

Abstract Submitted
for the SHOCK05 Meeting of
The American Physical Society

DOP test evaluation of the ballistic performance of armor ceramics against long rod penetration HUANG FENGLI, ZHANG LIANSHENG, Beijing Institute of Technology — A series of DOP tests with lateral confinement has been carried out and a linear relation between the residual penetration in RHA and the alumina thickness been obtained. The rod configuration and the initial transient impact are thought to be responsible for the gradual decrease of differential efficiency factor (DEF) with the increase of ceramic thickness in literature DOP tests. A new revised DEF definition is proposed to more accurately characterize the thick tile ceramic ballistic performance on a more physically based analysis.

Mark Elert
U. S. Naval Academy

Date submitted: 20 Apr 2005

Electronic form version 1.4