

SHOCK TUBE SYSTEMS, INC.

TECHNICAL BULLETIN

TRUNKLINE DETONATOR ASSEMBLY

FOR REDUCED AIRBLAST AND NOISE

The MK 149 Mod 0 Trunkline Detonator Assembly was developed by US Navy Explosives experts at The Naval Surface Warfare Center, Crane, IN in association with Shock Tube Systems, Inc. As the name implies, the Trunkline is used as an initiation train between explosive charges. It can be used in lieu of or in association with a detonating cord trunkline. Because it is shock tube based, the Trunkline Detonator Assembly contains far less explosive per unit length and thus will have far less airblast and noise than an equivalent length of detonating cord.

The Trunkline Detonator Assembly consists of 20 shock tube based detonator assemblies attached to each other with specially designed plastic connector blocks. The assemblies are arranged so that the detonator output from one assembly initiates the shock tube input on the next assembly. The first assembly in the chain has 100 feet of shock tube; this allows the device to be remotely initiated from up to 100 feet away. The 19 subsequent assemblies have 10 feet of shock tube each thereby providing a 10 foot spacing between detonators. Detonating cord or shock tube downlines can be attached to the Trunkline at any of the 20 plastic connector blocks.

Not even considering the 100 foot lead in line, the Trunkline contains over 300 times less explosive per foot than 50 grain per foot detonating cord commonly used as a trunkline. Thus, the Trunkline is a useful product for demolition, construction or mining applications where a reduced explosive alternative is required. By using the Trunkline Detonator Assemblies, conventional trunkline/downline blasting techniques can be used but instead of detonating cord, shock tube is used to transmit the initiation signal.

Users should keep in mind the transmission velocity of shock tube at 6500 feet per second is less than det cord.



MK 149 Mod 0 Trunkline



UN 1.4S Shipping Container

DISCLAIMERS:

Attention: The information and recommendations described in this bulletin cannot possibly cover every application of the product or variation of conditions under which the product is used. The recommendations herein are based on the manufacturer's testing and experiences. They are believed to be accurate but no warranties are made, expressed, or implied. Please feel free to contact Shock Tube Systems, Inc. for verifications.

NO WARRANTIES OR LIABILITIES:

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