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## REGULARITIES OF DEFORMATION OF ELASTIC MASSIFS

The analysis of the existing solutions for the elasticity theory is demonstration of their serious disadvantages resulted from the application of imperfect physical dependences. In order to eliminate this problem and to simplify the solution process, it is proposed to divide complete deformations into two independent types: volume deformations and deformations of pure shears. A full range of deformations of each type is determined separately, according to their regularities of deformations. These regularities are associated with various forms of the influence of the potential pressure function, which represents a stressed state of an elastic massif and is determined by given limited conditions. As a result, the disadvantages of solutions are eliminated, the range of problems having exact analytical solutions extends, and at the same time, derivation of these solutions is simplified.

**Keywords:** *regularities of deformations, volume deformations, deformations of pure shears, function of pressures, elastic massif.*

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