

GROUP No: 08

Workshop Practice -Welding
Techniques
Final Report

NAME: Group 08

REG NO: XXXXX

COURSE UNIT: IA 2103

DATE: 20/08/2025

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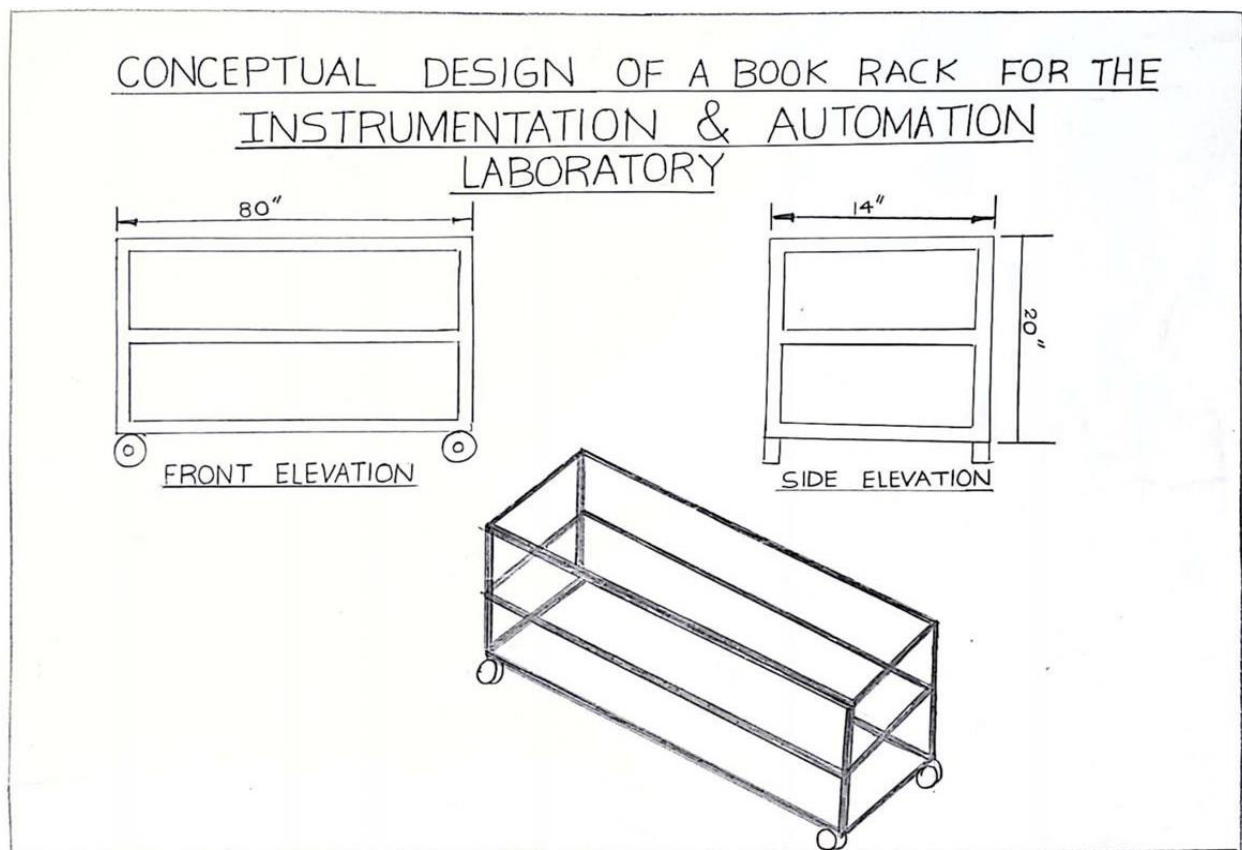
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01. INTRODUCTION

