INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

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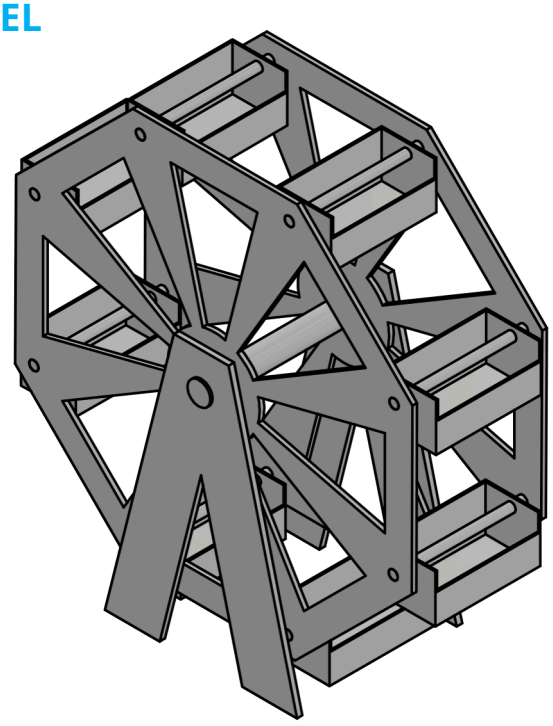
LAB IN CHARGE - MR. ANIL KUMAR VERMA
COURSE IN CHARGE - MR. I.P SINGH
TUTOR - PROF. KALLOL MANDOL
TOPIC- GIANT WHEEL



S. NO.	GROUP MEMBER	SIGNATURE
1	230795-PRITI VERMA	
2	230755-PIYUSH SINGAL	
3	230743-PATHAK PRINCE	
4	230744-PATIL VED VINAY	
5	230781-PRATIK KUMAR	
6	230772-PRANAV KRISHNA	

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INTRODUCTION

The Giant Wheel project aims to design and develop a large-scale Ferris wheel that serves as both an iconic landmark and a major attraction. This project involves the engineering and construction of a giant wheel, which will be a centerpiece in a recreational or urban setting, providing panoramic views and an unforgettable experience for visitors.

Motivation

We came across this idea while seeking some inspiration for our TA211. When we saw the animated image of this idea ,it caught our attention and we were stupefied by just looking at it. At this point , we decided , that we will apply our TA211 theory to make this image into concrete manifestation .

We were so fascinated by its image , that we wondered how would it feel to have this experience in physical . we thus embarked on this small journey of ours to see how it works in the flesh.

Our disposition to share this excitement with others also had some part in our project.

ACKNOWLEDGEMENT

It is with great reverence that we express our gratitude to our tutor and course instructor “Prof. Kantesh Balani , and the course in charge , Mr. Indra Pal Singh” for their precious guidance and constructive suggestions throughout the planning and development of this project . Their dedication, keen interest, and above all, their

Overwhelming attitude has gone a long way in helping us achieve what we intended to.

We also express our deep appreciation to highly experienced lab staff “ Mr. Indra Pal, Mr. Anil Kumar Verma , Mr. Rakesh Kumar , Mr. Gaurav Mishra ,Mr. Bharat Raj Singh, Mr. Surya Prakash Sonkar , Mr. Rajdipta Samandder, Mr. Avinash Chandra Saini” for their constant guidance , supervision and support has played a pivotal role in the completion of our project.

Special thanks to our TAs Mr. Praveen Kumar , Ms. Bhavna for giving us their valuable time.

Finally we would also like to thank the MSE Laboratory in-charge,Mr. Anil Kumar Verma for giving us this invaluable opportunity to do something constructive using the various available manufacturing processes.

WORK DISTRIBUTION

	Week1	Week 2	Week 3	Week 4	Week 5	Week 6
Piyush Singal	Octagonal plate	Octagonal plate	Octagonal plate	Octagonal plate	Assembly	Assembly
Pathak prince	Octagonal plate	Octagonal plate	Octagonal plate	Octagonal plate	Assembly	Assembly
Pranav krishna	Seat	Seat	Seat	Seat	Assembly	Assembly
Patil ved	Stand	Stand	Stand	Stand	Assembly	Assembly
Pratik	Wheel axle	Wheel axle	Seat	Seat	Assembly	Assembly
Priti verma	Seat axle	Seat axle	Stand	Stand	Assembly	Assembly

