
The method of modeling of the main hydraulic press cylinder

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The article is devoted to the simulation method and research of the main cylinder of four-column hydraulic press of nominal force 5MN when loading cylinder by pressure 25 MPa. On the basis of a solid model of the hydraulic cylinder we provide the results of ANSYS modeling on the strength of the main hydraulic cylinder parts. These results are compared with the analytical ones of calculations. The research of each cylinder detail is accompanied by a graphic illustration. We show benefits of using both analytical and program research means. Our simulation results and analytical calculations differ slightly.

Keywords: hydraulic cylinder, research, forging equipment, strength

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