eDev™ II

BLASTING TECHNOLOGY FOR UNDERGROUND MINING AND CONSTRUCTION

eDev™ II is one of three systems in the Next Generation Electronic Blasting Systems range. It has been built specifically for application in both Underground Development and Civil Tunnel Blasting. eDev™ II is the only electronic tunnel system that is designed for working at-face with the typical delay number concept used in mining and civil development.

GREATER SAFETY

- All our Next Generation electronic detonators have several safety features that are inherent in the design of the product including spark gaps, input and bleed resistors, and the chip itself.
- Dual voltage ASIC allows inherently safe at-face testability.
- Dual voltage modes of operation allows for higher energy fuse.
- Very high resistance to initiation by extraneous electrical energy (based on simulated lightning studies).
- Safety outcomes are also possible via over-break control giving better and safer side and hanging walls.
- eDev™ II can be integrated with i-kon™ CEBS. CEBS can be used to ensure easy and centralised remote blasting from a safe and convenient control point (available for underground development market only).

GREATER RELIABILITY

- Aerospace development partner for ASIC and PCB to achieve reliability by design.
- Pre-packaged ASIC for more reliable bonding of the board.
- State-of-the-art stress testing of PCB to segregate weak units.
- Five times stronger communications back signal from detonator to Tester or Blast Box.
- Sophisticated software-driven communication algorithms.
- A large range of detonator IDs, virtually eliminating the chance of duplicate IDs on a blast pattern.

Barcode scanning of eDev™ II detonators.

Glove-friendly connector.

eDev™ II
Electronic Tunnel Blasting System

ORICA

orica.com

eDev™ II
THE NEXT GENERATION

GREATER EFFICIENCY

- A significant new feature of eDev™ II is at-face testability. This reduces delays before blast time and allows you to use your equipment and resources more effectively.
- Load by Numbers technique offers a step change in face loading efficiency for underground blasters. You can now design blasts using the SHOTPlus™ blast design software to specify the millisecond delays required between delay numbers and within delay numbers. Individual detonators are not numbered, the process of barcode scanning ensures that the appropriate firing sequence meets the specified blast design.
- eDev™ II detonators are delivered as a single item per wire length.
- Faster programming time and faster hook up on blast day with a new connector and duplex harness wire.
- Improved packaging – stronger box will survive humid storage conditions better.

GREATER PERFORMANCE

- Multiple heading blasting can be achieved due to the increased maximum delay time and increased precision of the eDev™ II detonator, as well as the multiple heading firmware within the new eDev™ II scanners.
- eDev™ II allows for a much greater range of blast sizes, ensuring the blaster can optimise operations and accommodate a greater variety of tunnel sizes.
- Fully programmable in one-millisecond steps means thousands of potential delay times can be programmed for each detonator – offering the flexibility and precision to achieve challenging blast outcomes.
- Guaranteed single shot firing and greater precision of delay (0.01% coefficient variation) ensures in-sequence firing even at the longest delays.

At-face testability.

"Ultimately eDev™ II and the Multi Deck Blasting technique enabled less blasts and subsequently our overall efficiency and rate of advance increased."

Mr Sueyoshi
Deputy Project Manager,
Anei River Project,
Kajima Corporation

IMPROVEMENTS THAT MATTER MOST TO YOU

Faster rate of lateral advance

- Improved vibration control
- Operational efficiency
- Multiple heading blasting

Operational productivity

- Uniform fragmentation
- Versatility for changing geology
- Ore/waste separation through control of heave (underground development)

Risk management – improved mine safety

- Improved perimeters, over-break, side walls and hanging walls