Material List

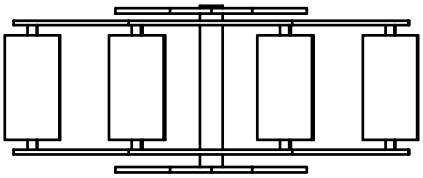
1.Mild steel sheet: 1.4ft X 2.8ft X 1mm
2. Mild steel sheet: 1.4ft X 2.8ft X 2mm
3.Mild steel rod : 3mm dia X 12 feet
4.Mild steel round pipe: 10mm dia X 1.5 feet
5.GI Steel: 3ft X 4ft X 0.35 mm

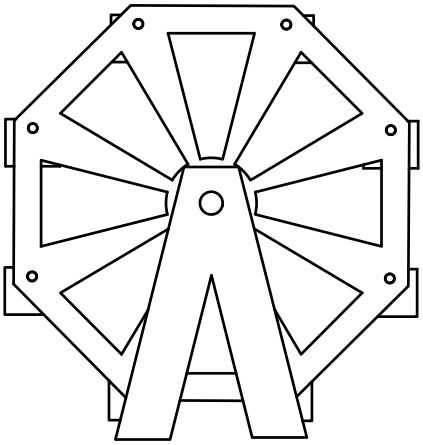
Cost Estimation

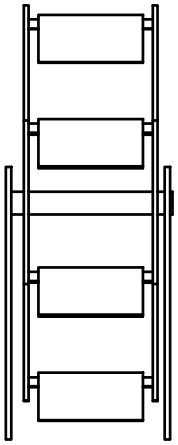
1.Mild steel sheet: Rs 535/-
2.Mild steel rod: Rs 72/-
3.Mild steel pipe: Rs 25/-
4.GI Steel: Rs 780/-

