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KLE TECH.

TEAM_03

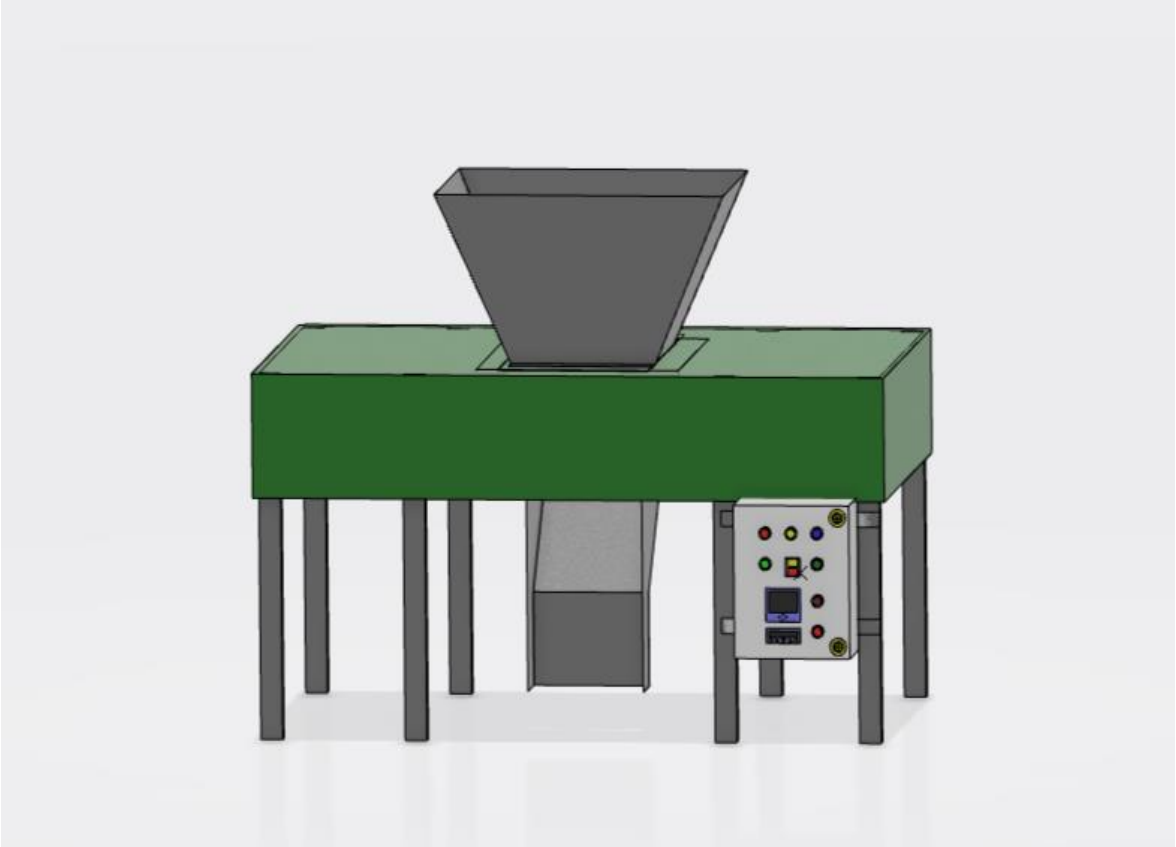
MINI PROJECT NAME(15EMEW301)

Double shaft shredder machine:

GUIDED BY:

Prof: Shivanandagouda Patil

Prof: Vinay Tigadi



TEAM MEMBERS

SN	NAME	USN	ROLL NO
01	VIVEKANAND HEBSUR	01FE20BME010	303
02	SIDDU HEBBALI	01FE20BME034	311
03	NAVEEN F WALMIKI	01FE20BME037	314
04	MITHIL HALUNDI	01FE20BME015	351
05	SHANMUKH A	01FE20BME050	354
06	LAXMI G SUREBAN	01FE20BME115	358

INTRODUCTION

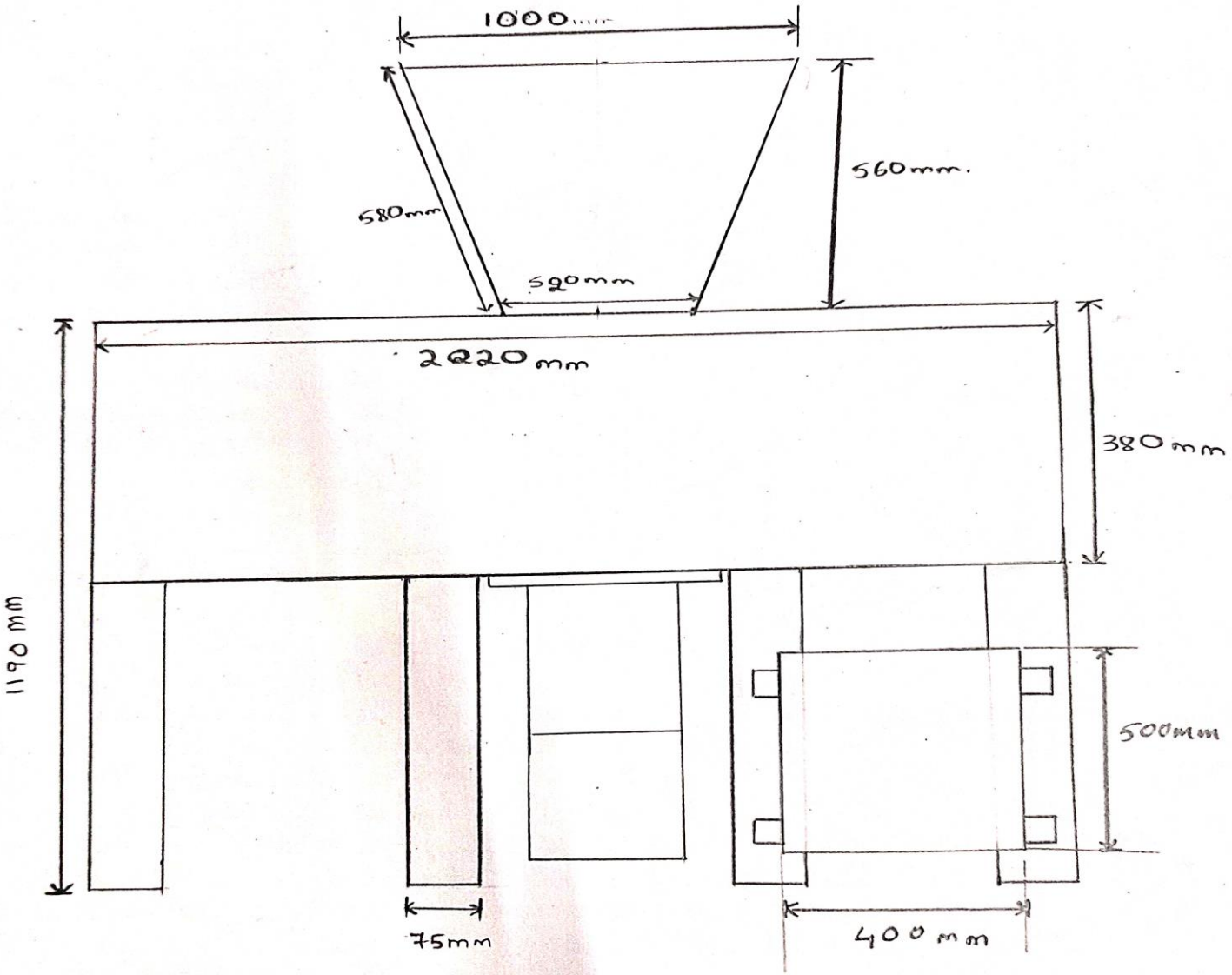
Double shaft shredder Machine is widely used in crushing various kinds of plastic scraps, such as plastic drum, pvc pipe, plastic film, plastic toys, plastic pallet, plastic lumps, refrigerator, washing machine, television, air conditioner and other household appliances, etc

