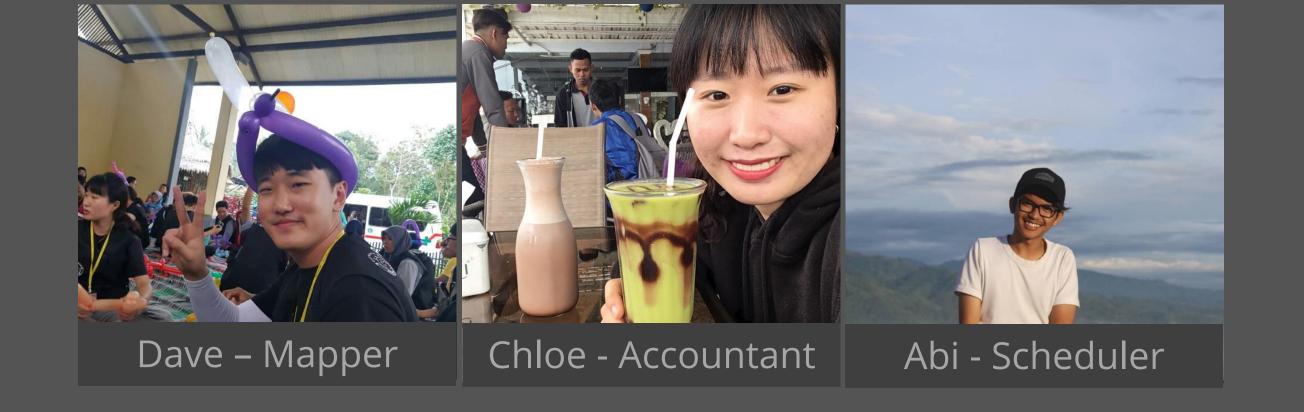


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- 1 Introduction
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### FANTASTIC SIX

*INTRODUCTION* 



Min - Journalist





Adit - Designer



# Background



### Gintangan Bamboo Crafts



What is Gintangan?

The biggest place to produce bamboo product in Banyuwangi.

**Bamboo Products** 

- They sell 200pcs bamboo product/day.
- The TRUNTUM pattern is origin from Gintangan, Banyuwangi.
- The most popular is the ROUNDED BAMBOO shape





Thinner the bamboo





Thread the bamboo





Cut the Bamboo into pieces





Bend the bamboo



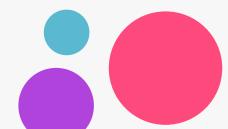


Assemble all the bamboo parts



# Problem







### The most popular issues

Top 4 issues in Gintangan Bamboo Craft.



#### Unsafety bamboo holder

The bamboo holder is too dangerous because the bamboo can easily move when they cut the bamboo.



### Manual way to bend the bamboo

The bamboo artisans use his knee to bend the bamboo, it may hurt his knee.



#### The messy place

The bamboo artisans put their tools randomly, it may hurts the barefoot.



#### No free space

The rounded bamboos are hanging on the roof, it may break the bamboo in rainy season.





### CHOSEN ISSUE

"Manual way to bend the bamboo"





#### 4 Ideas for this issue

#### Column

Make a fixed column from the iron tube.

#### Frame

Put the bamboo into the frame.

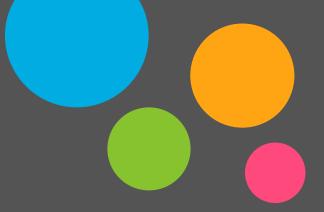
#### Roller Machine

Bend the bamboo with metal-tube to squeeze and thinning the bamboo.

#### Nails bending

Use nail to pull out the bamboo.





### CHOSEN IDEA

"Roller Machine"



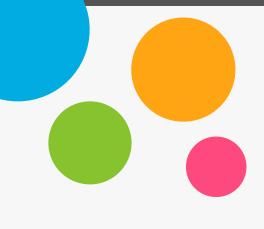




# Goals







### Our Goals

3 Important Keywords

Quality

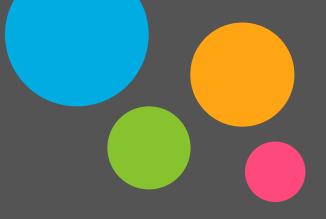
Everyone can bend the bamboo with the same **quality**.

Cost

They don't need to pay much to the worker to bend the bamboo, so it is **more cheaper**.

**Speed** 

The bamboo artisan can make a rounded shape of bamboo **faster**.



If they can reach the goals, they can increase their money income.