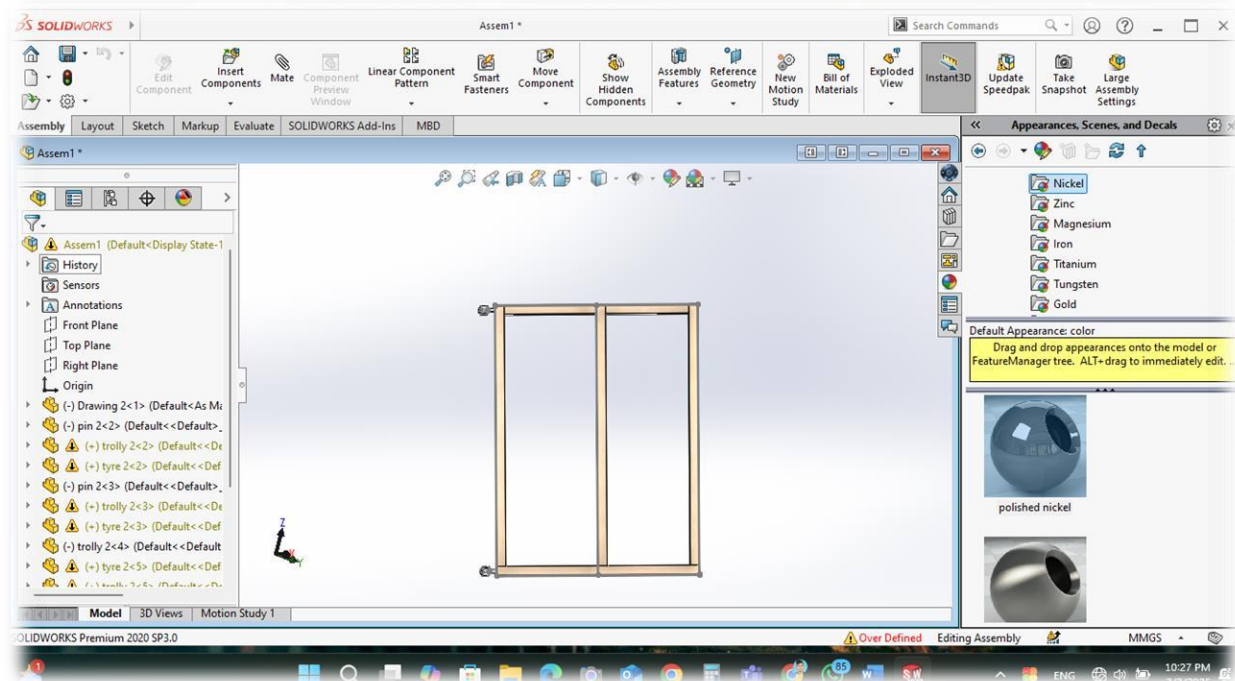
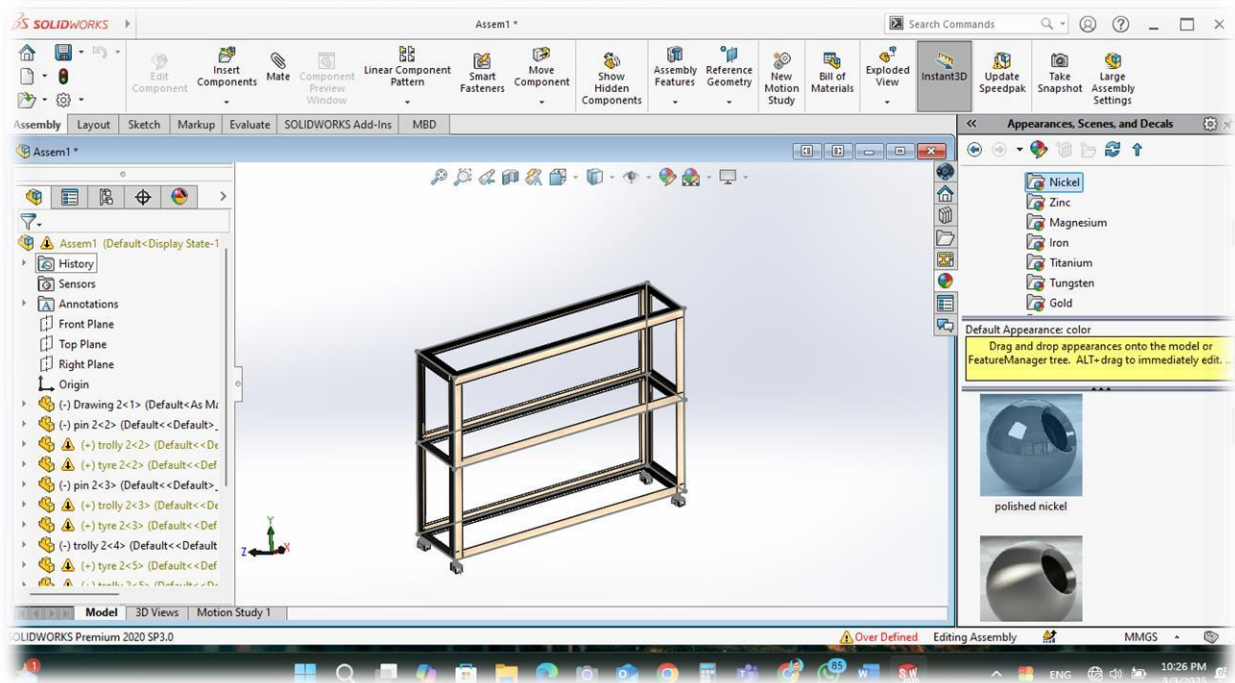
A book rack is an essential addition to the laboratory for organizing reference materials, manuals, and textbooks in a systematic and accessible manner. Proper storage helps maintain a neat workspace and ensures quick access to important documents. This project focuses on designing a durable and functional book rack suited for the laboratory environment.

