

# The Impact of Manufacturing Technology on the Properties of Solid Substances (Metals)

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**Abstract.** The article analyzes the influence of various factors of manufacturing and processing technology on the final properties. The impact of manufacturing technology (different casting methods vs. additive manufacturing) on the strength and cyclic characteristics of selected metallic materials with the same chemical composition is examined. Furthermore, the influence of heat treatment on the strength and cyclic properties is considered, using high-strength steel as an example. The article emphasizes the importance of proper selection of manufacturing technology and possible additional heat treatment already at the design stage to achieve the desired material properties in real operating conditions.

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