

DEVELOPMENT CHARGING UNIT (DCU)TM

Rail bound

Product description

The Development Charging Unit (DCUTM) is one of a range of compact charging systems developed for use with BME's MegapumpTM emulsion formulations. BME's Model 2 Mobile Pump utilised on the DCUTM 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 DCUTM 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 DCUTM 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 DCUTM 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.

Application

Primarily for use in the underground development environment.

Features

- Double mobilepump system configuration
- 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



Design features

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|---|--------------------|
| Emulsion tank capacity | 2 500 kg |
| Sensitiser tank capacity | 40 L |
| Water tank capacity | 100 L |
| Pumping rate | 7,30 kg/min |
| Drive systems | Electric/Air/Hydro |
| Max. hose length | 15 m (¾" – 1") |
| Compatible emulsions | Megapump Emulsions |
| Pre-set mass of emulsion/hole | |
| ICR – Intelligent Control and Reporting | |

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