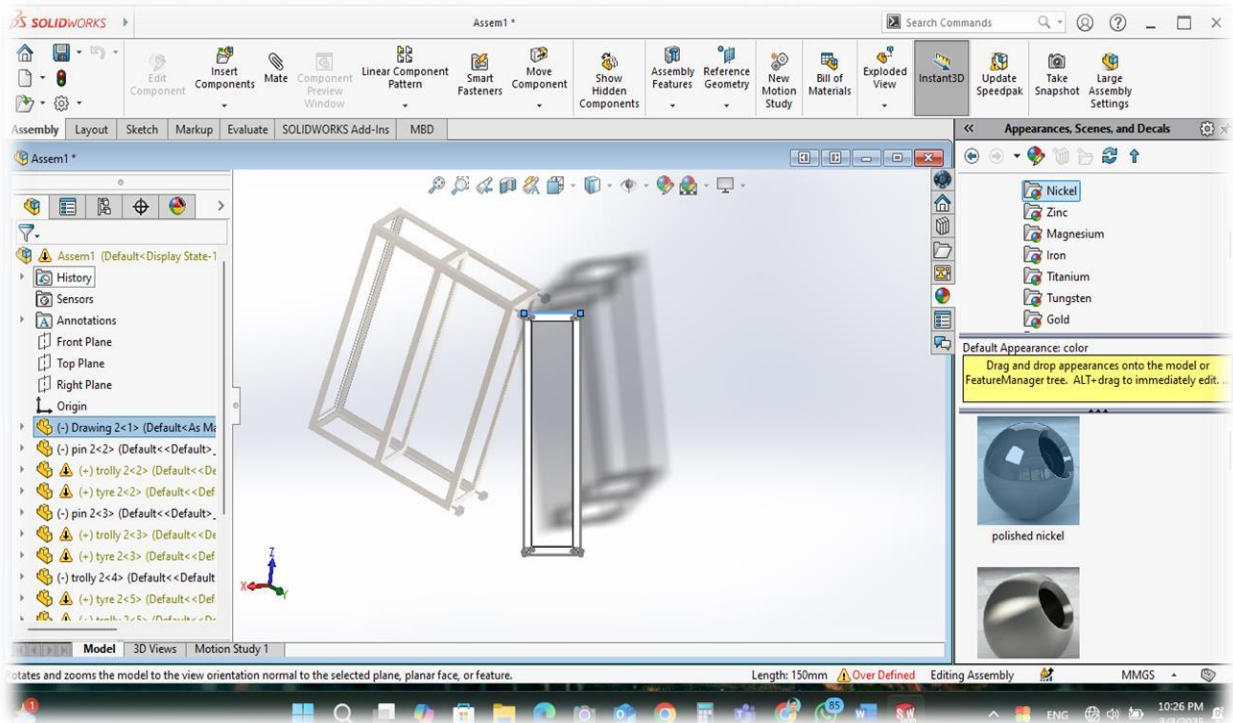
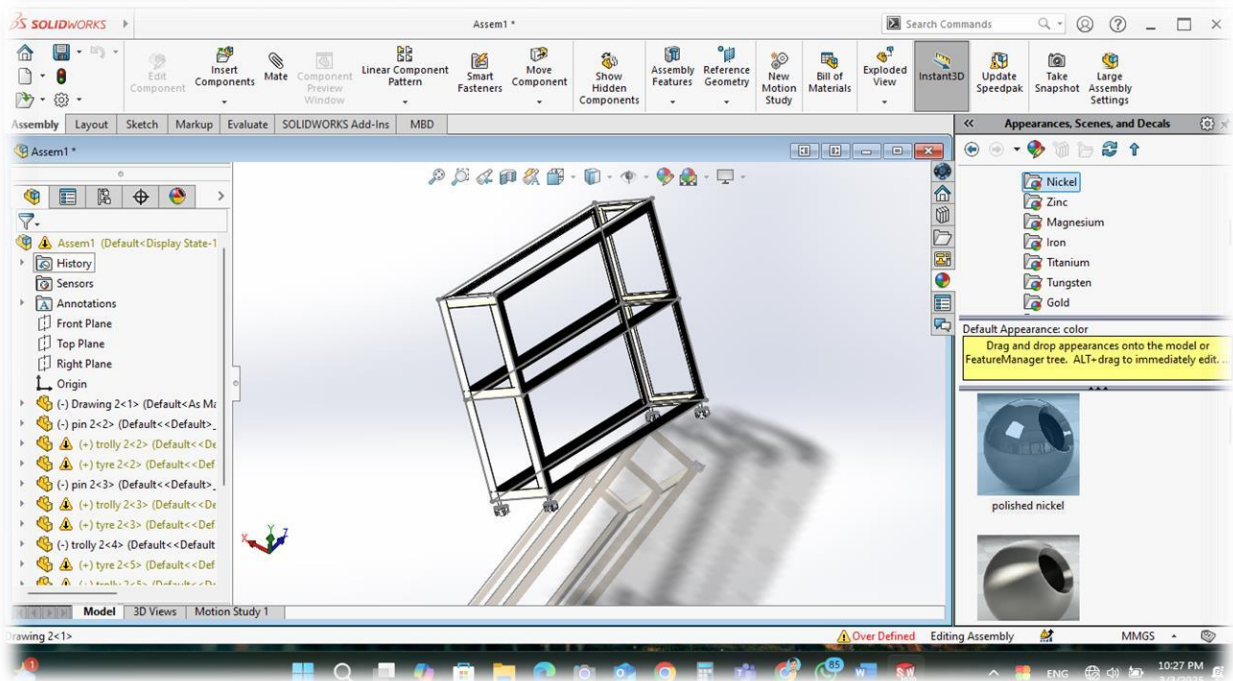
02. CONCEPTUAL DESIGN