OBJECTIVES

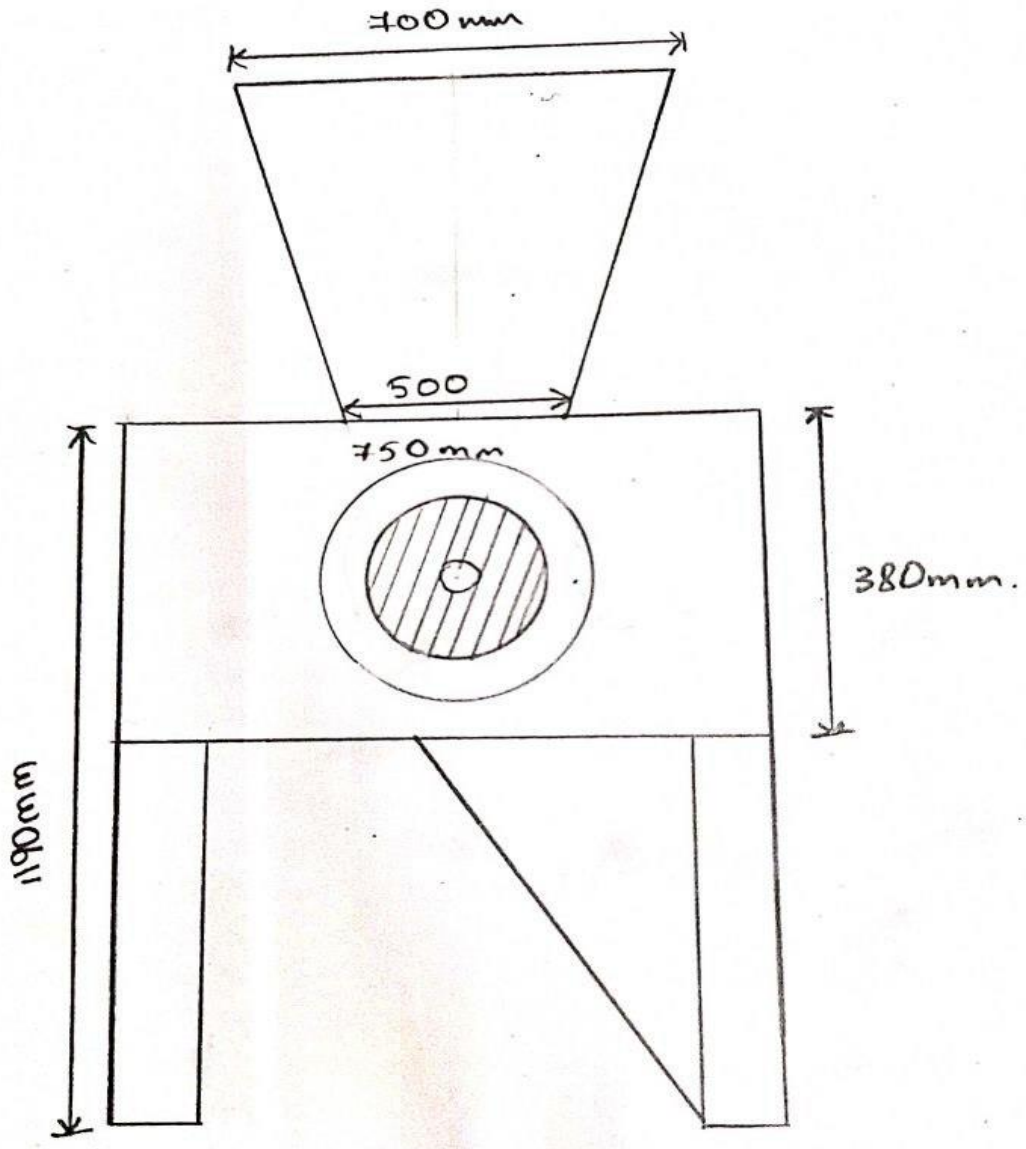
1. Plastic shredder is easy to operate and easy to maintain.
2. Plastic shredder has a low speed , high torque, low noise, compact design.
3. Plastic shredder with a special material, long life , high utilization rate; knives can be exchanged easily and quickly;
4. In case the scrap metal shredder is overloaded or foreign object are are in cutting unit, the rotor stops and moves backward automatically to prevent overfeeding and protect against damage from foreign objects.

