

NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY

Project Detail

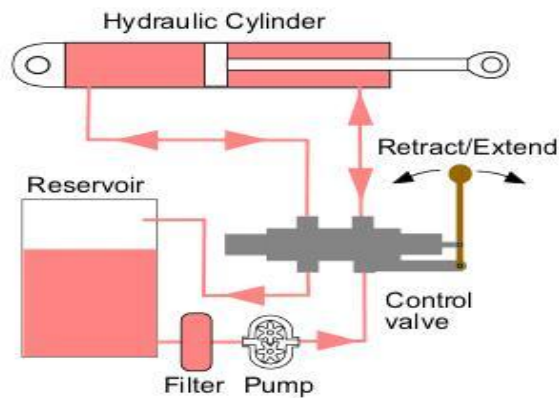
A DESIGN AND MANUFACTURING OF MULTI-FUNCTIONAL HYDRAULIC PRESS

• Student Detail:-

Student Name	Enrollment No.	Contact No.
Trivedi Manan P.	110340119026	8866342009
Patel Pratik A.	110340119049	9033326017
Patel Parth H.	110340119055	9723196272

Name of Project	A DESIGN AND MANUFACTURING OF MULTI-FUNCTIONAL HYDRAULIC PRESS
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• Working Principal:-



For the hydraulic fluid to do work, it must flow to the actuator and or motors, then return to a reservoir. The fluid is then filtered and re-pumped. The path taken by hydraulic fluid is called a hydraulic circuit of which there are several types. The flow is returned to tank through the control valve's open center; that is, when the control valve is centered, it provides an open return path to tank and the fluid is not pumped to a high pressure. Otherwise, if the

control valve is actuated it routes fluid to and from an actuator and tank. If the pressure rises too high, fluid returns to tank through a pressure relief valve. This type of circuit can use inexpensive, constant displacement pumps. Closed center circuits supply full pressure to the control valves, whether any valves are actuated or not. The pumps vary their flow rate, pumping very little hydraulic fluid until the operator actuates a valve. The valve's spool therefore doesn't need an open center return path to tank. Multiple valves can be connected in a parallel arrangement and system pressure is equal for all valves.

- **Applications:-**

- 1. For lifting heavy machined and work pieces.**
- 2. For pressing the lighter equipments.**

Total cost:-9,000 INR.

Project guide(Internal)	Mr. Shailesh Bhanushali	9033759254
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