HAND SKETCHES FOR CONCEPTUAL DESIGN



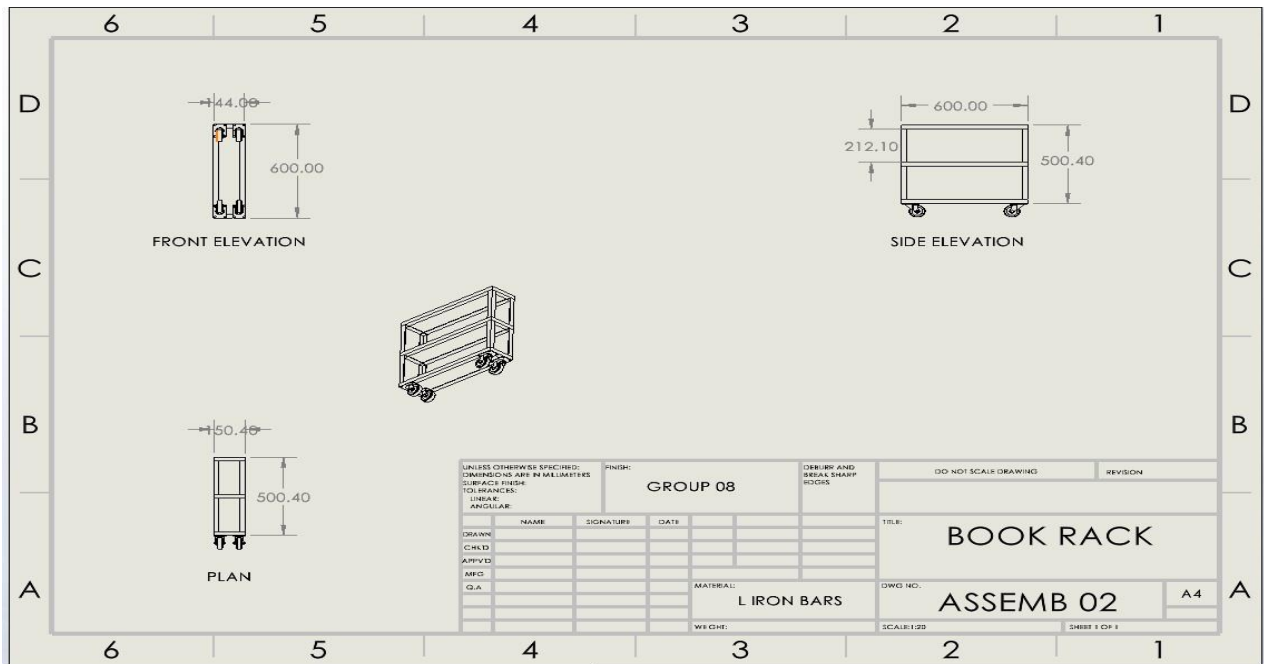
03. CAD MODEL



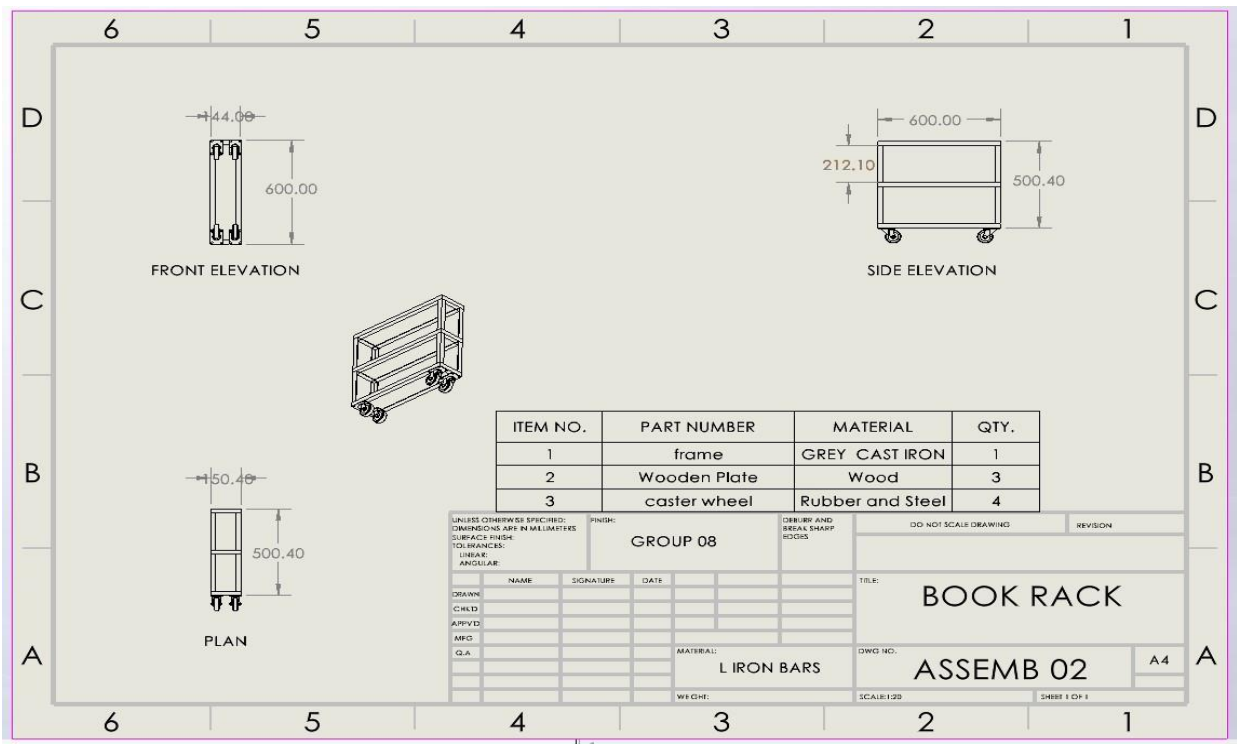


04. ENGINEERING DRAWING WITH BOM

ENGINEERING DRAWING



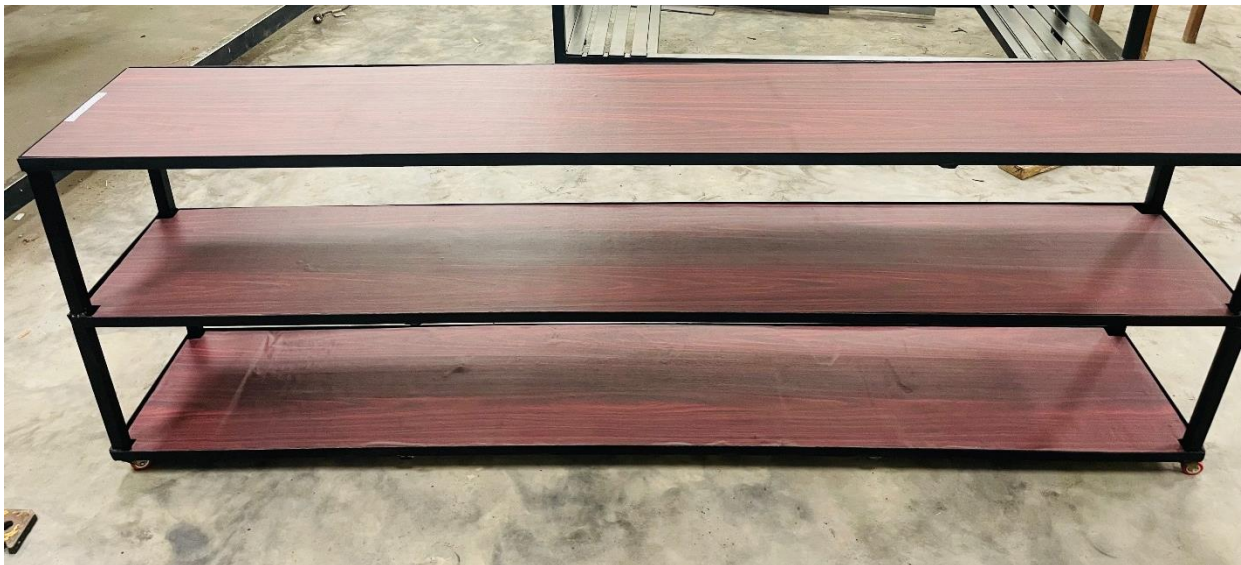
BILL OF MATERIAL OF BOOK RACK



05. COST CALCULATION

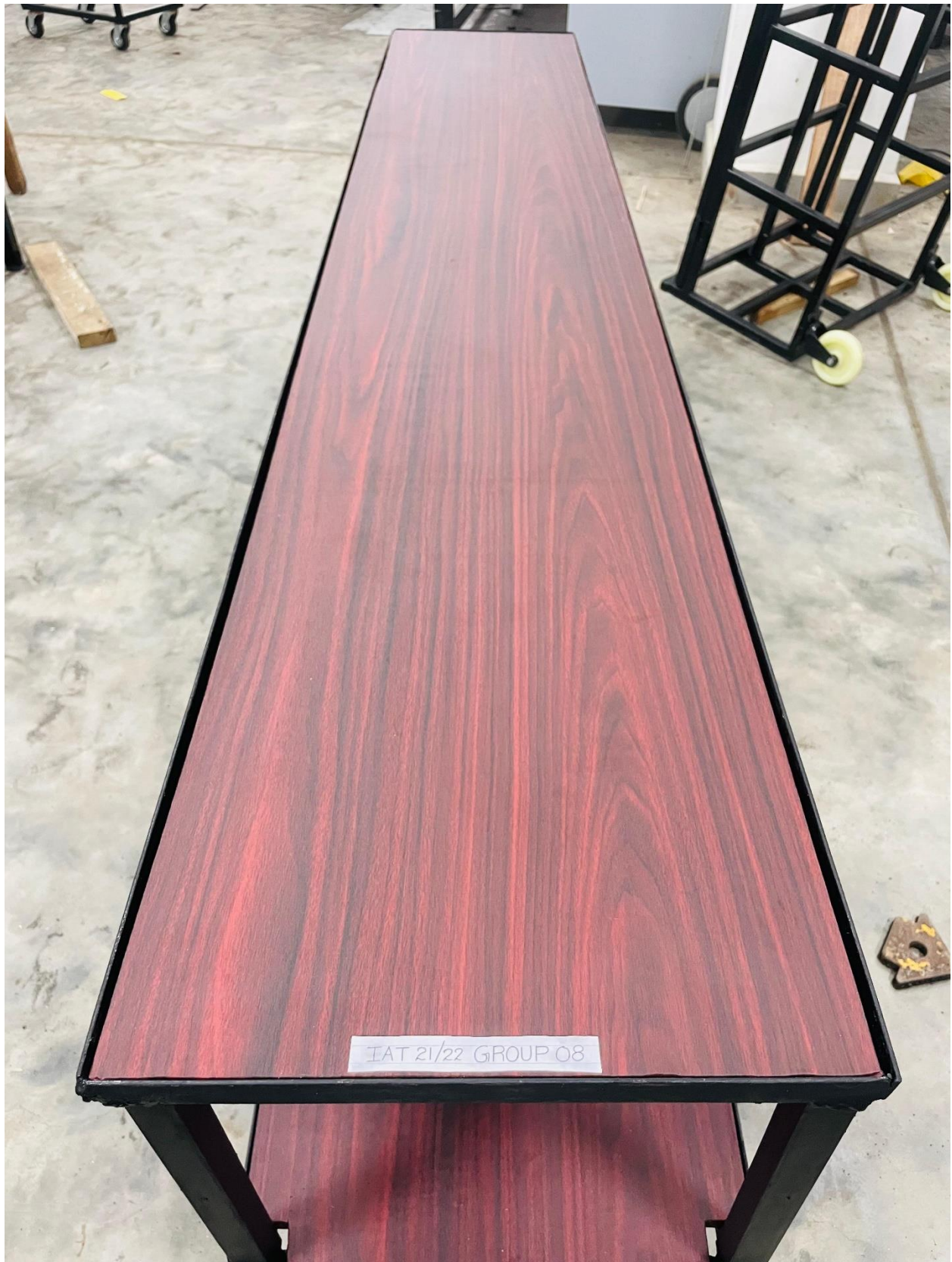
No	Description	Quantity	Unit Price (Rs)	Amount (Rs)
01	Box Bar	10 Ft	18Ft = 3250.00	1800.00
02	L Iron Bar	52 Ft	19 Ft = 2430.00	6650.00