ORIGINAL PRODUCT

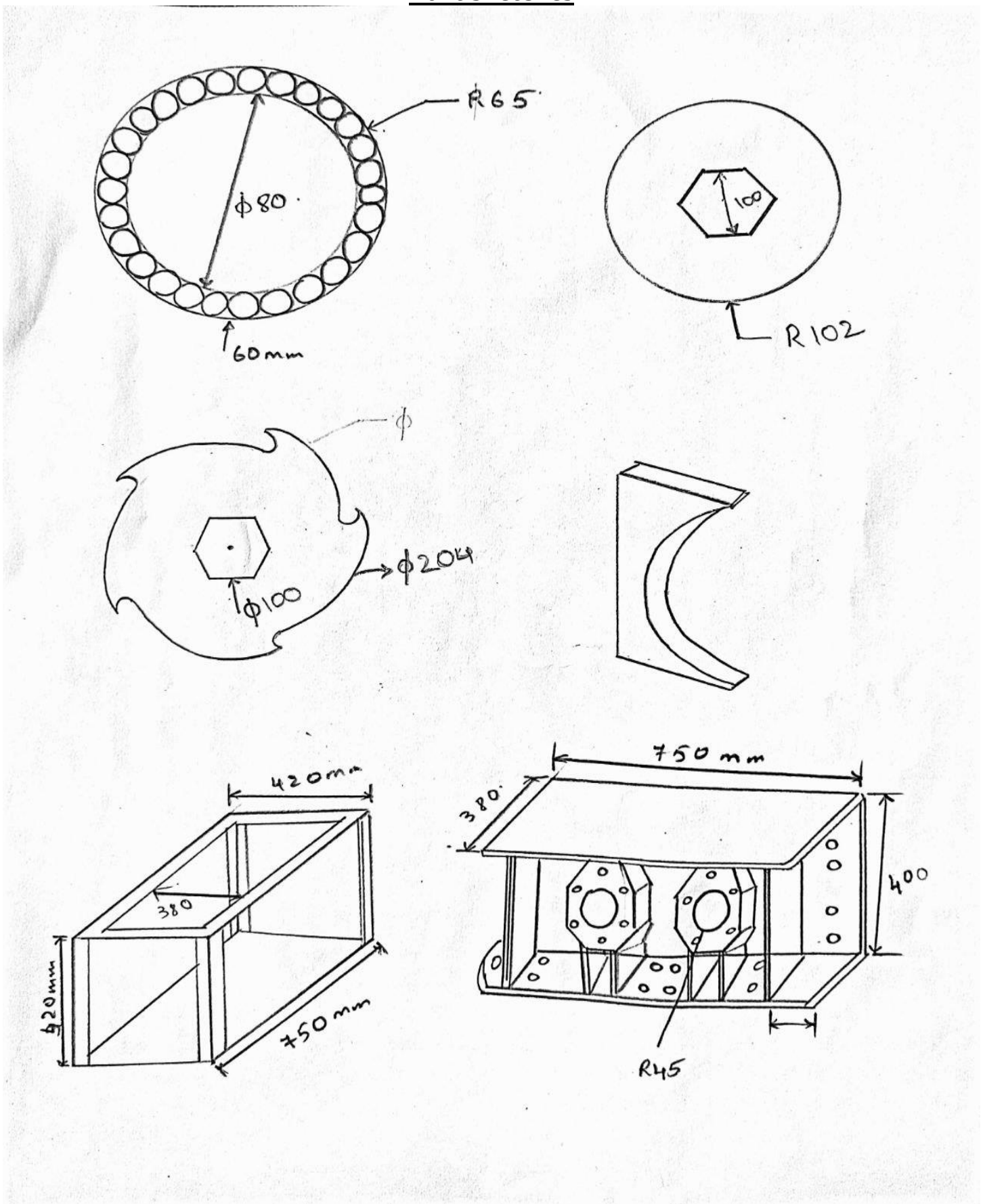
2D Sketches of Double shaft shredder machine

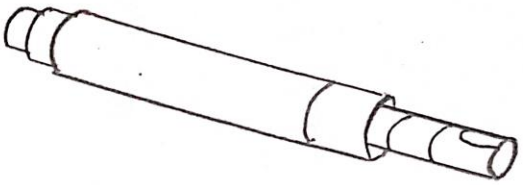


SIDE VIEW OF MACHINE

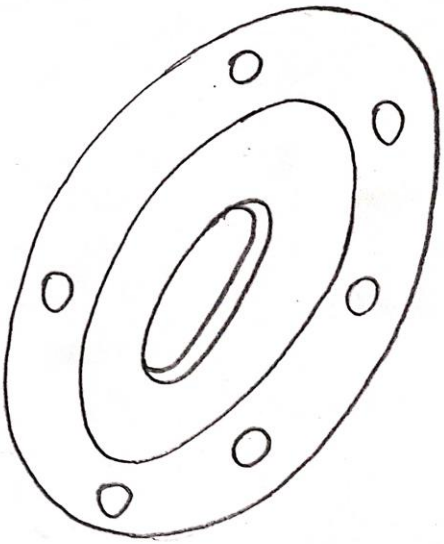


Part sketches





Drive shaft.



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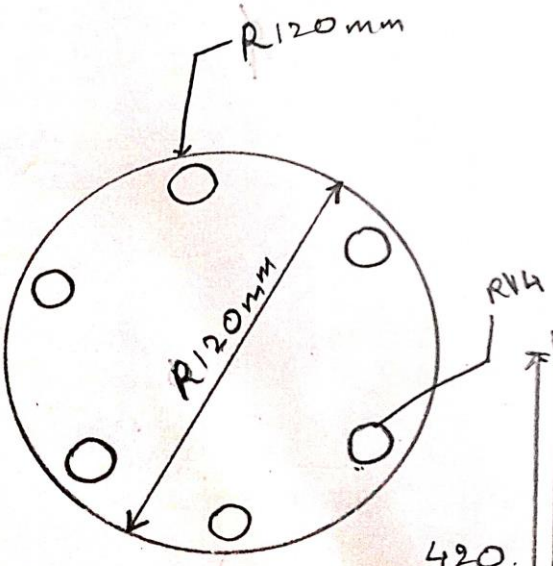
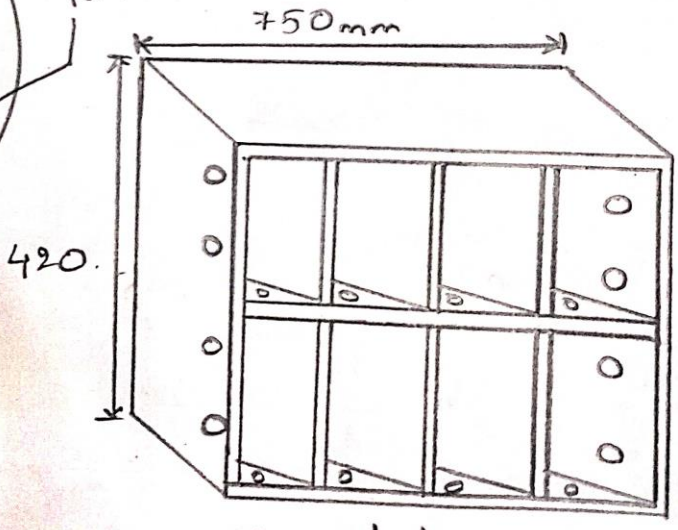
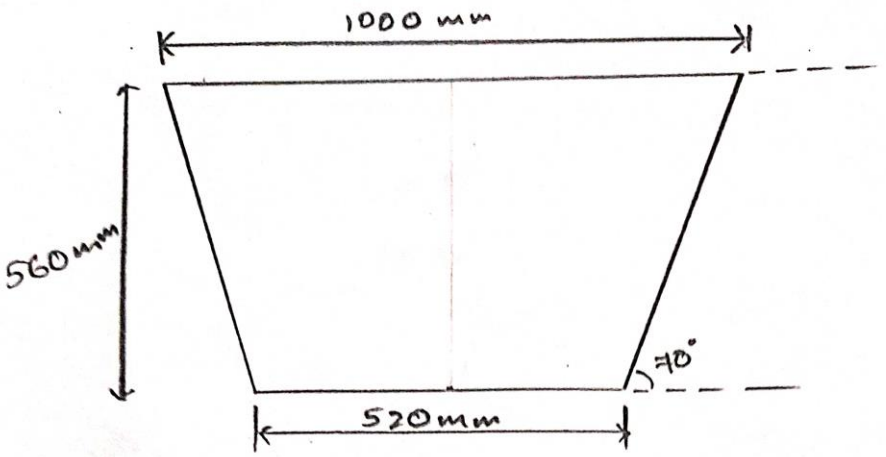
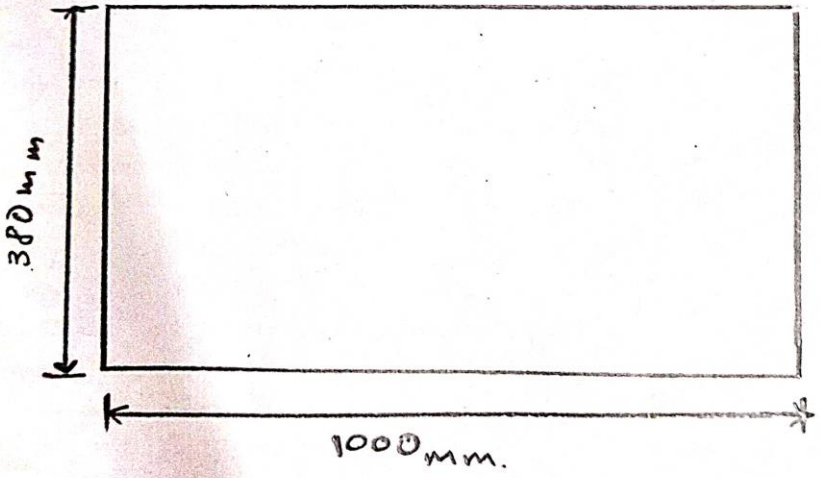


