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Ejecta Production and Properties

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The interaction of an internal shock with the free surface of a dense material leads to the production of jets of particulate material from the surface into its environment. Understanding the processes which control the production of these jets both their occurrence, and properties such as the mass, velocity, and particle size distribution of material injected has been a topic of active research at AWE for over 50 years. I will discuss the effect of material physics, such as strength and spall, on the production of ejecta, drawing on experimental history and recent calculations, and consider the processes which determine the distribution of particle sizes which result as ejecta jets break up. © British Crown Owned Copyright 2017/AWE