



## A forging press design from physical prototyping practices

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Brazil has a poor performance in international indices of technological development and innovation. When it comes to design products (in all uses: Architecture, Engineering, Industrial Design, etc.) it is noticed that many international companies use imitation strategies when developing new projects. And this strategy is little used in Brazilian territory. Therefore, the objective of this work was to carry out the design of a knife press based on the strategy of imitation, benchmarking and physical prototyping on a 3D printer. Research was used through the act of designing and, thus, it was possible to: prospect images of a press to be imitated, carry out studies on its operation, bring new ideas that could increase its performance, conceive a design, physically prototype, analyze and validate the prototype. At the end of the project, it can be concluded and corroborated that the well-conducted imitation strategy can generate new products while saving investments. The imitation strategy should not be interpreted as plagiarism, it only considers other existing products as a starting point. In this way, the development time is shortened, more assertive products are generated, investments are optimized. The final design of the press proved to be functional, amenable to manufacture, and cost considerably less than benchmark.

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