Analysis of influence of metal linings profile heterogeneity on the high-speed elongated elements shape

© P.V. Kruglov, V.I. Kolpakov

Bauman Moscow State Technical University Moscow, 105005, Russia

The article considers the problem of determining physico-mechanical and geometric parameters of modern metal lining for cumulative charges. The study establishes parameters of the linings, which form high-speed elongated elements that provide greater action efficiency. As the parameters influencing the high-speed element shape, we choose the geometric characteristics of the inner and outer spherical surfaces of the lining with different thickness along the generatrix, and the lining material strength. The required high-speed elements shape parameters are elongation, fullness, and stabilizer skirt diameter in the element tail part. Based on calculation results, the paper establishes a ratio between the steel lining parameters and high-speed elongated elements ones, as well as offers the recommendations on the lining shape choice.

Keywords: *charge-forming charges, numerical simulation, high-speed elements, elongated elements*

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Kruglov P. V., Cand. Sc. (Eng.), Assoc. Professor, Department of Technologies of Rocket and Space Engineering, Bauman Moscow Technical State University. Author of over 40 scientific publications in the field of special engineering technologies.
e-mail: kpv17@bmstu.ru

Kolpakov V.I., Dr. Sc. (Eng.), Professor, Department of Technologies of Rocket and Space Engineering, Bauman Moscow Technical State University. Author of over 100 scientific publications in the field of dynamic processes numerical simulation.
e-mail: kolpakov54@mail.ru