03	Mild Steel Flat Bar	7 Ft	19 Ft = 3220.00	1180.00
04	Hard Board	45 sq. Ft	Free	Free
05	Wheels	04	300.00	1200.00
06	PVC sticker	8 .5 Ft	1 Ft = 196.00	1666.00
07	Paint	250 ml	1L = 2800.00	700.00
08	Tinner	250 ml	1L = 760.00	190.00
09	Paint Brush	1		300.00
	Total			13686.00

06. IMAGES OF THE COMPLETED PROODUCT









07. REFERENCES

1. American Welding Society (AWS) Standards (AWS D1.1 Structural Welding Code – Steel)
2. ISO Standards (ISO 9606 – Qualification testing of welders)
3. ASME Boiler and Pressure Vessel Code (Section IX – Welding and Brazing Qualifications)
4. British Standards (BS EN 1011 – Welding Guidelines)

08. WORK DISTRIBUTION

No	Index No	Name	Work Distribution
01	2022t01335	G.L. Dilshan Perera	14%
02	2022t01337	A.G. Pooja Gayathri	14%
03	2022t01339	A.D.P.S.Praharshana	14%
04	2022t01340	H.L.T. Prasad	14%
05	2022T01343	R.L.A.T.P.M. Rajakaruna	14%
06	2022t01342	M. Rahulan	14%
07	2022t01341	S. Puvanithan	14%

THE END.