The influence of some geotechnical properties of clay on technical specification of ceramic materials

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Abstract

The ideal selection of raw materials in manufacturing process is a very important step to develop this process and to improve the product. For this purpose, we search for initial parameters to guide us in using clay materials (wherever it locate) in ceramic industry. These parameters depend on physical properties of clay (Atterberg Limits). We follow experimental and analytical methods for laboratories tests applied or clay, and for ceramic samples tests. We deduct initial parameters which determine technical specification values for ceramic product, and we derived mathematical formulas between clay properties and technical specification for ceramic product. These parameters and formulas help us to achieve ideal investment for clay ambushes either as pure raw materials or with suitable additives to reach on acceptable value for water absorption of ceramic product which, at the end, specify the type of product according to international specification.

Keywords: Clay – ceramic materials

For the abstract in Arabic see pages (101-114).

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