

Refining the Performance of a Cutting Cell for Sectioning Munitions

It is becoming increasingly accepted that abrasive-laden high-pressure waterjets provide an effective answer to the need to gain access to the interior of a wide range of military munitions. However when such a tool is placed within the bounds of a fully automated separation and cutting operation, then the performance of the system must be consistent and reliable.

In this regard specific features that allow optimization of cutting performance of a high pressure waterjet abrasive cutting cell have been identified. They are described, together with the benefits that can accrue from their use. In particular the advances that have been made in the operational lifetime of nozzles, and the best way to achieve that effective life are discussed.

An integrated design that will allow multiple shell cutting is then developed from the results of an evaluation of single shell cutting, and the operational characteristics of this unit are given.