

## The analysis of the quality criteria of the reinforced concrete strength structures

Mihai Cristian Nenov <sup>1</sup>

<sup>1</sup> *Department of Concrete Structures, Building Materials, Faculty of Civil Engineering, Technology and Management, "Gh. Asachi" Technical University, Iași, Romania*

- ▶ Date of submission: (16.07.2004)
- ▶ PhD. Supervisor: SERGIU COROBCEANU, Faculty of Civil Engineering, "Gh. Asachi" Technical University of Iasi, Romania
- ▶ President: NICOLAE TARANU, Dean, Faculty of Civil Engineering, "Gh. Asachi" Technical University of Iași, Romania
- ▶ Scientific Board:
  - TRAIAN ONET, Faculty of Civil Engineering And Building Services Technical University of Cluj-Napoca, Romania
  - VIRGIL BREABAN, Faculty of Civil Engineering, "OVIDIUS" University of Constanta, Romania
  - ALEXANDRU SECU, Faculty of Civil Engineering, "Gh. Asachi" Technical University of Iași, Romania

### Summary

In the thesis entitled "The analysis of the quality criteria of the reinforced concrete strength structures", it has been analyzed the concept of quality and it's components, the damages in reinforced concrete strength structures, departure from design and execution, with the negative effects that derive from this.

The author conceived an experimental programme to improve the concrete quality, the main building material used in the mentioned structures; the results obtained indicates a reduction in concrete consumption with 8-12% for the same class of concrete.

Both idea of perquisite cement hydration and deepening it – solution that leads to concrete consumption reduction in obtaining the same concrete quality – demands simple and low-cost arrangements inside a concrete centralized preparation unit which gives the paper a directly practicability.

*Keywords.* reinforced concrete, quality criteria, strength

