

Device for testing materials under impact loads comprises a capacitive electrical energy storage unit with a charging device, a foil-type explosive conductor connected to the storage unit via a discharge device, a dielectric foil holder, a fixture for mounting the test specimen, equipment for controlling and recording test results, and a pulse sensor. The foil holder, on which the flyer is placed, is designed as a plane formed by two electrodes and a variable dielectric heat-resistant plate located between them. Both electrodes are attached to an insulating plate, which is fixed to the upper end of a vertical reflector conductor with a Rogowski coil mounted on it, connected at the lower end to a solid metal base, in which, symmetrically to the reflector conductor, two threaded studs, on which the muzzle is secured to the crossbars using nuts and spacers. A target made of the material under test and a sensor connected to a microcomputer, which also collects data from the Rogowski coil and a high-voltage divider, and generates control signals for the discharge device and a regulated charging device, connected via a Wi-Fi channel to a remote computer. The software allows for the configuration of test parameters, as well as the acquisition, processing, and storage of the collected data.