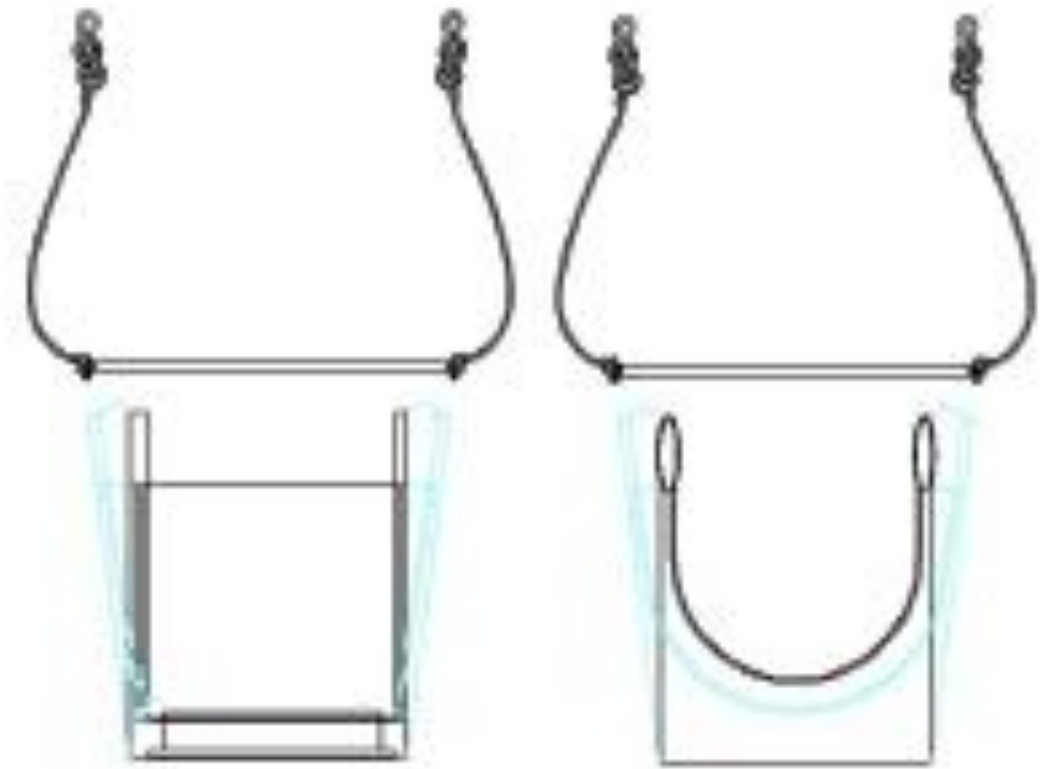
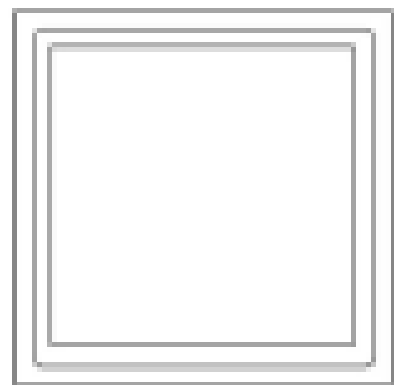
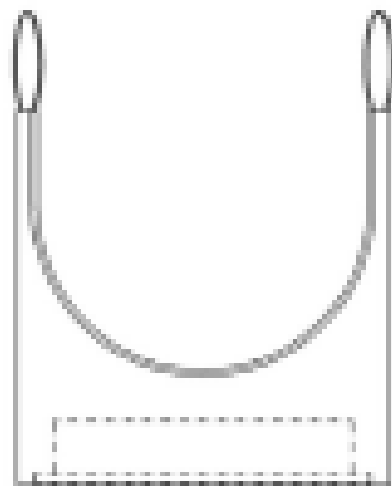
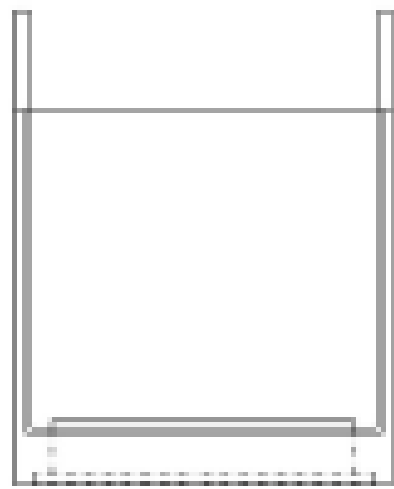
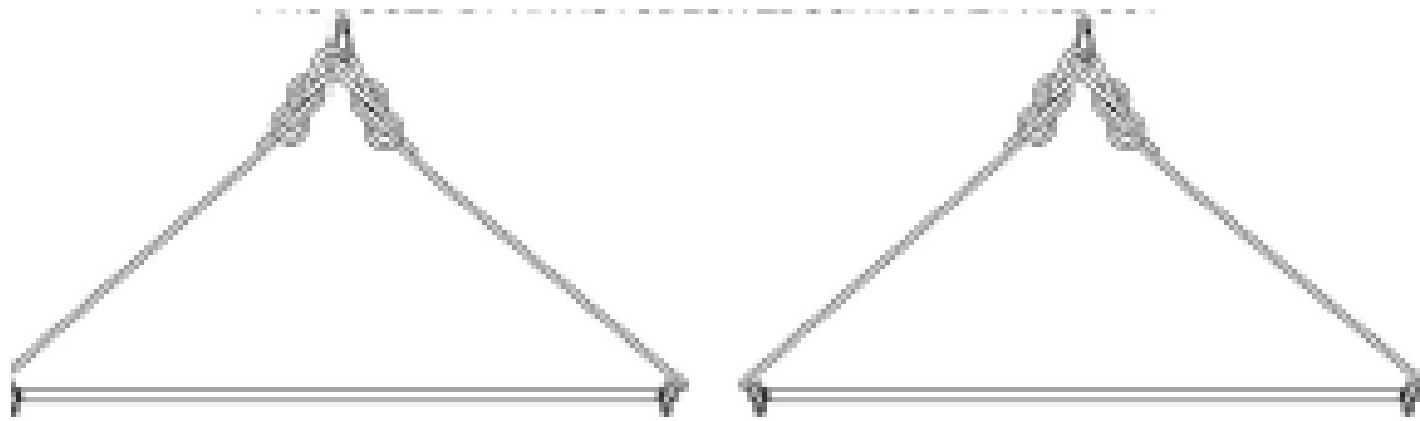




