

3. Rapid Construction Method for Lining Concrete - Full-Scale Construction Experiment of Casting Lining Concrete by Press-Fitting Using Branch Pipes -

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For rapid construction system of Lining Concrete, an extended Centre was used. In this construction method, to respond the increased amount of concrete casted per day, two concrete pumps are used simultaneously for the purpose of increasing the casting volume per hour. And the branch pipes are applied in order to press-fit concrete to both left and right sides simultaneously. Moreover, concrete was press-fit from the side wall to the shoulder so that the frequency of pipe switching is able to be reduced.

In this research, the feasibility of using branch pipes to press-fit concrete to both sides was examined in the element experiments. In addition, the reproducibility of the element experiment results and the effect of quality were confirmed in the full-scale construction experiment.

Key words: lining concrete, rapid construction method, branch pipes, press-fitting, full-scale experiment