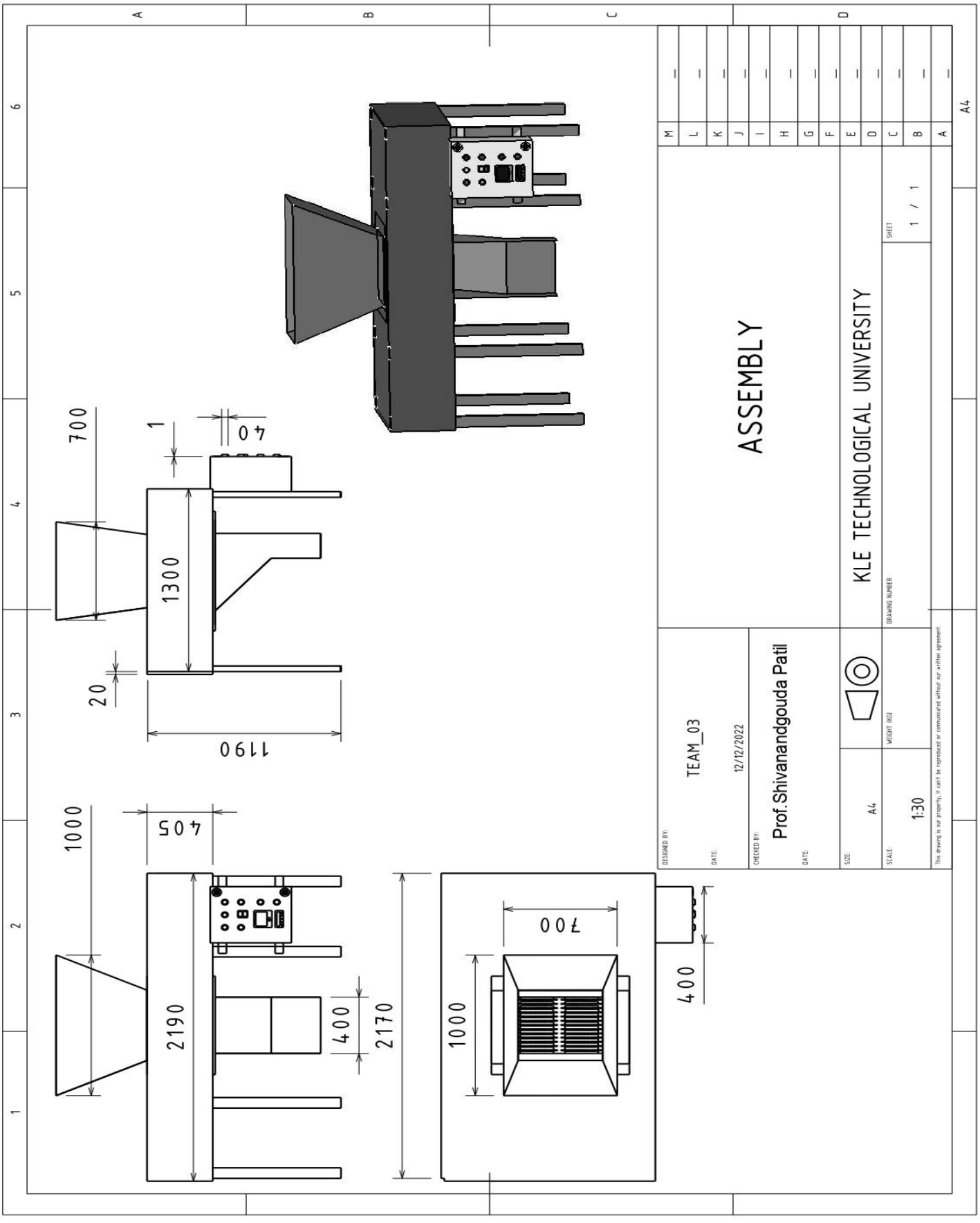


Support frame

INLET



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KLE TECHNOLOGICAL UNIVERSITY
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12/12/2022
Prof.Shivanandgouda Patil
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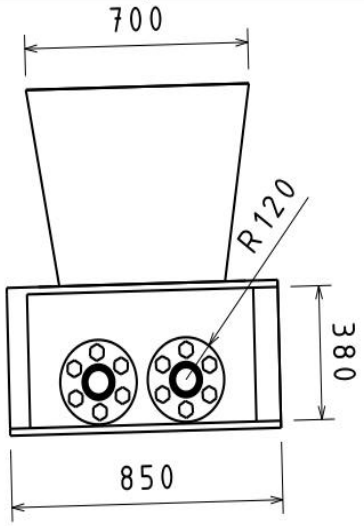

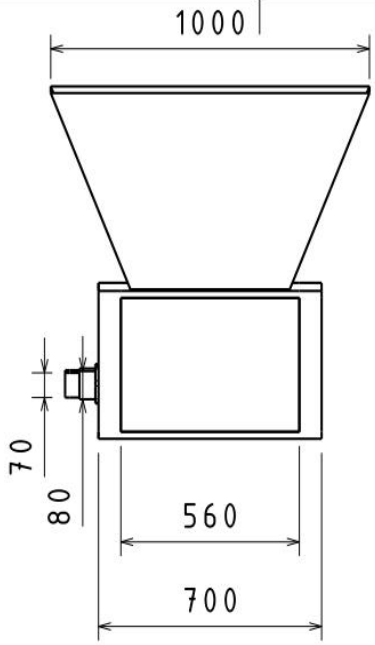

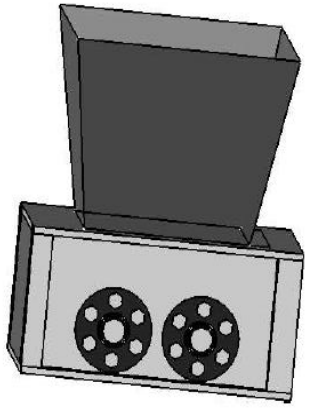

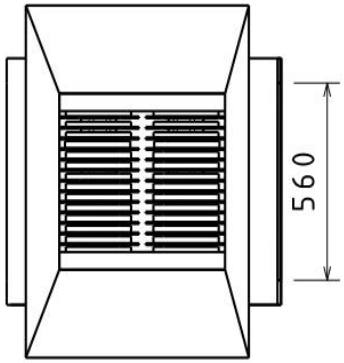

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CHECKED BY: Prof.Shivanandagouda Patil	
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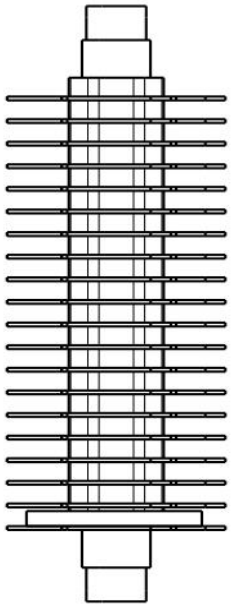

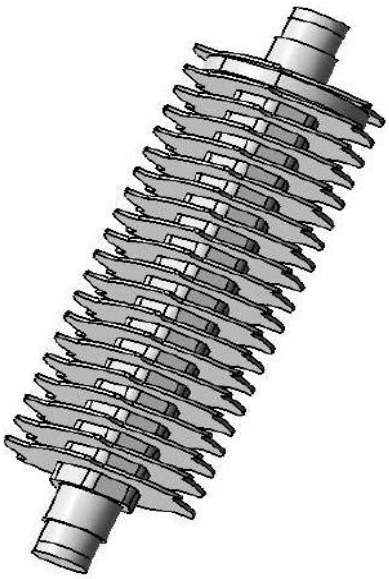

BLADE ASSEMBLY

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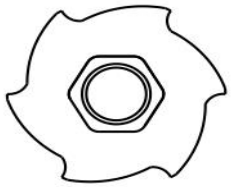