# projects examples



# projects examples



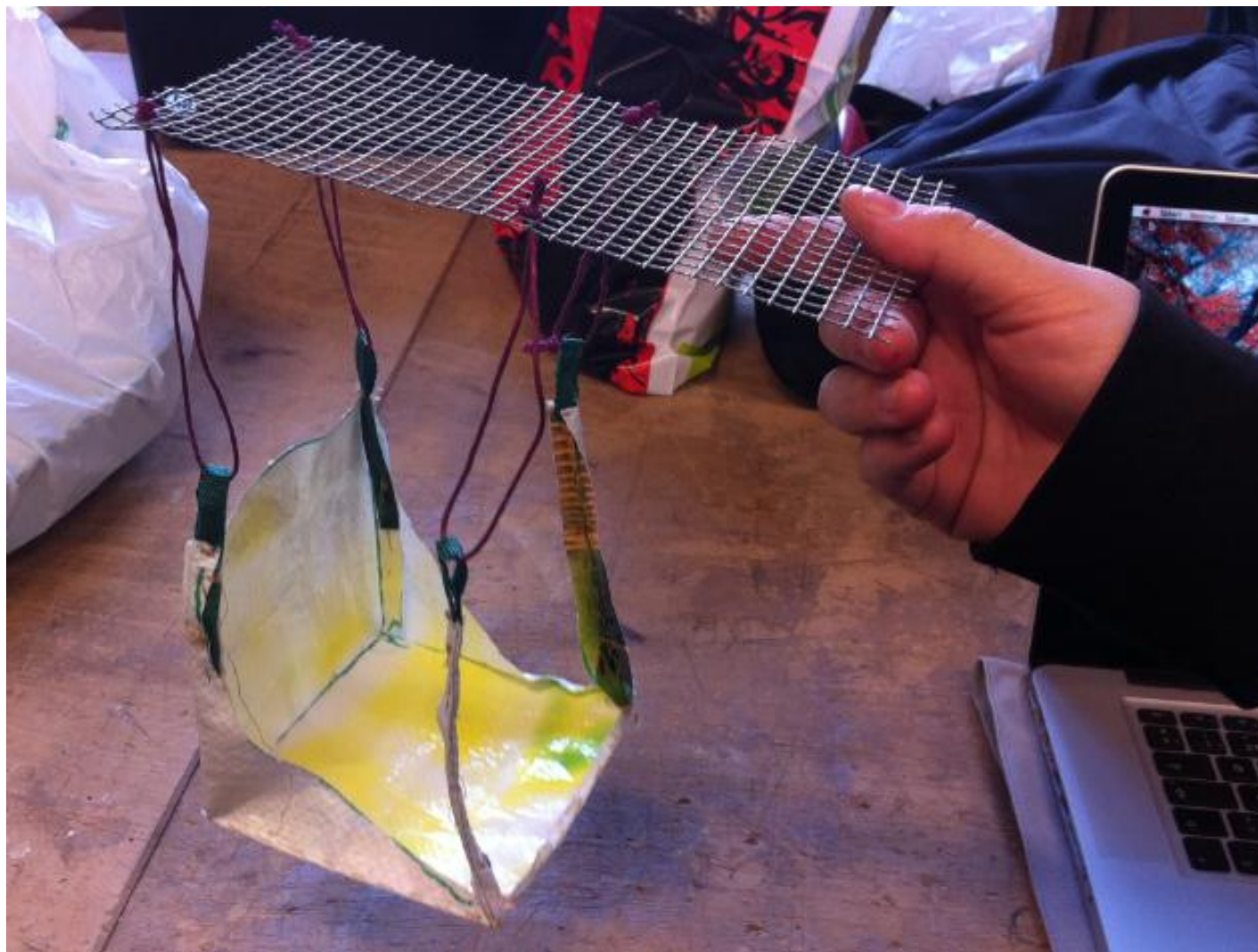


# projects examples





# projects examples





## **STA TEACHING STAFF MOBILITY**

From 3rd to 6th April 2013, “Workshop ‘Projecte\_R’: Upcycling” by prof. Toni Riera, at the Instituto Politécnico de Viana do Castelo (Viana do Castelo, Portugal), with an STA Erasmus grant.

# description of the initiative

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**May 2013**

All participants deliver their proposals in order to prepare an exhibition.



# description of the initiative

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**June 2013**

An exhibition of a selection of proposals will take place at the Escola Superior de Disseny de les Illes Balears

**thank you very much**

