

MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)





Department of Mechanical Engineering Innovative Teaching Methods

Activity Title	Case Study Presentation		
Faculty Name/Department	Dr.S.Prasath / Mechanical		
Mapped Course Name & Code	ME3492-Hydraulics and Pneumatics		
Date	05-04-2023		
Benefitted Students (Year / Sem / Dept)	II / IV / Mech		
Topic	Case study presentation on Valves and Circuits		
Description	Case study presentation on Valves and Circuits Implementation of Case study learning methodologies used for mechanical Engineering Student's careers in order to prepare for future graduate studies as well as for their professional lives Valve case study A variation of a pressure-compensated flow control valve is a temperature-compensated flow control valve. This variation comes because sometimes the temperature of the operation may rise such that set tolerances in orifices will become inaccurate. Temperature compensators are installed to cater to these variations. Circuits Case study on design of hydraulic circuit and analysis Case study 1. Problem definition: package lifting device (hydraulic system). 2. Problem definition: furnace door control. 3. Problem definition: hydraulic car lifting system. etc.		
Course Outcomes (CO)	CO2: Summarize the features and functions of Hydraulic motors, actuators, and Flow control valves CO3: Explain the different types of Hydraulic circuits and systems		
Performance Indicator (PI)	1.3.1		
Mail ID (for review)	mech.prasath@msajce-edu.in		



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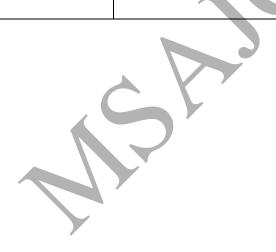






Activity Photos







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Marks:

Group Name (if ITM is a group activity)	Reg No.	Торіс	Marks
TEAM A	311821114001		
	311821114002		
	311821114003		20
	311821114004		20
	311821114005	Valve case study	
	311821114006	And	
ТЕАМ В	311821114007	Case study on design of	
	311821114009	hydraulic circuit and	
	311821114010	analysis	20
	311821114011	Case study	
	311821114012	1. Problem	
TEAM C	311821114014	definition: package	
	311821114015	lifting device (hydraulic	
	311821114016	system).	10
	311821114017	2. Problem	10
	311821114018	definition: furnace door	
	311821114301	control.	
TEAM D	311821114302	3. Problem	
	311821114303	definition: hydraulic car	
	311821114304	lifting system. etc.	
	311821114305		20
	311821114306		
	311821114307		
	311821114701		

Outcomes:

These different case studies of hydraulic valves and hydraulic circuits are used to know and understand the components, construction, location, function, circuit diagram, and case studies of different failures in the hydraulic systems. This improves the student's interest in the Internal Assessment Test.