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## Detonation Transfer Performance of a Flat-sheet Style and Micro-scale Explosive Train

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**Abstract:** A flat-sheet style and micro-scale explosive train of loaded HMX-base lead explosive JO-9C (Ⅲ) in a thin sheet to form strip-shaped lead explosive instead of columned lead explosive was designed. Micro-scale electric detonator and booster in two terminals of explosive train, whose axes are upright with surface of strip-shaped lead explosive, were used as input and output of explosive train, and the detonation transfer route which includes two right-angle was formed finally. The detonation transfer performances of explosive train with strip-shaped lead explosive with the thickness of 1.8 mm and 0.8 mm under different temperature (high temperature, low temperature, room temperature) conditions were studied and compared. Results show the detonation of the explosive train with double right-angle route composed of micro-scale electric detonator, booster and strip-shaped lead explosive with the thickness of 0.8 mm can transfer step by step. The higher the temperature of explosive train, the greater the destructivity to the restrictions after action.

**Key words:** explosive train; detonation transfer lead explosive; thickness of charge

**CLC number:** TJ55; O69

**Document code:** A

**DOI:** 10.11943/j.issn.1006-9941.2015.02.015



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