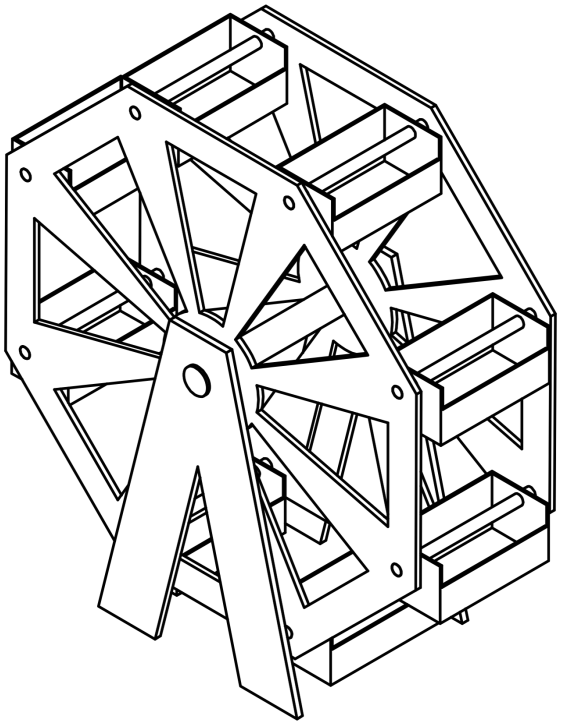
Total Estimated Cost = Rs 1412/-

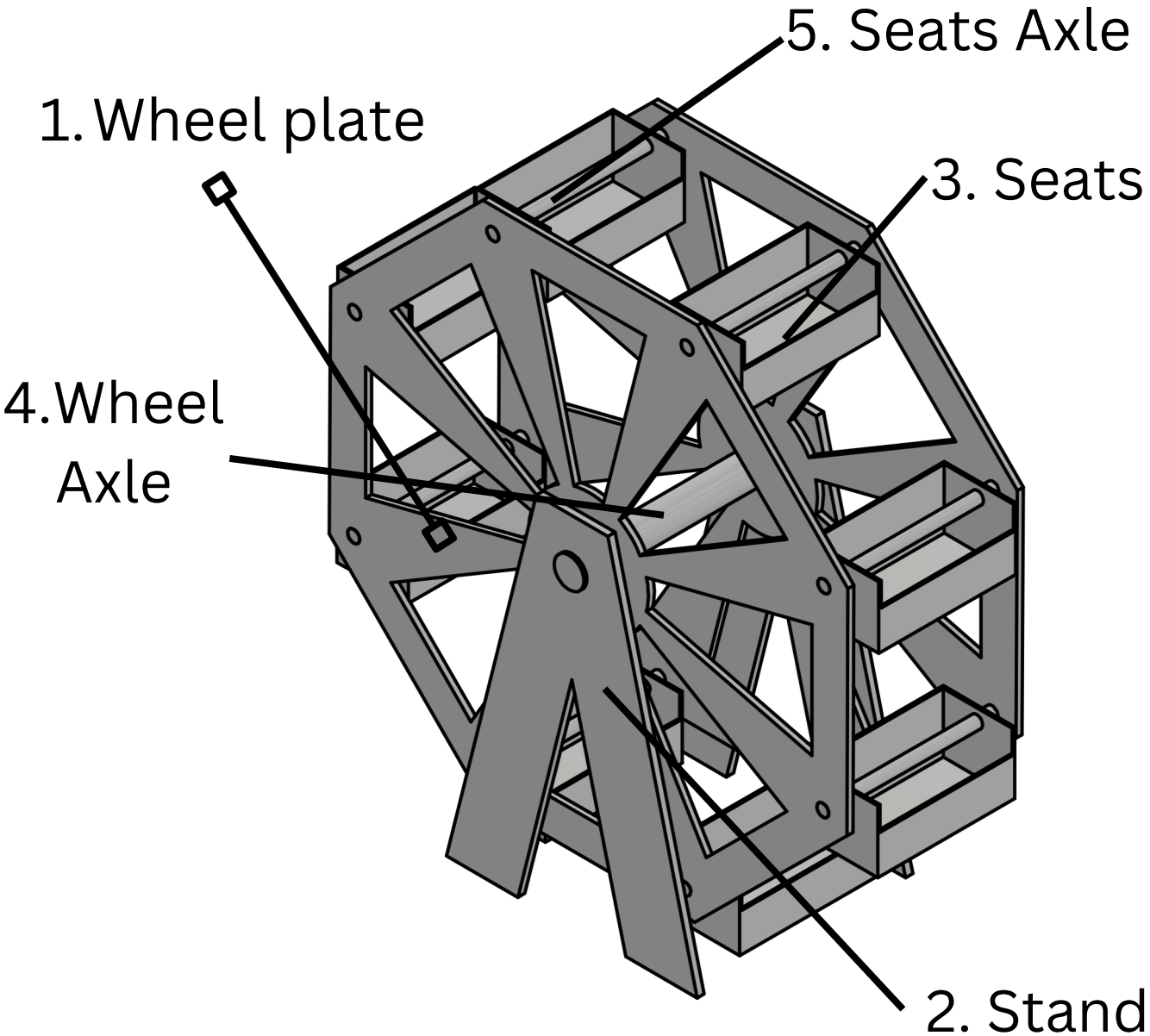