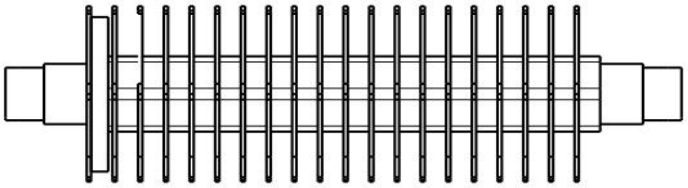

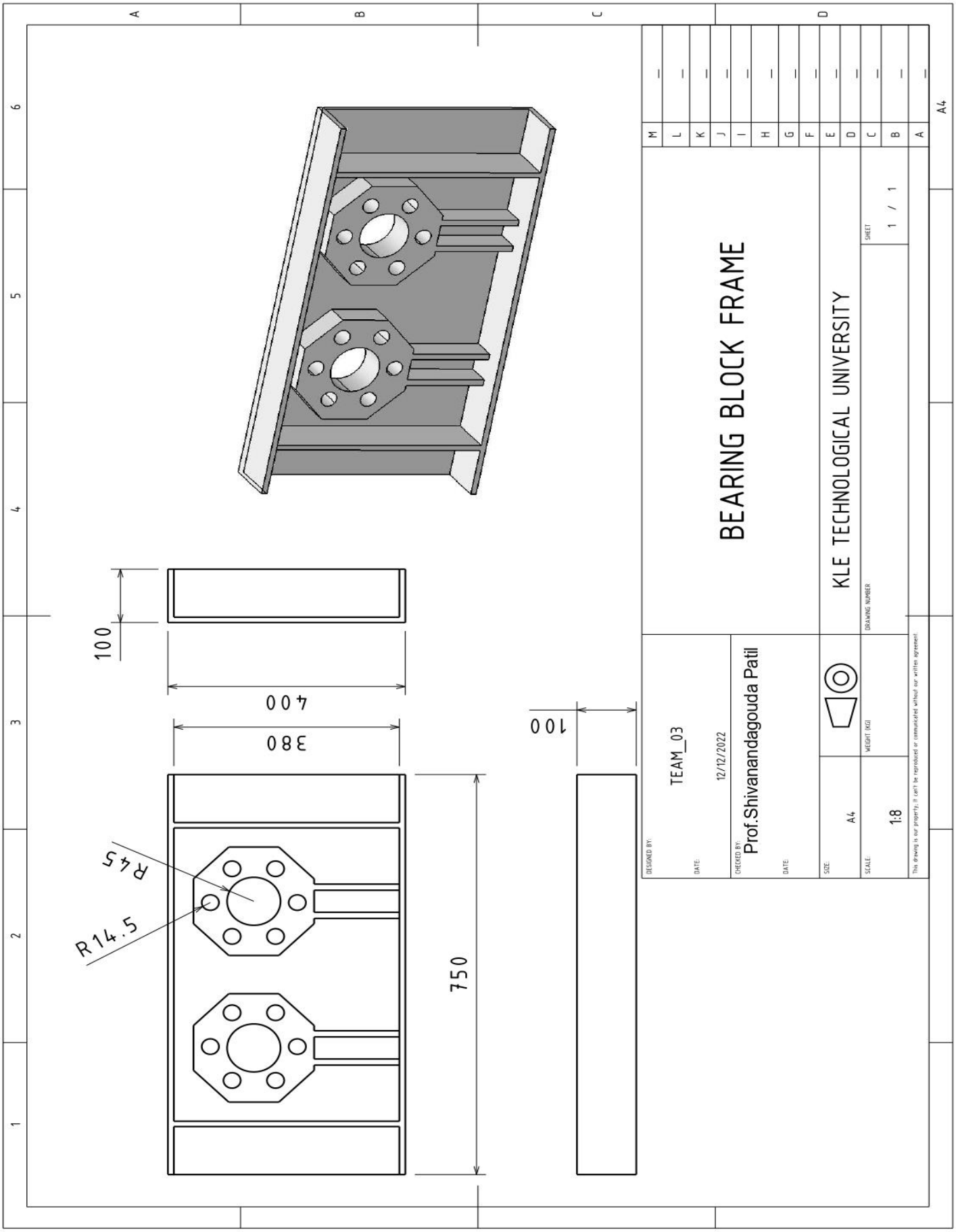
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KLE TECHNOLOGICAL UNIVERSITY
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12/12/2022
Prof.Shivanandagouda Patil
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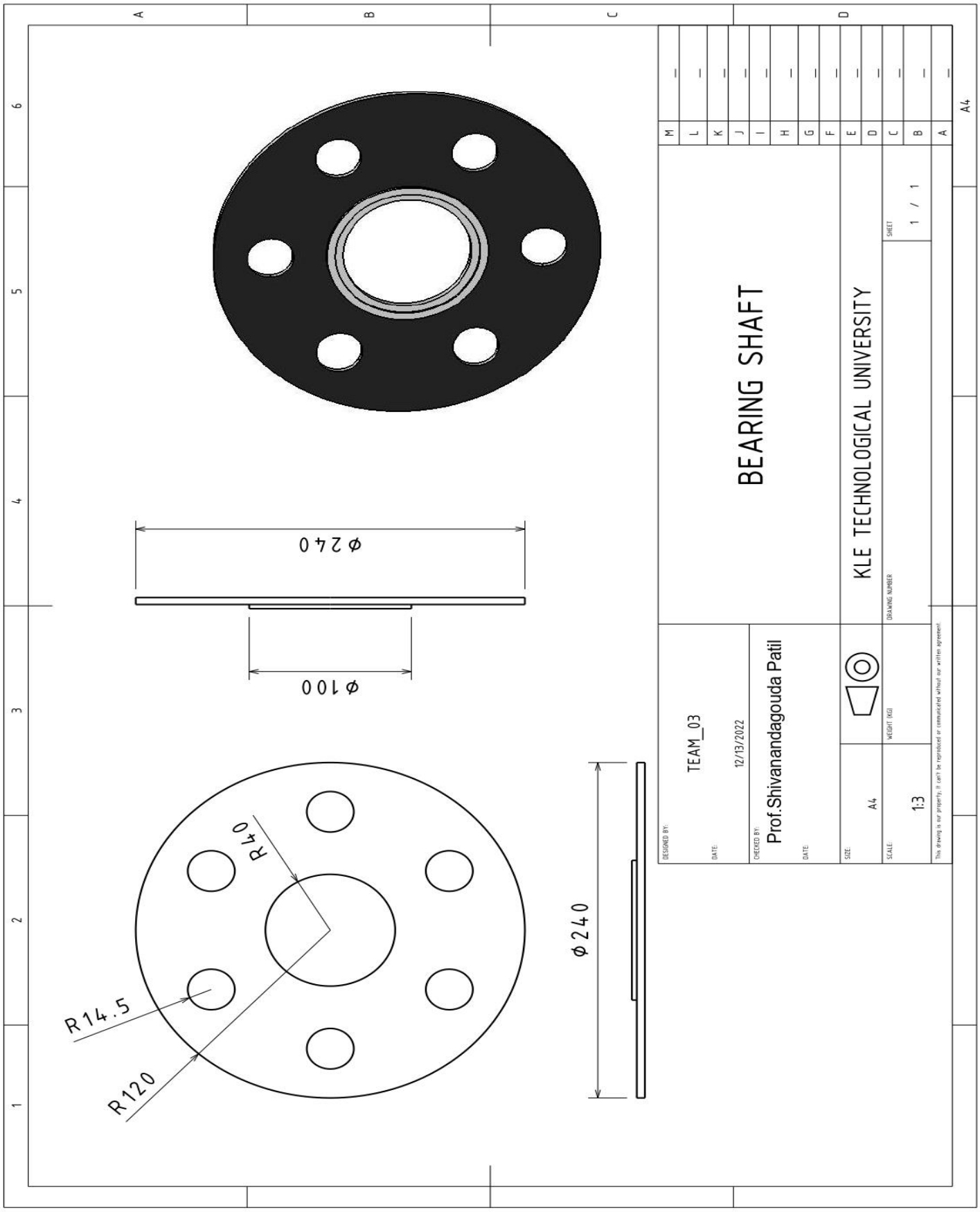
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KLE TECHNOLOGICAL UNIVERSITY
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Prof.Shivanandagouda Patil
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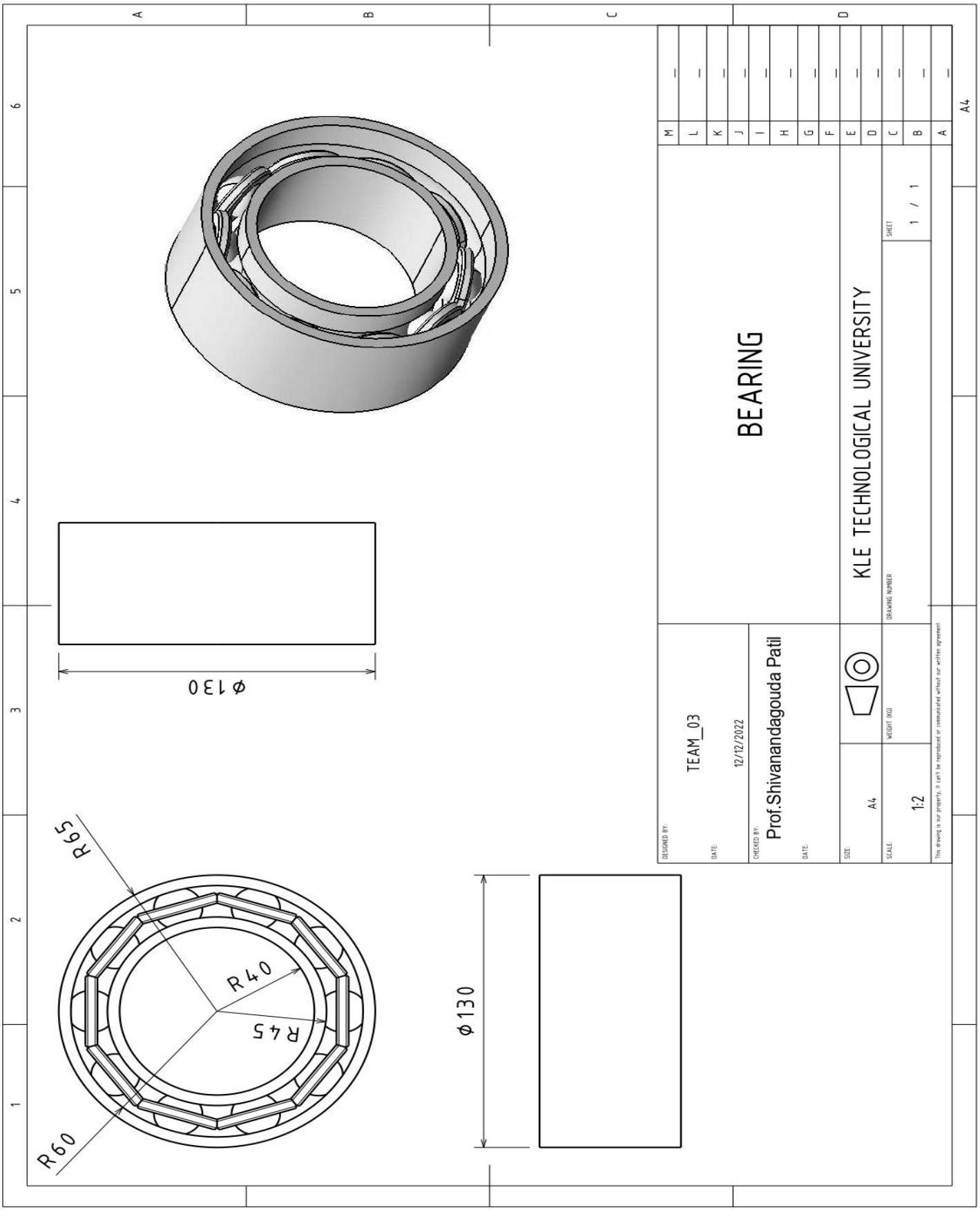
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KLE TECHNOLOGICAL UNIVERSITY
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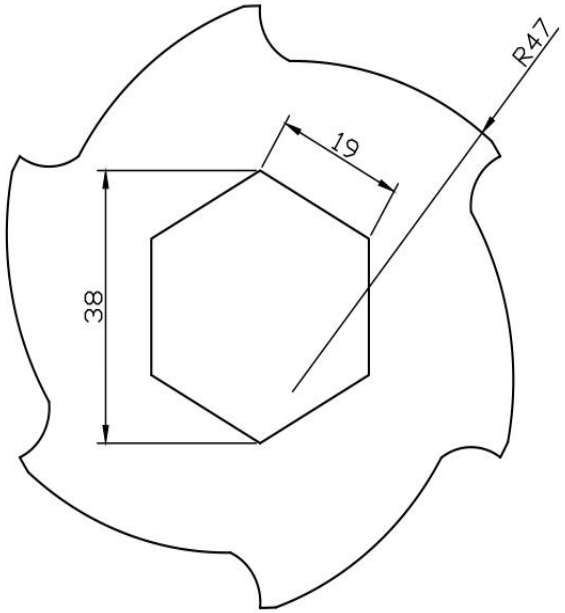

