The Interaction of Metallised Explosives with Structures

F.G.Hulton M.A.Nash QinetiQ Dstl UK UK

Introduction

Metal particles are sometimes included in explosives in order to add energy in the form of heat to the explosion. Provided that this heat is released quickly enough it will contribute to the resulting blast effects, and thus to explosive loading. Metal particles may also be included within explosives in order to provide an efficient mechanism of energy transfer. How explosives containing metal particles interact with structures is a complex and interesting subject. The aim of this paper is to give qualitative explanations of some aspects of the interaction of metallised explosives with structures.