Isometric Drawing

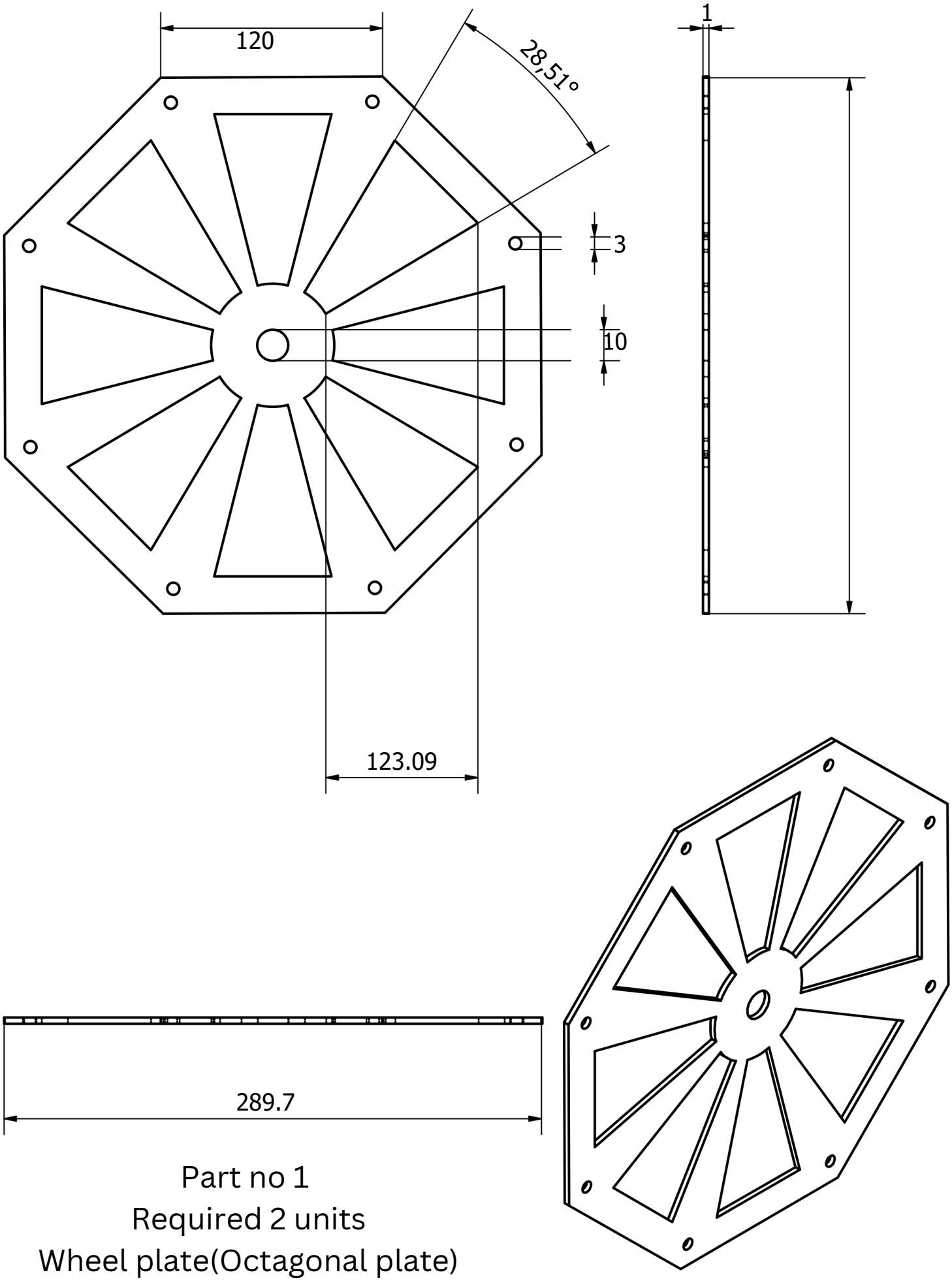












Part no 1

