EVALUATION OF PHYSICAL EFFECTS DURING SC COLLAPSE DUE TO GAPS

Alois Freko

TDW Gesellschaft für verteidigungstechnische Wirksysteme mbH., 27 Hagenauer Forst, Schrobenhausen, 86529, Germany;

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The close fit of explosive and liner is considered to be important for a good shaped charge performance. However, it is difficult to control this on a life charge. Clear quantitative arguments, why it is important to have a direct contact still are missing.

This paper tries to close this explanation gap via a hydrocode based study of a 2 - D charge model with and without gap at the liner explosive boundary.

Velocity and pressure profiles are evaluated, to assess differences. Conclusions are made concerning the effects on jetting. A full physical modelling of the consequences is only possible via a 3-D model, which would overstress the capabilities of available computer power.

Compiled by: Alois Freko, e-mail: alois.freko@mbda-systems.de