Non-electric Detonators

GENERAL SURVEY

Austin Detonator non-electric delay detonators are designed to provide the precise control and accuracy for blasting in surface mines, underground metal and non-metal, and construction sites where the risk of ignition of the explosive air-methane or air-coal dust mixtures does not exist.

SHOCKSTAR NON-ELECTRIC DETONATORS CONSIST FROM

- Instantaneous, millisecond and long delay inhole detonators (with or without "T" connector).
- Surface delay detonator with SHOCKSTAR connector.
- Instantaneous and delay detonator with SHOCKSTAR BUNCH CONNECTOR.
- Austin STARTUBE and SHOCKSTAR STARTLINE.



BENEFITS

- 720 mg base charge.
- High impact protection.
- Excellent delay time accuracy ensures greater than 99% probability of in-sequence initiation.
- Manufactured with yellow Shock tubing for easy differentiation from surface detonators when inspecting the connected blast pattern.
- Easy shock tube connection, locking mechanism to ensure locking of the tubes in the block if needed. Capacity of 8 Shock tubes.
- Color coded connectors according to the delay time of the detonator.
- T-connector can be provided on all in-hole detonators for rapid and easy connection to detonating cord.
- Initiating signal is transmitted at a constant velocity of 2,000 m/s and noiselessly passes also through kinks, knots and sharp bends of Shock tube without disrupting the explosive column.







SHOCKSTAR SPECIFICATIONS AND APPLICATIONS

PRODUCT	TECHNICAL INFORMATION	TYPICAL APPLICATIONS
SHOCKSTAR SURFACE	Delay time / block color: • 0 ms / Green • 9 ms / Brown • • 17 ms / Yellow • 25 ms / Red • • 33 ms / Grey • 42 ms / White • • 67 ms / Blue • 100 ms / Black • • 200 ms / Orange •	Specially designed to provide connection of surface initiation network and relay of initiation signal to the next shock tubes. This unit is designed for nitiation of Shock tubes only.
SHOCKSTAR BUNCH CONNECTOR	Detonator with special design which allow initiation of detonating cord placed in a special connector block.	This connector/detonating cord assembly is used especially in tunnel blasting. And is designed for reliable initiation of up to 20 Shock tubes.
SHOCKSTAR MS	In-hole millisecond detonator available in 30 delays: • delays 1-20; interval 25 ms • delays 21-30; interval 50 ms • includes instantaneous 0 ms	The most complete in-hole millisecond delay system designed for initiation of cap sensitive explosives or boosters. "T" connector provides fast and easy connection to detonating cord.
SHOCKSTAR TS	In-hole detonator available in 40 delays: • delay 0 = 25 ms • delay 1 - 10 interval 50 ms • delay 11 - 12 interval 100 ms • delay 14 - 20 interval 200 ms • delay 25 - 90 interval 500 ms	Designed for use in underground mines as well as tunnels, shafts, trenches and other surface work where long delays are required to provide sufficient time for rock movement.
SHOCKSTAR DUAL DELAY	Combination of SHOCKSTAR SURFACE (nominal delays 25 and 100 ms) and SHOCKSTAR MS or SHOCKSTAR TS (nominal delays 475, 500 and 9000 ms).	Designed for use in surface applications for bench blasting or underground applications.
SHOCKSTAR STARTLINE	SHOCKSTAR SURFACE 0 ms – length 50, 100, 400, 600 and 800 m.	Factory-spooled tubing with a SHOCKSTAR SURFACE 0 ms connector for starting of initiation network.
STARTUBE	Shock tube available in 400, 600, 800 and 3000 m on the spool.	Factory-spooled tubing for starting of initiation network.



Detonators must be stored in an approved magazine located to conform to state and local laws and regulations. The storage place should be well built, well airconditioned, clean, dry, fire resistant and securely locked when not in use. Detonators should never be stored in the same magazine with other explosives.

Contact your local Austin Powder representative for further information.

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