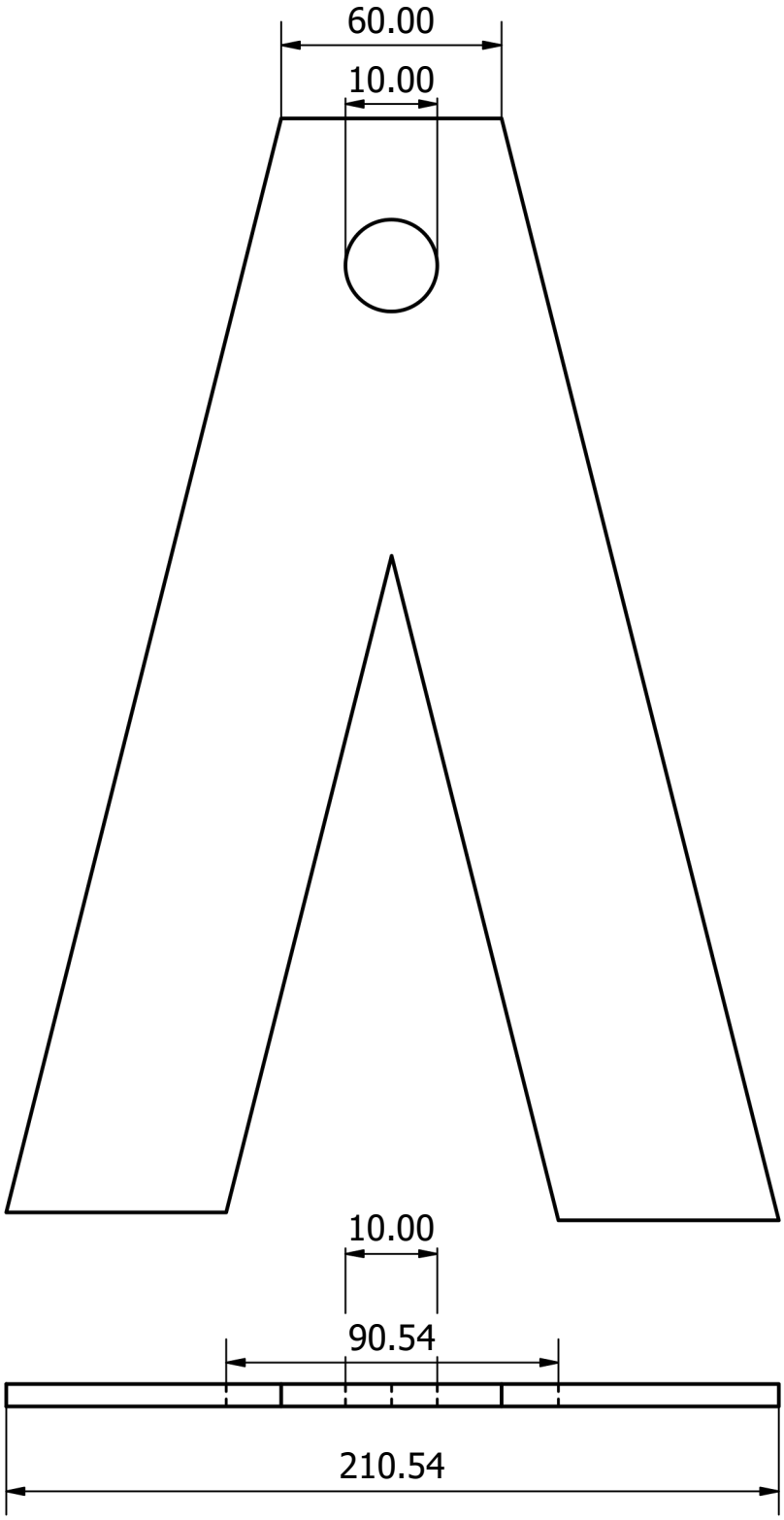
Required 2 units

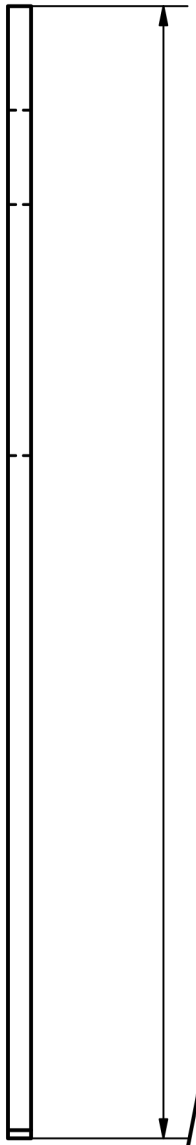
Wheel plate(Octagonal plate)

