
Principles of compositional unity construction in the structures of new mechanical products using the "Golden Proportion"

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The article considers the general principles of compositional unity of engineering objects and mechanical products. Integrated aesthetic plan for building an object and its spatial structure are regarded as important features of the new parts, components and entire structures. The article brings forward the criteria for aesthetic evaluation of products in terms of improving their competitiveness, ergonomics and visual appeal. The conditions of aesthetic training the modern engineer, including the general level of culture, a sense of beauty, understanding harmony, proportion and aesthetic perfection of created parts are defined. The role of natural composition unity of a product with the environment, functional links with the surrounding parts and structures is emphasized. The author analyzes the objective obstacles to achieving these goals. The attempt to consider the basic aspects of aesthetics of mechanical products, especially their compositional unity was made on the example of so-called golden proportion.

Keywords: *golden proportion, composition, technical aesthetics, aesthetic excellence, functional links, proportionality, equilibrium, unity, beauty.*

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