

# Mini Hydraulic Press

**Prof. Kare. K.M<sup>1</sup>, Ganesh Dattatrya Ghogare<sup>2</sup>, Nikhil Balasaheb Kirdakar<sup>3</sup>,  
Kiran Mahadev Gaikwad<sup>4</sup>, Akshay Madhukar Nevase<sup>5</sup>**

Assistant Professor, Department of Mechanical Engineering<sup>1</sup>

Students, Department of Mechanical Engineering<sup>1,2,3,4</sup>

S. B. Patil College of Engineering, Vangali, Indapur, Pune, Maharashtra, India

**Abstract:** *A hydraulic press is a device (see machine press) using a hydraulic cylinder to generate a compressive force. It uses the hydraulic equivalent of a mechanical lever, and was also known as a Bramah press after the inventor, Joseph Bramah, of England. He invented and was issued a patent on this press in 1795. A hydraulic press is a machine using a hydraulic cylinder to generate a compressive force. Frame, hydraulic cylinder and press table are the main components of the hydraulic press. Hence a hydraulic press is a machine that makes use of the pressure exerted on the fluids to crush, straighten or mould. The concept of the hydraulic press is based on Pascal's theory, which states that when pressure is applied on fluids in an enclosed system, the pressure throughout the system always remains constant. In hydraulic press, the force generation, transmission and amplification are achieved using fluid under pressure. The liquid system exhibits the characteristics of a solid and provides a very positive and rigid medium of power transmission and amplification. In a simple application, a smaller piston transfers fluid under high pressure to a cylinder having a larger piston area, thus amplifying the force. There is easy transmissibility of large amount of energy with practically unlimited force amplification.*

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