
Estimating the energy of a shaped charge jet using various methods

© V.I. Vasyukov, Yu.M. Dildin, S.V. Ladov, S.V. Fedorov

Bauman Moscow State Technical University, Moscow, 105005, Russia

The study considers the possibility of estimating shaped charge jet energy through two methods: one based on deformation energy in a cylindrical target made of mild steel and the other based on irreversible energy loss over the course of the shaped charge jet penetrating the same target. We supply analytical equations for estimating kinetic energy of a shaped charge jet according to the two methods outlined above. We developed experimental procedures based on the two methods suggested, and used these procedures to measure the shaped charge jet kinetic energy for various types of laboratory shaped charges.

Keywords: *shaped charge, shaped charge jet, kinetic energy, internal energy, calorimetry, hole*

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Vasyukov V.I. graduated from Bauman Moscow Higher Technical School in 1965. Cand. Sc. (Eng.), Assoc. Professor. Author of over 100 scientific publications in the field of physics of explosion.

Dildin Yu.M. graduated from Bauman Moscow Higher Technical School in 1969. Cand. Sc. (Eng.), Senior Research Scientist. Author of over 80 scientific publications in the field of physics of explosion.

Ladov S.V. graduated from Bauman Moscow Higher Technical School in 1972. Cand. Sc. (Eng.), Corresponding Member of the Russian Academy of Natural Sciences, Assoc. Professor, Department of High-Precision Airborne Devices, Bauman Moscow State Technical University. Author of over 350 scientific publications in the field of physics of explosion. e-mail: sm4-2009@mail.ru

Fedorov S.V. graduated from Bauman Moscow Higher Technical School in 1987 and Lomonosov Moscow State University in 1992. Senior Lecturer, Department of High-Precision Airborne Devices, Bauman Moscow State Technical University. Author of over 300 scientific publications in the field of physics of explosion and high-speed impact. e-mail: sergfed-64@mail.ru