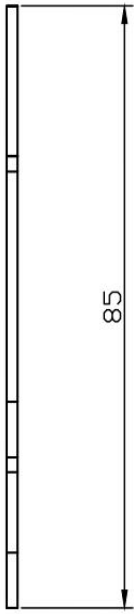

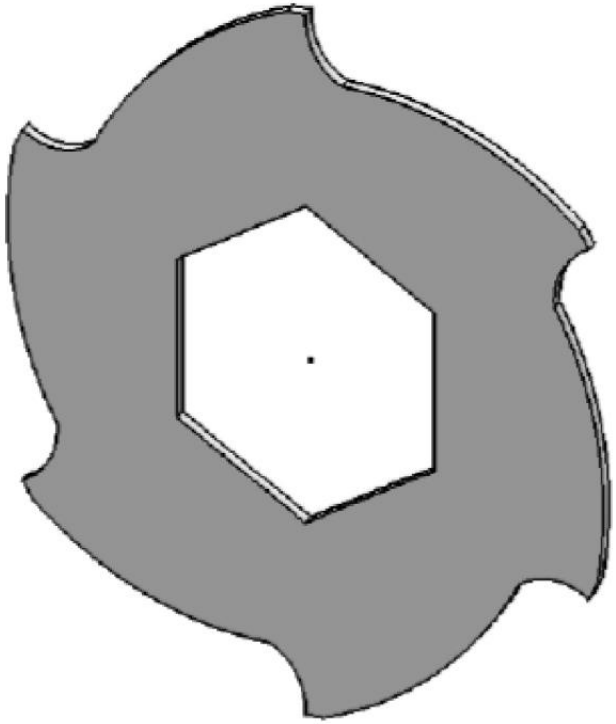

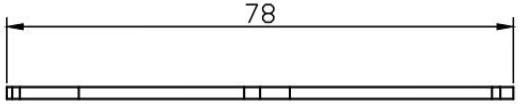

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CHECKED BY: Prof.Shivanandagouda Patil	KLE TECHNOLOGICAL UNIVERSITY		
DATE:			
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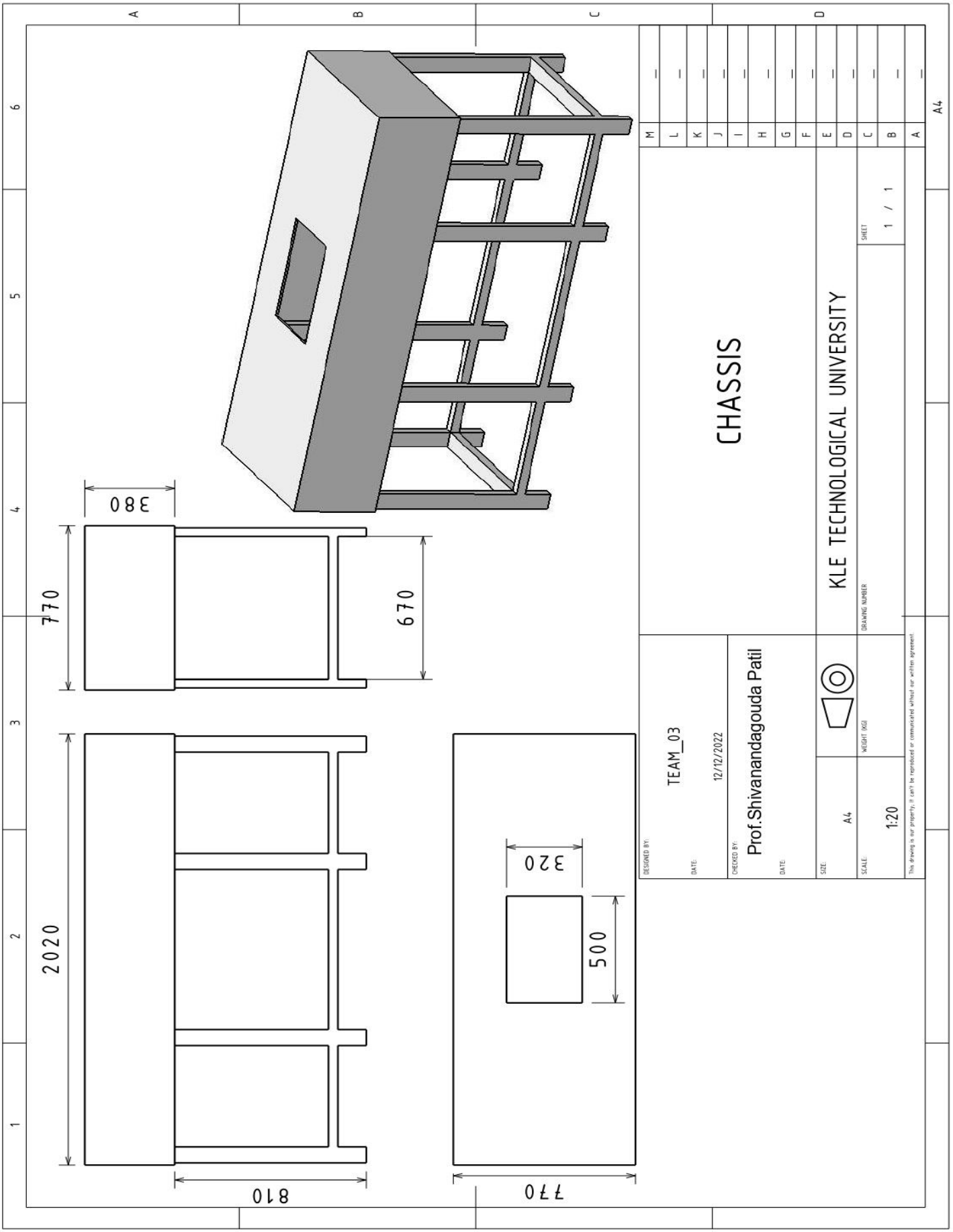
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12/12/2022
Prof.Shivanandagouda Patil
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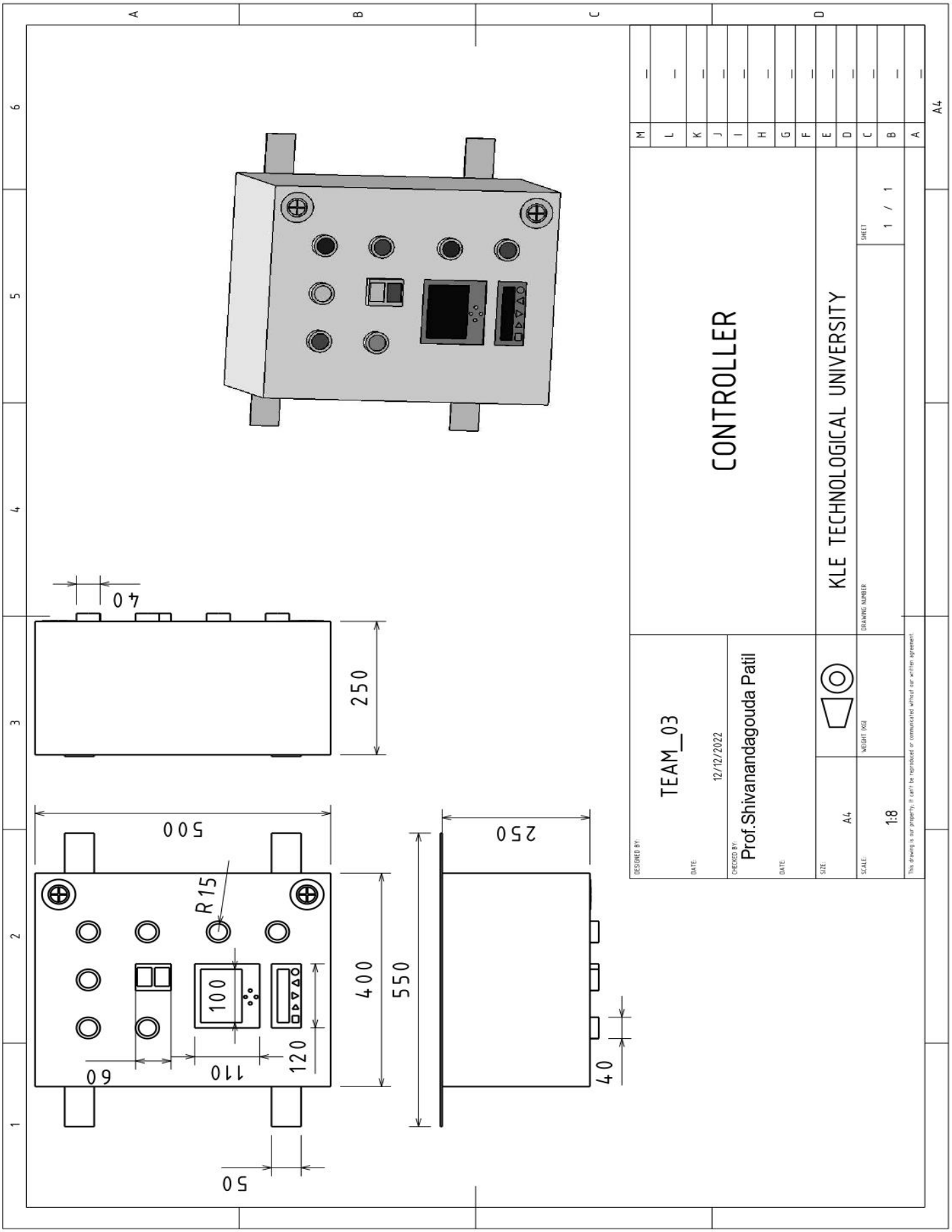
CONTROLLER
KLE TECHNOLOGICAL UNIVERSITY
TEAM_03
12/12/2022
Prof.Shivanandagouda Patil
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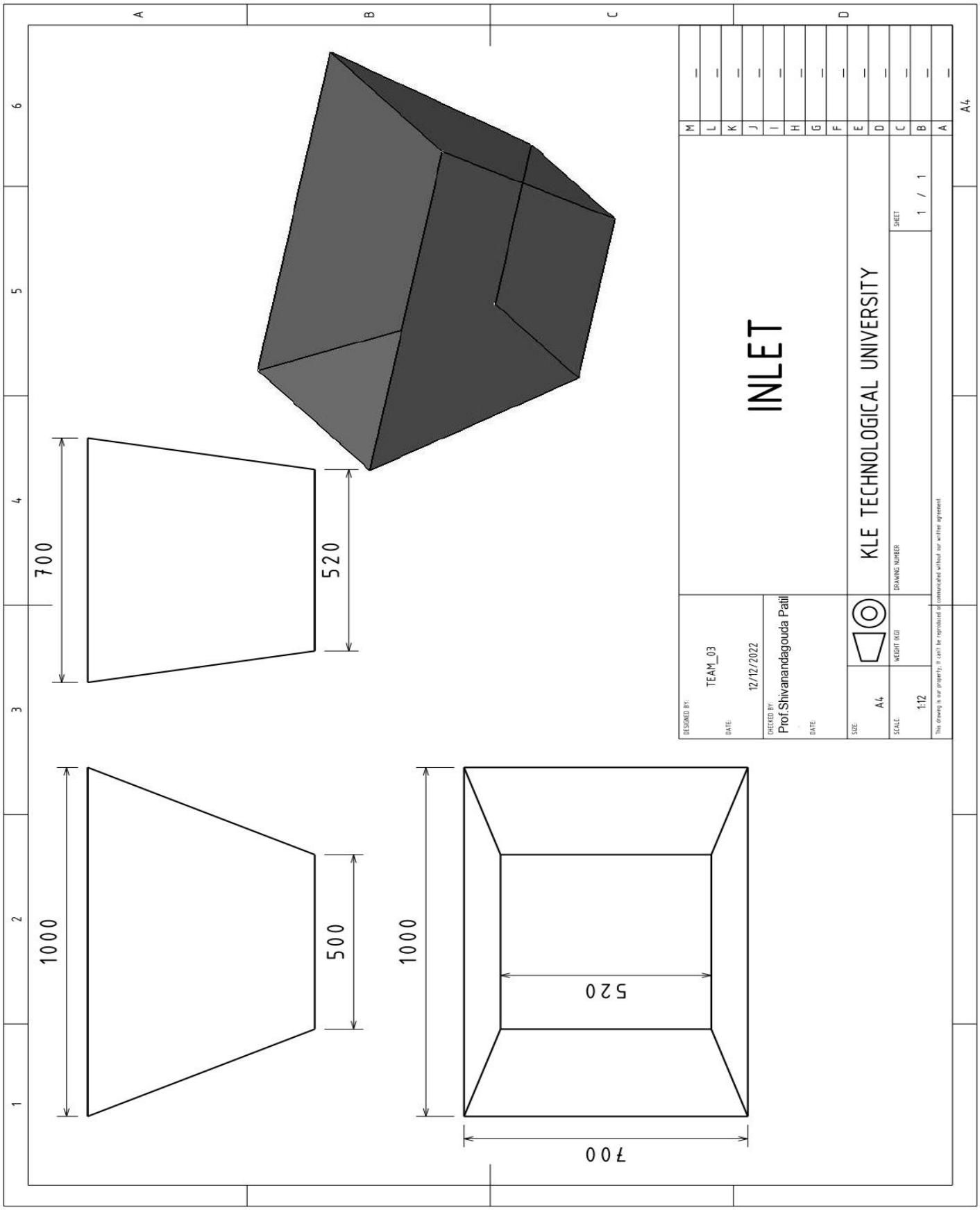
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KLE TECHNOLOGICAL UNIVERSITY
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TEAM_03
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12/12/2022
CHECKED BY:
Prof.Shivanandagouda Patil
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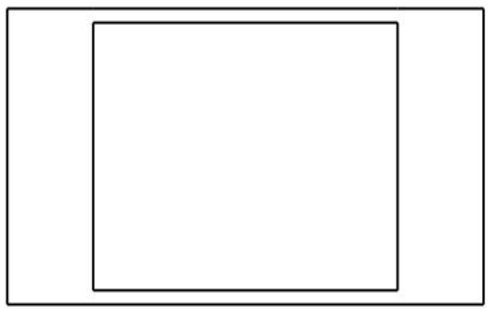

