

## Research regarding dust measure in construction

### [ Point ]

In the fiscal year 2000 ,based on the listening comprehension test with constructors and makers, we organized dust measure technologies from perspectives of the effect and technology development standard. As a result, we clarified that as the technologies to develop and prevail in the future, such as regarding inhibition methods , accelerating agent, centrifugal shooting, and formwork method with high-flow high-speed cement, and regarding dilution removal methods, air ventilation andminiaturization of dust extractors, and regarding inhalation prevention methods, comfortable anti-dust masks, which people can wear all the time, are necessary.

In the 2001 fiscal year, to grasp dust prevention measure introduction condition of tunnel construction widely, we surveyed of tunnel construction sites under Regional Development Bureaus, Japan Highway Public Corporation, and Japan Railway Construction Public Corporation. And next, we performed verifying research regarding some high efficiency and viability technologies of the ones extracted in the fiscal year 2000, in the sites. As a result, we clarified, in order to archive the development goal of dust concentration  $3\text{mg}/\text{m}^3$ , technology developments including materials and construction methods are necessary.

Keyword : tunnel construction, dust, generation inhibit, dilution removal, concrete shot blasting