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Application of Value Engineering approach for Improving the Quality and Productivity of ReadyMixed Concrete Used in Construction and Hydraulic Projects

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The paper studies the effectiveness of applying value engineering to concrete mixtures. It was conducted in the State of Qatar on a number of strategic construction projects for the 2022 World Cup projects, in order to generally improve the quality and productivity of ready-mixed concrete used in construction and hydraulic projects. The application of value engineering to such concrete mixtures resulted in the following: Improving the quality of concrete mixtures and increasing the durability of buildings; Optimizing the use of resources, and enhancing sustainability; Reducing the use of cement, thus reducing CO2 emissions which ensure the protection of environment and public health; And Increasing the market share and competitiveness of concrete producers The research shows that applying of value engineering to concrete is an effective way to save around 5% of the total costs of concrete mixtures and, in turn, reducing the costs of construction projects.

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