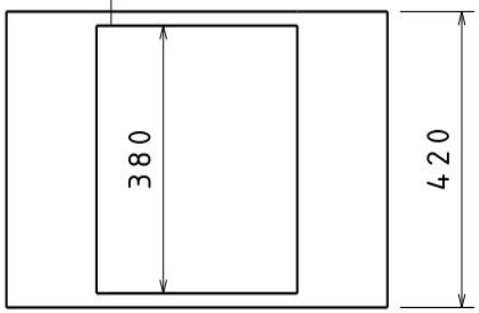

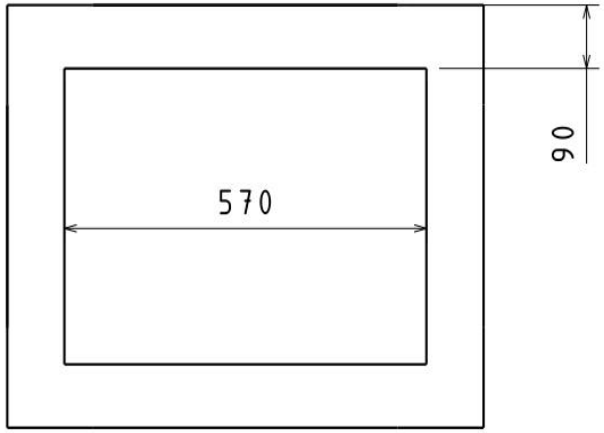

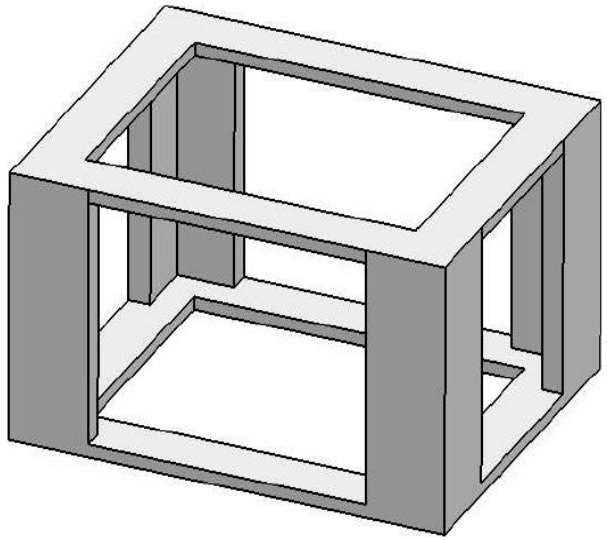

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CHECKED BY: Prof.Shivanandagouda Patil			
DATE:			
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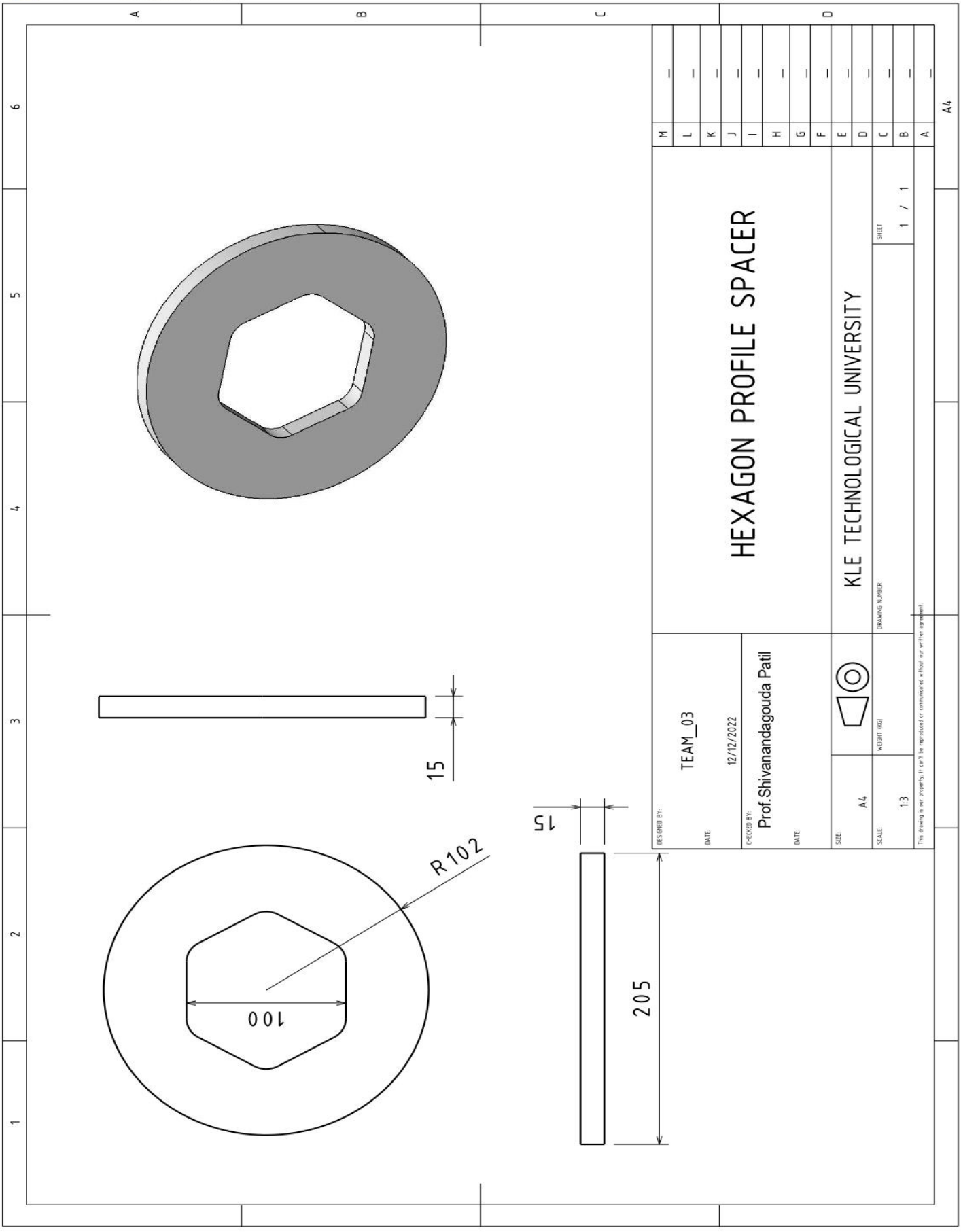
SCALE: 1:10	WEIGHT (KG)	DRAWING NUMBER	SHEET 1 / 1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KLE TECHNOLOGICAL UNIVERSITY
TEAM_03
12/12/2022
Prof.Shivanandagouda Patil
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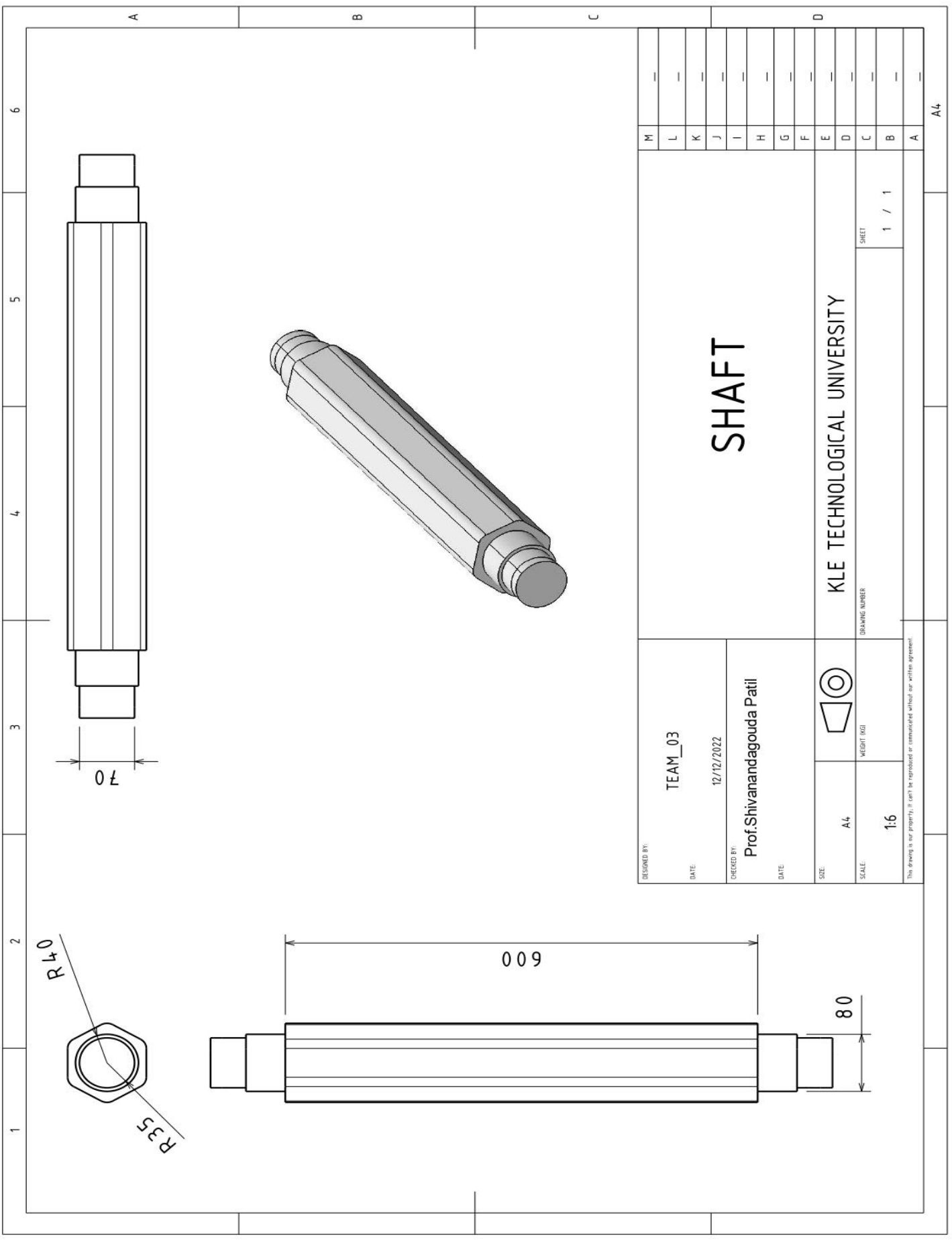
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KLE TECHNOLOGICAL UNIVERSITY
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12/12/2022
Prof.Shivanandagouda Patil
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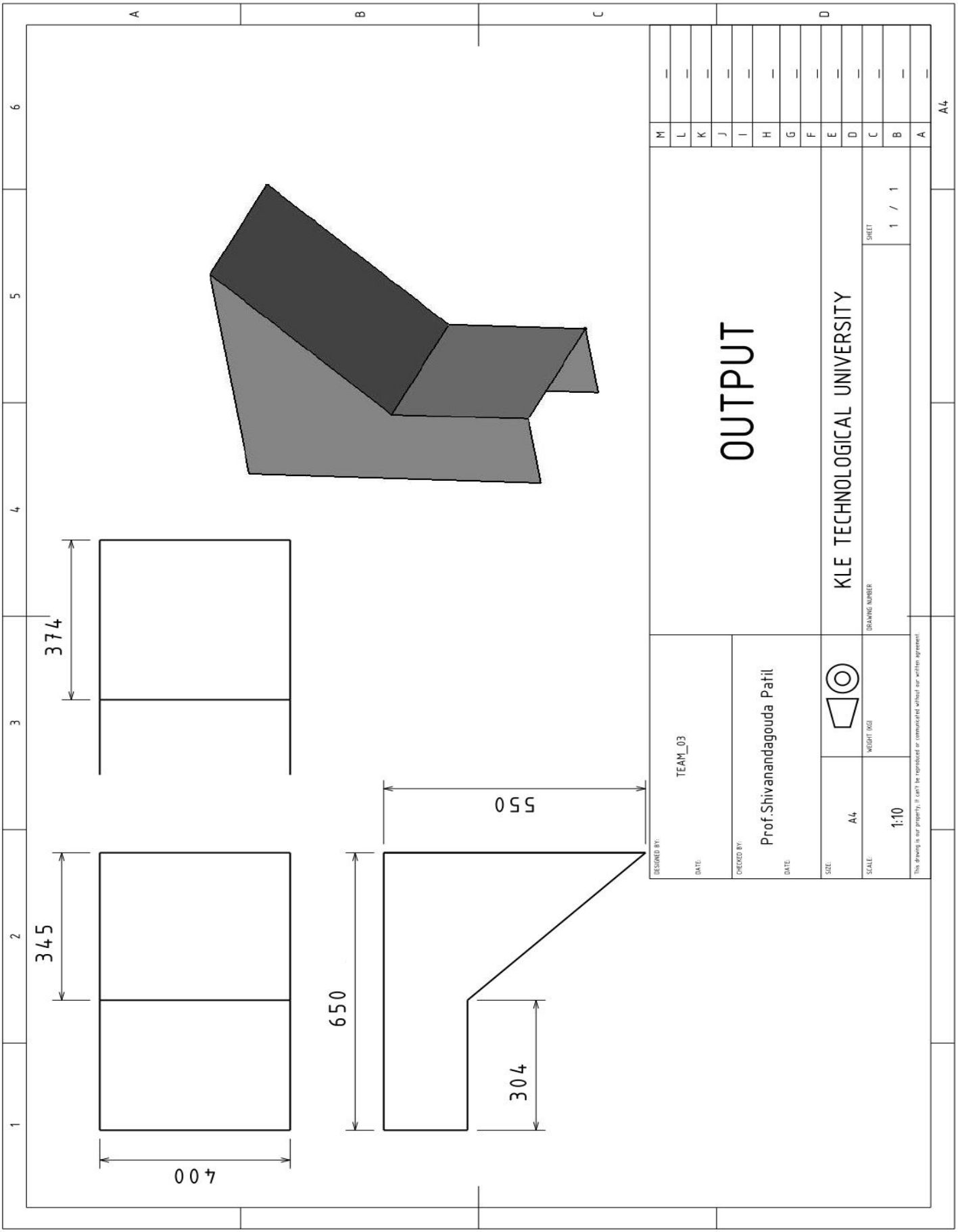
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TEAM_03
Prof.Shivanandagouda Patil
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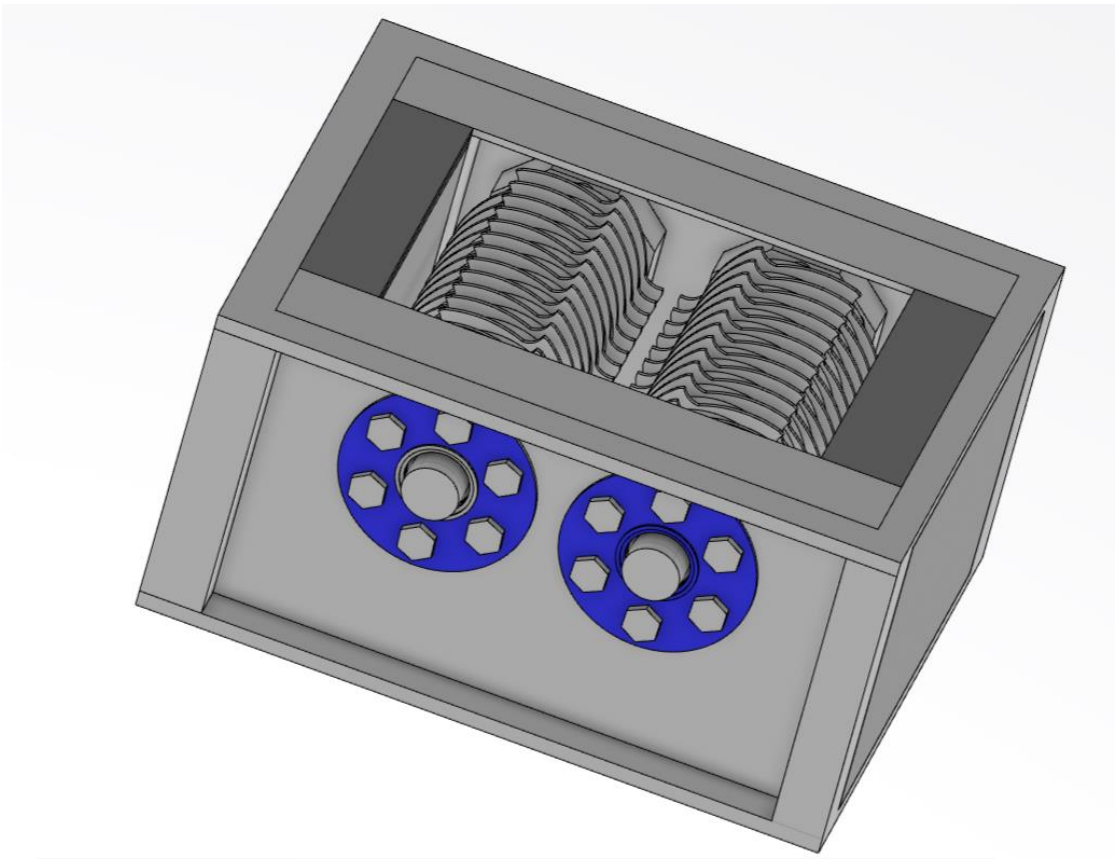
