

Sheet Metal Bending System by Pneumatic Pressure

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Abstract: *The bending machine is most important in sheet metal industry. This machine should be used for bending machine with wide application. But in some industry hand bender are used. For that machine to operate the human effort are required. The machine should be simple to operate and easy to maintain, hence we tried out to develop the Pneumatic Bending Machine. In bending operation the bend has been made with the help of punch which exerts large force on the work clamped on the die. The bending machine is designed in such a way that, it works automatically. The machine is designed by observing the factors to improve the efficiency and to reduce the cycle time by producing quality output. Automation of machine is achieved with the help of pneumatic system controlled with Arduino. We created the design of an efficient system, which reduces the human effort, and help to increase production output. It also includes pneumatic system, pneumatic component and bending die.*

Keywords: Bending, Pneumatic Cylinder, Directional Control Valve, Solenoid Valve

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