10. Concrete Surface Preparation Technology by Water Jetting Performance Verification Tests for Surface Preparation Equipment for Walls and Columns

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Water jetting is now being used for cleaning or removing coating film on concrete surface during the renovation of concrete structures. Water jetting is generally carried out manually using hand guns or other equipment. Problems therefore occur such as the variation of treated surface because of varying skills of workers, low work efficiency due to painful repetitive work and deterioration of work environment created by the spread of mist and dust. In order to solve these problems, water-jetting surface preparation equipment was developed for walls and columns. The equipment enables the creation of completed sections of uniform shape and the control of the spread of mist and dust by controlling water jetting equipment.

As a result of performance verification tests using a full-scale model, it was verified that the water-jetting surface preparation equipment for walls and columns developed ensures the formation of a monolithic finished surface and helps greatly improve the work environment.

Keywords: water jetting, surface preparation equipment, coat removal, cleaning, prevention of spread of mist and dust