

5. Quality Assurance System of New Concrete Structures - Development of Concrete Placement Support System using ICT -

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A concrete placement support system was developed aiming to prevent initial defects of concrete during construction, ensure the quality of concrete while placing, and improve the reliability. The system uses ICT to share the information on the transportation, quality and placement of concrete at all stages, from mixing to completion of placing, at construction sites and site offices. A field application test of the system showed that the system could effectively adjust the amount of shipment so as to cope with the placing speed of concrete, control the intervals and duration of placing in real time, and facilitated ensuring the quality of concrete during construction.

Key words : concrete, quality assurance, placement control, construction stage, ICT