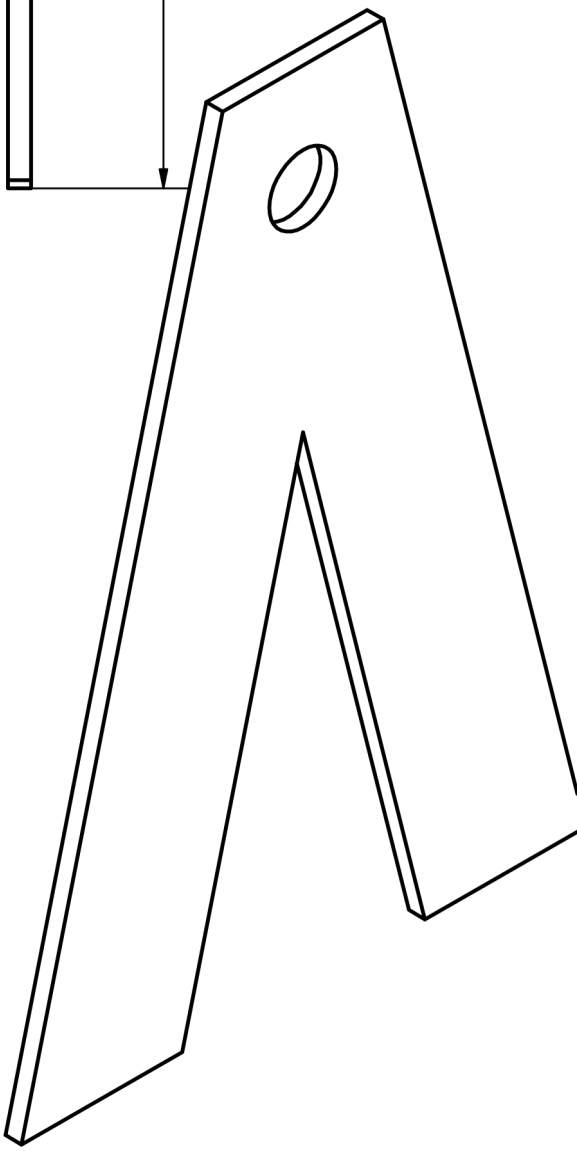
Material used-Mild steel

Process-Plasma cutting

All dimensions are in mm







Part no 2

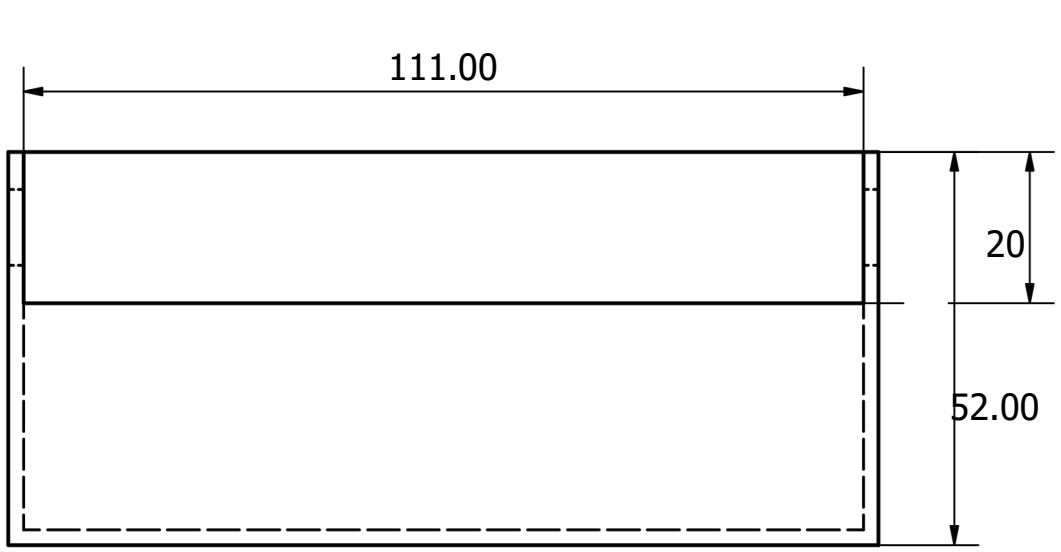
Required 2 units

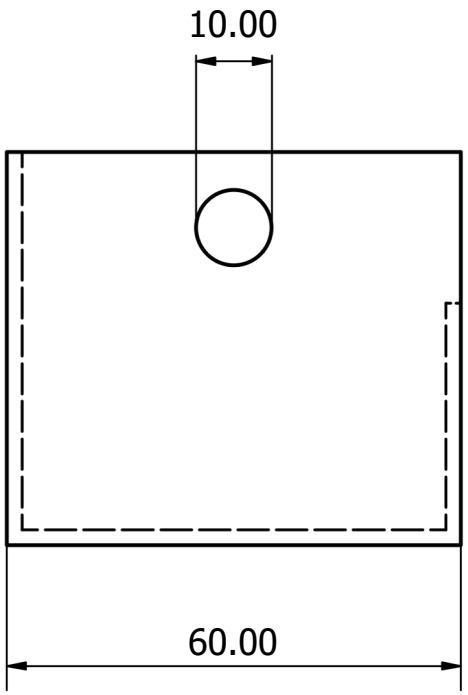
Stand

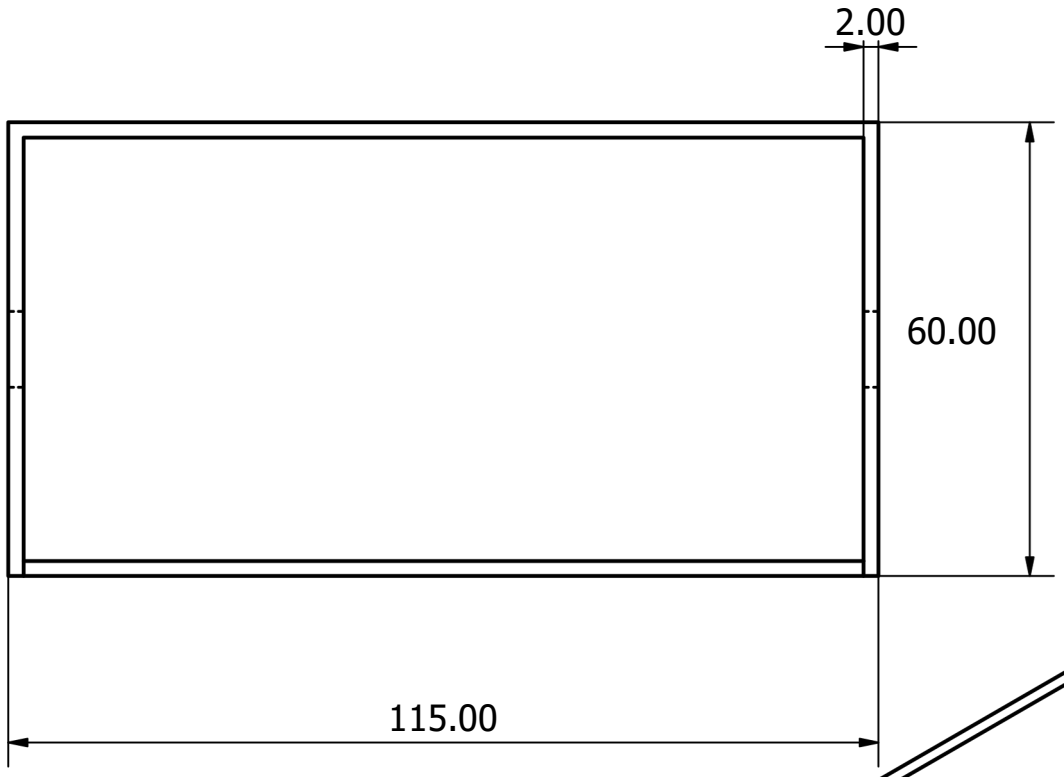
Material used-Mild steel

Process-Plasma cutting,Welding

