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Observation of shock initiation process in gap test SHIRO KUBOTA, YUJI OGATA, YUJI WADA, KATSUMI KATOH, TEI SABURI, MASATAKE YOSHIDA, National Institute of Advanced Industrial Science and Technology, KUNIHITO NAGAYAMA, Kyushu University — We have conducted the experiments for shock sensitivity of high energetic materials by gap test. The set up of gap test have been improved to observe the shock initiation phenomena in acceptor charge by high-speed camera. The length of gap material and length of acceptor are varied to observe the initiation process under various situations. The numerical simulations have also been conducted and compared with the experimental results to investigate the shock initiation criteria and the initiation model. We indicate that this improved gap test can be regarded the effective experiment to understand mechanism shock initiation process and to confirm the validity of the numerical results.

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