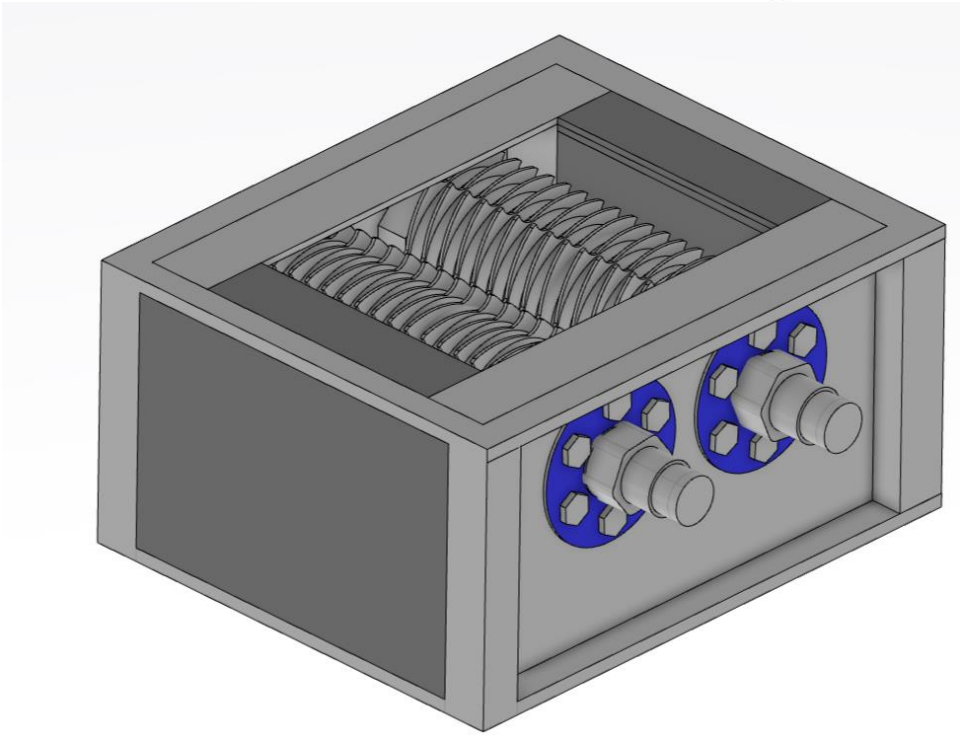
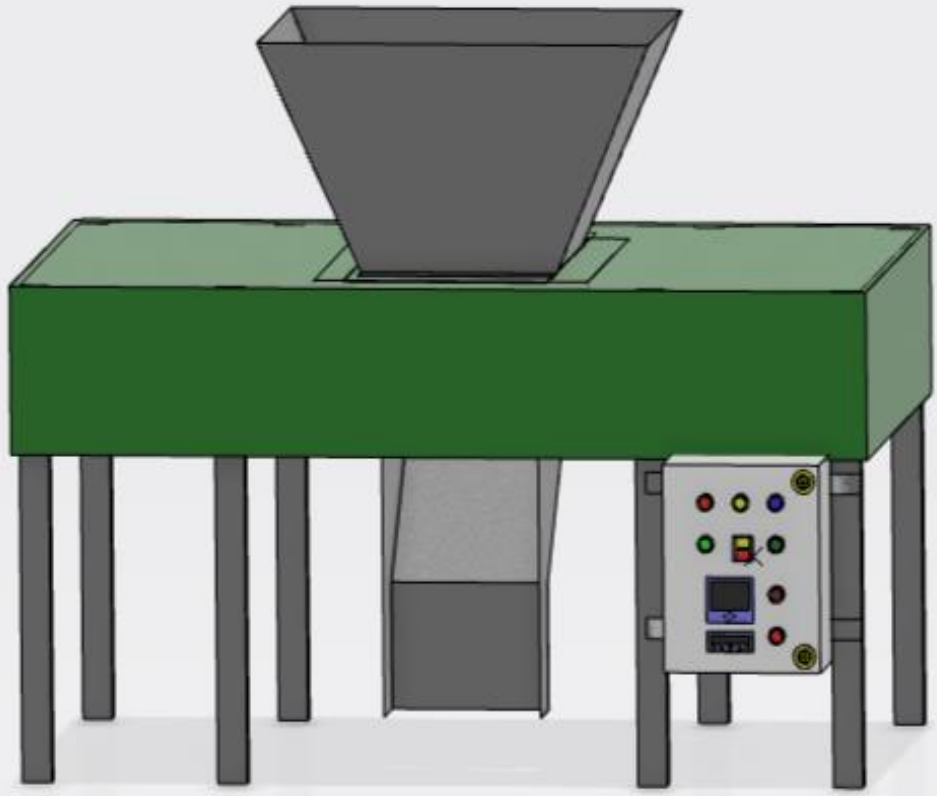
SUBASSEMBLY PART





FINAL ASSEMBLY MODEL OF TWO SHAFT SHREDDING MACHINE



Conclusion:

1)The main goals of the project were to build the shredder at minimum cost and to develop an improved version after testing it.
2) Minor modifications were made of the original designs to improve handling and assembling of the machine.
3) The gearmotor and its electronics were also built on a separate platform to create a modularized unit that
is easily detached if desired to be used in other applications.
4)The shredder worked as intended but caused some difficulties during assembly. The redesign addressed this issue as well as increased the rate of cutting action by modifying the knives and counter knives**.**

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REFERENCE:

We have referred to K. R. Gopalkrishna book for making our 2-D Drawings perfect. We have also referred to YouTube as well as Google for getting more information about the machine and gain more knowledge about it.