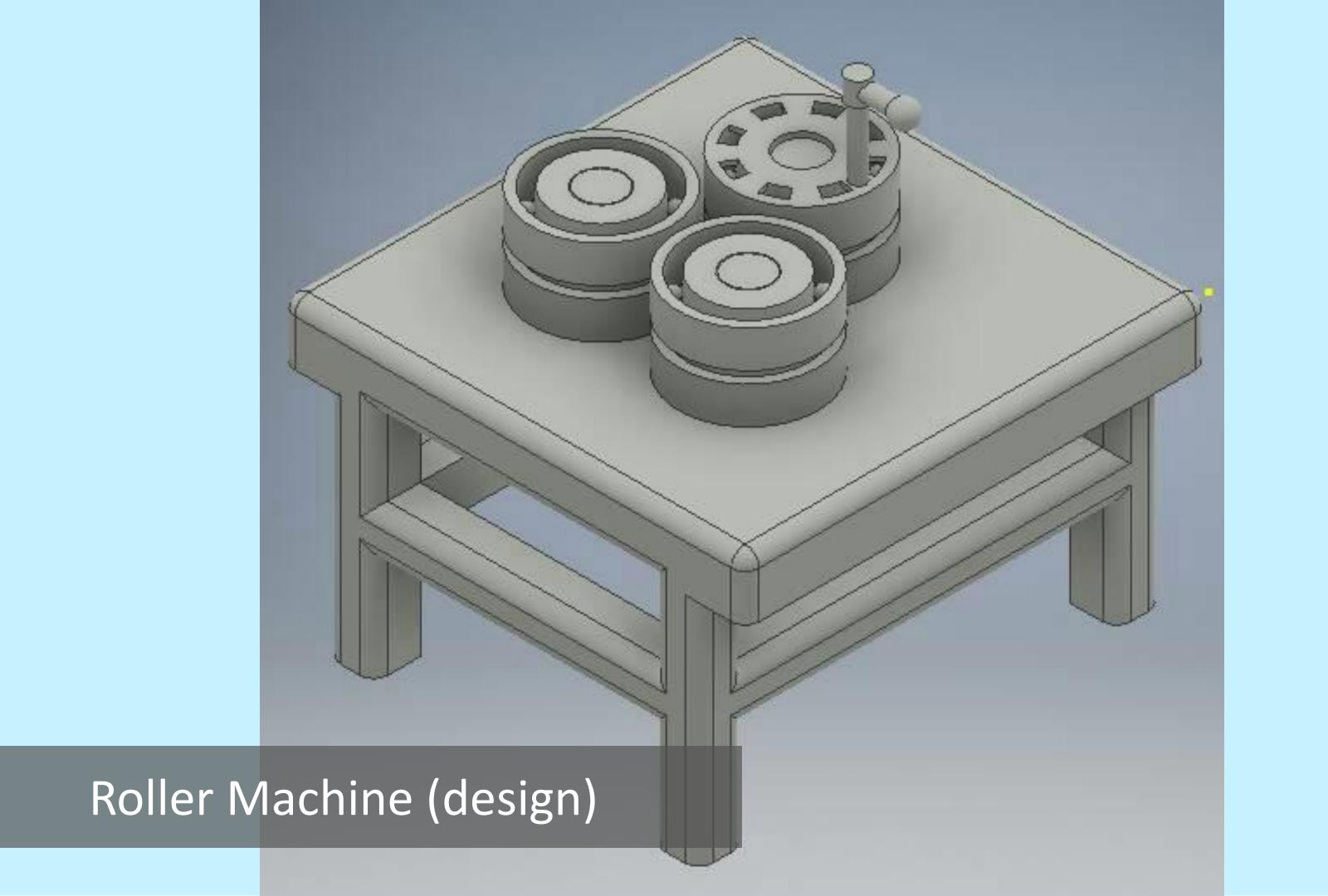




# Design







### Materials

- 1. Bearings (6pcs)
- 2. Steel Plate (45 cm x 50 cm)
- 3. Hollow Steel (4.5cm x 4.5cm)
- 4. Lever
- 5. Shaft
- 6. Steel Paint
- 7. Thinner
- 8. Grinder Plate (5 pcs)
- 9. Electrode (1 box)