All dimensions are in mm







Part no 3

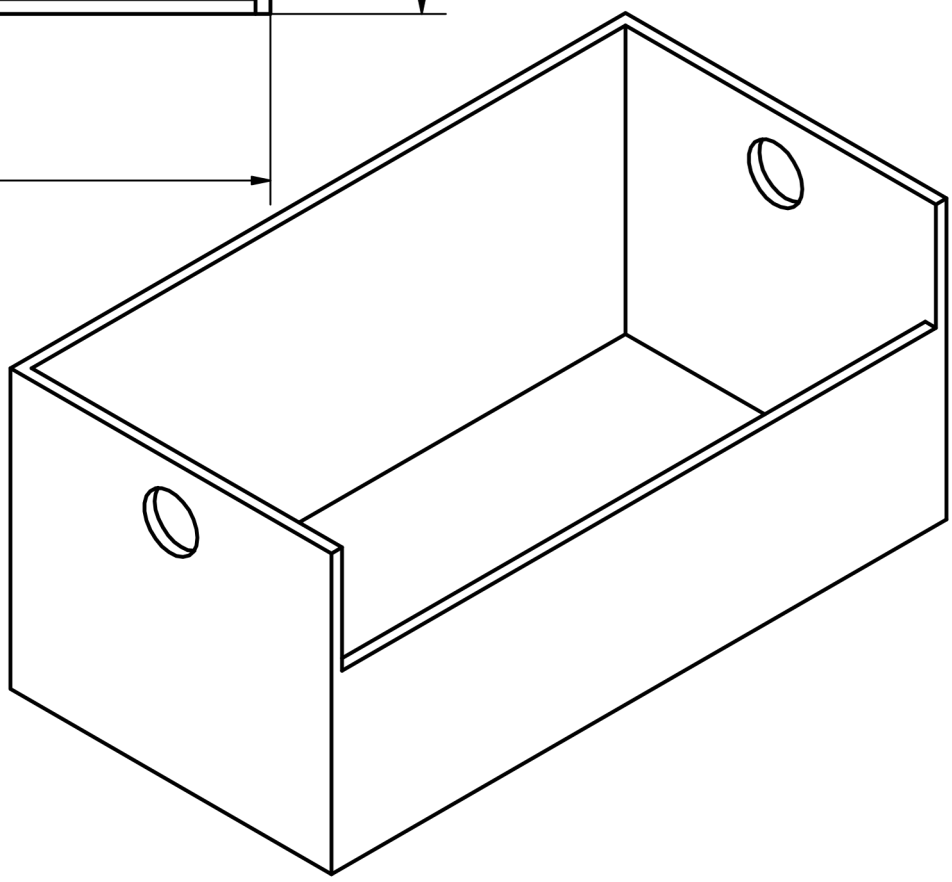
Required 8 Units

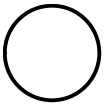
Seat

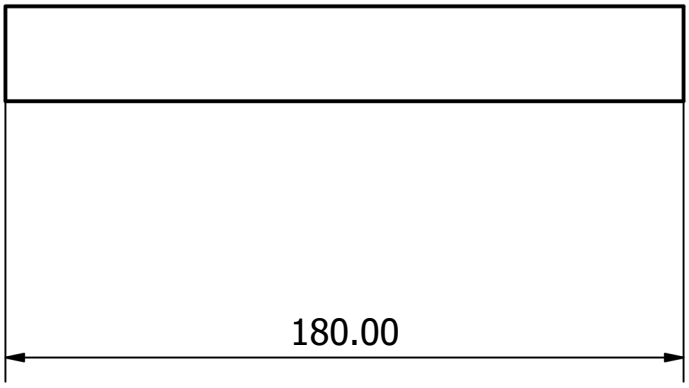
Material used-GI Sheet

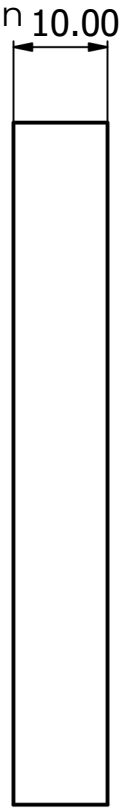
Process-Sheet metal forming

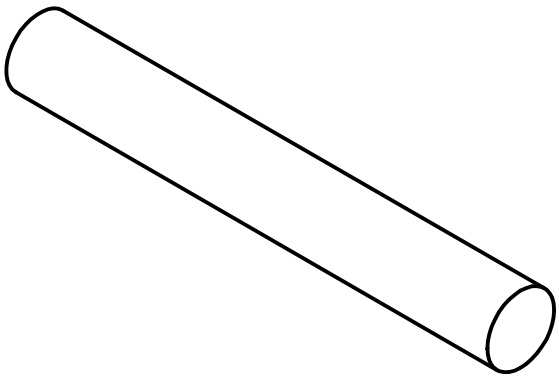
ALL dimensions are in mm











