

1. Development of the Low Vibration Blasting Method Using the Slot Drill and Electronic Delay Detonators

Hiroyuki Suda, Takeshi Kurita, Kouji Tsukamoto,
Kanemasa Inaba, Naruki Koga, Kenji Hagimori

We developed the low vibration blasting method using the slot drill and electronic delay detonators. The peak particle velocity (ppv) is reduced by using multi period blasting system or interfering the vibration waves.

- i) Several experiments of this method were carried in a tunnel site.
- ii) Ground vibration was reduced to 5~10% compared with the conventional blasting method.
- iii) This method will be effective for reduction of excavation times and cost.

Key words : slot drilling method, electronic delay detonator, low vibration blasting method