11. Concrete Debris Removal Method Using Temporary Storage Shaft

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A new demolishing method in which broken pieces of concrete are taken down from the uppermost demolishing floor to the ground has been developed. As the first step, a temporary opening is made at each floor, and a shaft is constructed at the lower floors so as to surround the openings. Broken pieces of concrete are dropped into the shaft from the uppermost floor, and concrete debris is temporarily accumulated in the shaft. Even when concrete debris is dropped from a height of 60 m above ground level, the vibration level can be kept at 55 dB or lower at a distance of 10 m from the shaft, and the noise level can also be kept at or below the regulation-specified limit. Although broken pieces of concrete of typical size seldom get stuck in the shaft, the shaft is equipped with a blockage releasing device located just above the outlet where blockage might occur.

Key words: demolition, shaft, blockage, vibration, noise