

1. AU2020102626 - DESIGN OF PROGRESSIVE TOOLS



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Title

[EN] Design of Progressive Tools

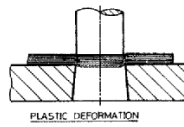


Figure 1 Plastic Deformation

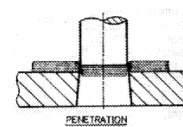


Figure 2 Penetration

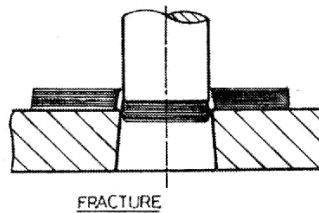


Figure 3 Fracture

Abstract

[EN] As far as the technology is concern "Today is nothing, tomorrow is out of date" everyone is looking forward for the forthcoming trends. In this situation to keep pace with the technology and time saving are of great importance. As there is increase in demand for any product, it is required to increase the rate of production. Press tool is the one which has brought the revolution in the field of mass production in which maximum of 3600 strokes per minute is possible and thickness of 0.1 to the maximum of 16mm thick stocks can be punched and finished within a fraction of seconds. Different operations which can be performed on a press tool were Blanking, Piercing, Bending, Trimming, Forming, Shaving Flanging, Planishing, lancing Notching, Cutting off, Embossing, Coining etc. Different types of dies, which brings importance to the press tool field are progressive dies, compound dies, panel dies, fine blanking dies. The basic principle lies in any type of die in the field of press tools is by forcing the punch into the die, by this the required counter of the component can be achieved. Stages include in blanking of component are, plastic deformation, penetration, and fracture. Figure 1 Plastic Deformation Figure 2 Penetration Figure 3 Fracture

