

## **Development of repairing and renovation technology of materials and structures considering environment burden reduction.**

### **[ Point ]**

Based on consideration and assessment of external diseconomy, such as effects of construction activity under public projects on environment of the earth and life, reduction of whole societies construction cost (construction projects cost) is necessary. For this reason, regarding solvent-based paint for structures, containing volatile organic solvent (VOC), which is one of air pollution substances, including urban ozone, we examined durability of environmentally- friendly paint, which reduced VOC. Moreover, regarding treatment method for scattering prevention of paint film, which contains poisonous heavy metals in substrate surface control for repainting of structure paint films, and assessed the effect with the real sized structures. Moreover, since normal paint contains lead, which is poisonous heavy metal, we performed test construction of nonleaded rustproof paint on a crossing bridge on the premises, and assessed the availability of the construction.

Keyword : environment burden reduction, volatile organic solvent (VOC), environmentally- friendly paint, poisonous heavy metal, substrate control