Part no 4

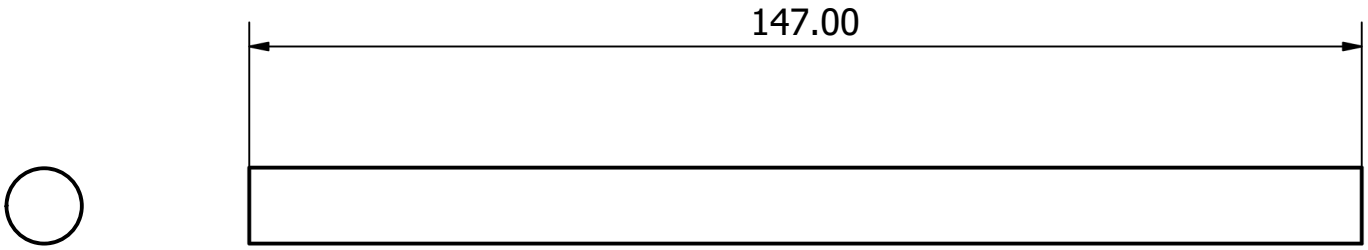
Required 1 unit

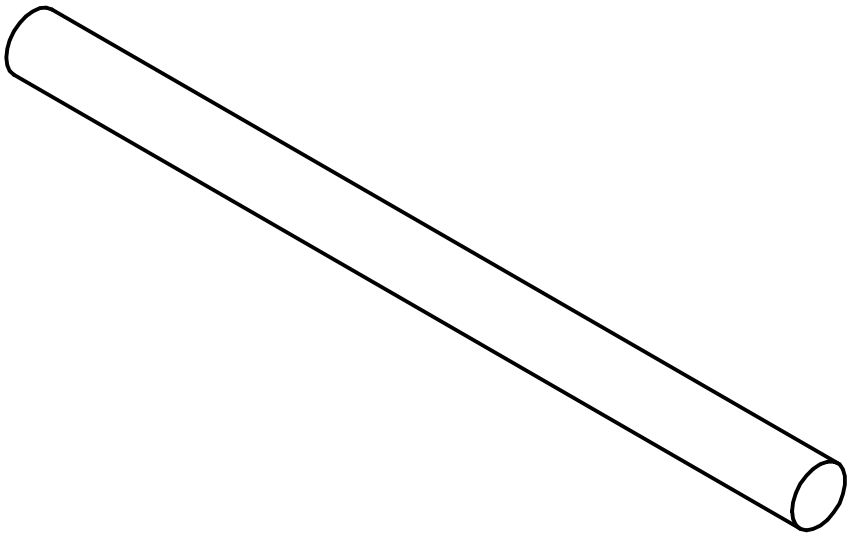
Wheel Axle(Centre rod)

Material used-Mild steel

Process-Turning cutting,Welding

ALL dimensions are in mm





Part no 5

Required 8 units

Seat Axle

Material used-Mild steel

Process-Turning, cutting,Welding

ALL dimensions are in mm