

Are there Different Test Methods for IM Based on STANAG 4439?

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Insensitive Munition is defined by the fact that proof of an IM signature is obtained by means of a special test program defined in STANAGs. The basis for IM testing is STANAG 4439 and AOP 39 and six specific STANAGs which describe different tests in detail. It appears that the tests are described in great detail. Moreover it is possible to carry out these tests in different manners.

The presentation describes the different possibilities to carry out tests in accordance with STANAG 4439. It is shown which parameters have to be respected in order to conclude that the tests are equal and therefore the test results are comparable.

It will be presented that the Fast Heating STANAG 4240 allows the test to be carried out with either gas or kerosene as combustible. The only constraint is that both temperature profile and heat flow are corresponding.

The paper will also explain the details of other tests, such as Bullet Impact, Fragment Impact, Slow Heating, Shaped Charge Jet Impact and Sympathetic Reaction, and will show what the critical parameters are.

At the end of the presentation, recommendations for coherent IM-tests will be given in order to allow potential clients to compare the IM-signatures.