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Annotation

Since the nineteen-eighties the great building "boom", the dominant material for a wide range of structures is concrete. By this time was essentially monitored basic characteristic of only the concrete compressive strength. With the development of computer technology is the development of a method of designing structures, and also with the growing volume of concreting work there are changes in the technology of construction, which is reflected in changes in the composition and method of production of concrete. All these changes have led to the fact that in addition to the basic requirement of the concrete compressive strength, the durability of a defined deformation characteristics of concrete become dominant requirements of designers. Since the nineteen-eighties, we can see "modern" concrete. This term can include a wide range of concrete such as high-strength, high performance, self compacting, fiber, steel fiber, ultra high performance, lightweight construction, spray concrete, fire resistance and many other types of concrete. The development of these concretes is continuing both in terms of composition and production technology, as well as for the determination of the resulting physical and mechanical properties. As stated above, to the forefront of the next to receive the durability of concrete and its deformation properties. Among some of the deformational characteristics of each concrete include concrete modulus of elasticity E. Modulus of elasticity enters into a series of static calculations and is closely related to a number of other physical and mechanical properties of concrete such as creep, shrinkage etc. describes the ability of concrete to behave under a given load up to a certain extent flexible and determines how much the material will deform under load [1]. It is used in the elastic calculation of deflections, often as a control parameter in the design of the plates, and pre-or post-tensioned structures. The work describes the options for determining the modulus of elasticity, and discusses in detail the various technological and test impacts, especially on the final value of static modulus of elasticity in compression.