

# DEVELOPMENT CHARGING UNIT (DCU) Rail Bound

## PRODUCT DESCRIPTION

The Development Charging Unit (DCU) is one of a range of compact charging systems developed for use with BME's INNOVEX™ UG emulsion formulations. BME's Model 2 mobile pump utilised on the DCU is a positive displacement pump designed to deliver emulsion and sensitising solution simultaneously through the charging lance where it is sensitised to form an explosive on entering the blasthole.

Due to the low energy requirements necessary for the operation of BME's mobile pump technology, the DCU can be powered through a range of energy sources while maintaining a rate of delivery equal to that of mechanised emulsion technology. This places the DCU in a class of its own and allows the unit to function with an independent hydraulic power pack driven by an electric motor, air, or hydro-power.

In order to eliminate down time and the possibility of lost blasts BME's DCU has been designed to facilitate the operation of two mobile pumps on a single charging unit. These are in turn controlled through BME's new Intelligent Control and Recording system (ICR) that allows a pre-determined mass of emulsion to be loaded per blasthole.

## PRODUCT FEATURES

### FEATURES

Primarily for use in the underground development environment.

### FEATURES

- Double mobile pump system optional
- Increased reliability and reduced down time
- Low maintenance costs
- Low capital requirements
- Intrinsically safe pump operation in instances of:
  - Dry running
  - Dead heading
- High flow rate
- Short lead time for manufacture
- ICR – Intelligent Control and Reporting

### DESIGN FEATURES

Emulsion tank capacity	1800 L
Sensitiser tank capacity	40 L
Water tank capacity	100 L
Pumping rate	30 kg/min
Drive systems	Electric/Air/Hydro
Max. hose length	15 m (¾" – 1")
Compatible emulsions	INNOVEX™ UG Emulsions
Pre-set mass of emulsion/hole	

### PUMP SAFETY FEATURES

- Intrinsically safe pump technology
  - Safe in instances of dry running
  - Safe in instances of dead heading
- Pressure bursting disk
- Failsafe control system
- Charging lance flushing system

