

PUBLICATIONS

There are more than 100 publications (articles and conference proceedings) with results obtained in various blast protection testing carried out by SPECIAL MATERIALS, LTD. More than 20 invention applications are based on the results obtained.

The main publications are presented below:

1. Mikhailin A.I., Orlov A.V., Sadirin A.I., Silnikov M.V. Blast Attenuation Factors // Proceedings of Scientific Conference “Modern Methods of Designing and Execution of Missile-Artillery Weapons”. - Voldshskiy Regional Center of Russian Academy of Rocket Sciences, 1999. - Sarov: VNIIEF.-2000.-P.517-521
2. Silnikov M.V., Kozlov A.V., Orlov A.V. etc. Blast Inhibitor “Fountain” // Proceedings of the First All-Russian Science and Application Conference “Urgent problems of Protection and Security”. - St. Petersburg. – 1999. – P. 125-131.
3. Silnikov M.V, Mikhailin A.I., Orlov A.V, Sadirin A.I Simulation Liquid-Elastic Container Deformation Caused by HE Explosion // Proceedings of the Second All-Russian Science and Application Conference “Urgent problems of Protection and Security”. – SPb. – 1999. – V. 2. – P. 190-198.
4. Silnikov M.V, Mikhailin A.I., Orlov A.V. Estimation of Blast Overpressure Caused by a Charge Explosion Suppressed by a Liquid-filled Container// Collected Lectures of the Third International Workshop «Non-Standard Combustion and Interior Ballistics». – SPb: BGTU. – 2000. – V.1. – P. 53-56.
5. Silnikov M.V, Mikhailin A.I., Orlov A.V Experimental Determination of Effects of Liquid Blast Inhibitor Parameters // Collected Lectures of the Third International Workshop «Non-Standard Combustion and Interior Ballistics». – SPb: BGTU. – 2000. – V.1. – P. 57-69.
6. Silnikov M.V, Mikhailin A.I., Orlov A.V Development of «Explosive sphere» Model for Estimation Blast Overpressure Suppressed by Blast Inhibitor // Proceedings of the First Interregional Scientific-Application Conference «Application of Special and Operational Equipment by Law Enforcement Professionals». – SPb: St. Petersburg Ministry of Interior University. – 2000. – P. 219-223.
7. Gelfand B.E., Silnikov M.V, Mikhailin A.I., Orlov A.V. Attenuation of Blast Waves Resulted from HE Explosion in a Confined Liquid Elastic Envelope // Physics of Combustion and Explosion– V. 37, №5. – 2001. – P. 128-133.

8. Silnikov M.V, Mikhailin A.I., Orlov A.V. etc. Experimental Investigation of Blast effects Caused by Condensed HE explosion // Proceedings of the Fourth All-Russian Science and Application Conference “Urgent problems of Protection and Security”. – SPb. – 2001. – P.588-598.
9. Gelfand B.E., Silnikov M.V., Mikhailin A.I., Orlov A.V. The attenuation of blast overpressures from liquid in an elastic confinement // The 23rd International Symposium on Shock Waves/ Fort Worth, Texas, USA. - July 22-27, 2001. – P.124.
10. Mikhailin A.I., Orlov A.V , Selivanov V.V., Silnikov M.V. Estimation of Blast parameters resulted from HE Explosion suppressed by a Liquid Layer // Proceedings of the First Interregional Scientific-Application Conference «Application of Special and Operational Equipment by Law Enforcement Professionals». - St. Petersburg.– 2000. – P.208-218.
11. Silnikov M.V., Orlov A.V., Sadirin A.I. Blast Wave Attenuation in a Gas- Liquid Medium // Collected Articles «Actual Rocket Production Question ». - Issue 1. BGTU, SPb. – 1991. – P.74-78.
12. Silnikov M.V, Mikhailin A.I., Orlov A.V, Serdtchev N.I., Nozdrachev A.V. Blast Characteristics of Suppressed Explosion // Proceedings of the Fourth. All-Russian Science and Application Conference “Urgent problems of Protection and Security”. – SPb. – 2000. – V. 2. – P. 580-588.
13. Silnikov M.V, Mikhailin A.I., Orlov A.V, Turin M.V., Nozdrachev A.V. Experimental Investigation of Blast effects Caused by Condensed HE explosion // Proceedings of the Fourth. All-Russian Science and Application Conference “Urgent problems of Protection and Security”. – SPb. – 2000. – V. 2. – P. 588-598.

List of Applications on inventions of blast inhibition devices with a patent

Patents obtained:

Patents RU № 2125232, 2150669, 2150670, 2168698, 2171446, 2175109, 2177140, 2177141

Positive decision obtained on the following patent applications:

Applications № 2000121108, 2000121313, 2000121174, 2001101039, 2001101991

Additional information on above mentioned patents and applications can be found at

Federal Institute of Industrial Property web site : <http://www.fips.ru/ruptoen/index.htm>

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