

No.N-25/UP/717/W

*Dated the 1st March, 1978*

To

**The Chief Engineers/Addl. Chief Engineers of all State P.W.Ds. and Union Territories dealing with National Highways and other Centrally Sponsored Works**

**Sub: Casting and testing of concrete test cubes for National Highways and other Centrally Sponsored Works**

In one of the major National Highway bridge works currently in progress in the country, it was noted that most of the steel moulds being used at site for the casting of concrete cubes were deformed in one way or the other and did not conform to the required specifications. Apparently, by the hammering of moulds at the sides at the time of casting, the sides had bulged inside and further some of the moulds had also suffered a lateral distortion. Clearly, these deficiencies in the moulds will be reflected in the strength of the concrete cubes cast in those moulds and the strength values so obtained will not be representative of the concrete actually used on the job and cannot be taken as reliable. It is, therefore, very essential that the moulds are checked up at frequent intervals and are made to conform to the standards prescribed in IS : 516.

2. It is equally important that the standard procedure given in the aforesaid IS Code is strictly followed in the preparation of the test cubes, their curing etc. The testing machine should also be recalibrated at regular intervals so that any defect in the machine will be detected in time. Further, it will be a good practice if instead of testing all the cubes on only one machine at the site, some of the cubes selected at random are got tested at one of the established testing laboratories nearby so that results can be compared.