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# A review paper on the analysis and optimization of the 110-ton frame structure of a hydraulic press

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## Abstract

Metal forming is one of the manufacturing processes that is almost chip less. The machine used for pressing is known as a press. There are many different types of presses.
The most popular are hydraulic presses and pneumatic presses. Presses are used for
manufacturing large quantities of parts fast, accurately, and economically through the
cold working of mild steel and other ductile materials. Presses are used in industries for
different purposes, including blanking, piercing, and pressing. Press work is defined as a
chip-less manufacturing process by which various components are made from sheet
metal. Press machines always work under an impact load condition. Because of the
continuous impact of the load, the frame of the press machine always experiences continuous tensile stress.

## Keywords

Press machine, stress, FEA, stress concentration, frame structure.

## Full Text:

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