



Aditya College of Engineering & Technology

Aditya Nagar, ADB Road, Surampalem – 533437

Department of Mechanical Engineering

Academic Year: 2020-2021

Project Title:	FABRICATION OF CHILLED WATER DISPENSER SYSTEM	
Guide Name:	Mr. G. Raju	
Students Name with Roll No.:	18P35A0305	A. N. V. A. Ch. Sandeep
	8P35A0308	B. Surendra
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	7P31A0310	Ch. Naga Sandeep
	17P31A0304	A. V. Venkata Ganesh

Abstract	PO's Mapping	PSO's Mapping
<p>This project “FABRICATION OF CHILLED WATER DISPENSER SYSTEM” deals with the study of refrigeration and water dispenser system in a single unit. The main object behind this project is to develop the multifunctional system which can provide cold water and hot water. The design mainly consists of compressor, condenser, expansion valve and other accessories (back pressure valve and diffuser).</p> <p>In Industries, colleges, restaurants, etc., includes canteens which use refrigerators, water coolers and air conditioners to generate heat during the process of refrigeration. This heat energy is usually wasted. But in this project, we have utilized this heat, to heat the water without an external source of power. The purpose of the project is that, the heated</p>	PO1, PO2, PO3, PO4, PO6, PO7, PO9, PO11	PSO1, PSO2, PSO3

water can be utilized to wash hands and clean utensils in the canteens.		
In this project we are using R-600A refrigerant replacing R-32 for better co efficient of performance of the system.		

PO1: Engineering Knowledge	PO5: Modern Tool usage	PO9: Individual & Team Work
PO2: Problem Analysis	PO6: Engineer & Society	PO10: Communication Skills
PO3: Design & Development of solutions	PO7: Environment & Sustainability	PO11: Project Management & Finance
PO4: Investigations on complex problems	PO8: Ethics	PO12: Life Long Learning
PSO1: Mechanical Engineers must be able to analyze, design and evaluate mechanical components and systems using cutting-edge software tools as required by the industries from time to time.	PSO2: The ability to work in manufacturing and other sectors' operations and maintenance plants	PSO3: As part of a team or individually, plan and manage activities in micro, small, medium and large enterprises



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Relevance to PO's and PSO's

PO1	Applied the subject knowledge in calculation for design and development of the system
PO2	Studied and analysed existing designs of various water dispenser systems
PO3	Layout of the system is designed in CATIA.
PO4	Different materials are taken into the consideration for fabrication of system.
PO6	Designing the system included the engineer skills.
PO7	The refrigerants which are used are not harmful for environment.
PO9	Fabrication work incurs the team collaboration.
PO11	Business plan contains the work flow and cost control
PSO1	Designed layout of system and fabricated.
PSO2	Ability of working in manufacturing sectors attained.
PSO3	Acquired knowledge in how to design, fabricate the system and managed the materials.





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