### Tools

- 1. Grinder
- 2. Welding Machine
- 3. Ruler
- 4. Paint brush





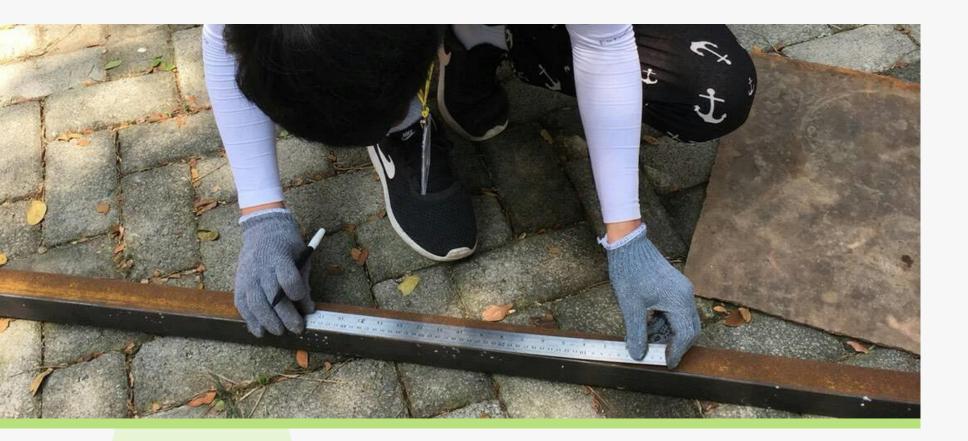
# Method







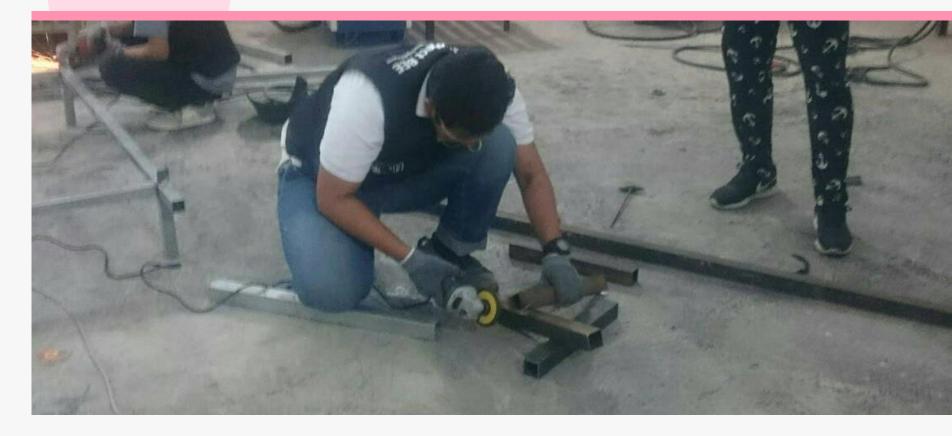
### Steps



#### 1st step

Measure the length of the hollow steel that will be cut.

### 2nd step



Cut the hollow steel based on the measurement we have done before.



### Steps



#### 3rd step

Weld all the hollow steel to make it as a frame.

### 4th step



Cut the steel plate.



#### 5th Step

Weld the whole frame to the steel plate.

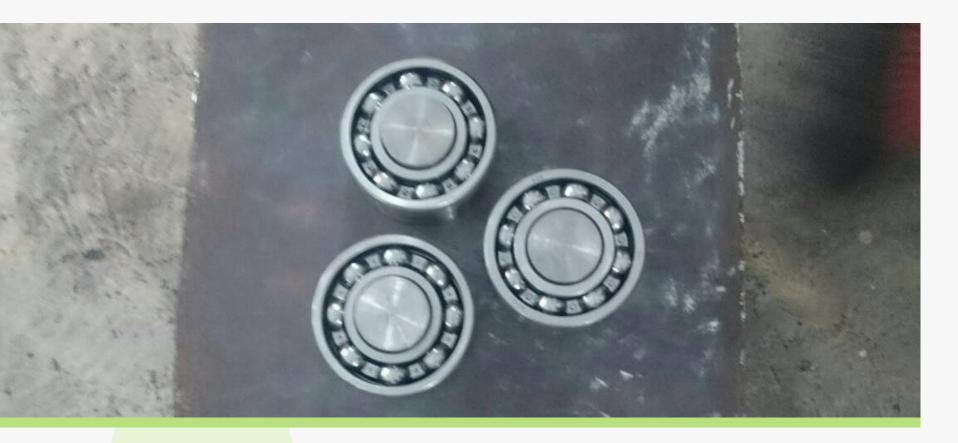
### 6th step



Cut the shaft as high as the bearings.

22





#### 7th step

Weld the three shafts on the plate. And put two bearings by each shaft.

### 8th step



Weld the lever on the bearings.

23





#### 9th step

Polish the product with an anti-oxidant. And then, paint it as a white color with a compressor

#### The Final Product

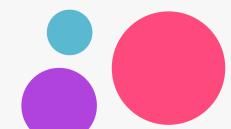






## How To Use











# How To Maintain



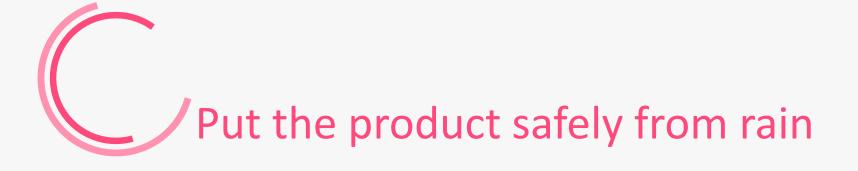




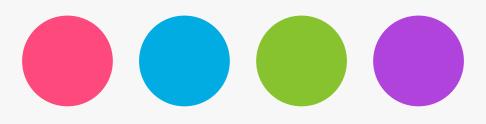
### How to maintain

Roller Machine

Coating the product with an antioxidant regulary







# Result









# Thank You!

Any Questions?



