CRUISER CHARGING UNIT (CCU)™

Model 2

Product description

BME's Cruiser Charging Unit (CCU™) is one of a range of compact charging systems available for use with BME's range Megapump™ emulsion formulations. The Model 2 CCU™ is fitted with BME's new Model 2 Mobile Pump™ and Intelligent Control and Recording™ (ICR) System with recording and reporting functionality. This represents not only the forefront in mechanised emulsion technology, but significantly improves the safety of underground emulsion pump technology. In operation, the positive displacement Mobile Pump on the CCU™ delivers both a double salt emulsion and sensitising solution simultaneously where it is mixed in the charging lance before entering the blasthole.

Though CCUs are limited in emulsion carrying capacity to 700 kg, they possess distinct advantages over traditional mechanised charging units in both mobility and daily operating expenses. This reduction in capital requirements and maintenance costs is made possible through the greatly improved efficiency of the new Mobile Pump over out-dated progressive cavity pump technology. In order to allow for ease of use in high operating areas, a hydraulic lifting platform can also be installed on the vehicle.

Application

The CCU™ was initially developed for use in underground development blasting where it was designed to pump at equivalent rates to traditional emulsion technology. The CCU™ has also found acceptance in small scale surface opertions.

Features

- High flow rate – 40 kg/min
- Low capital outlay
- Low operating and maintenance costs on vehicle
- Low maintenance cost on charging unit
- Intrinsically safe pump operation in instances of:
  - Dry running
  - Dead heading
- Short lead time for manufacture

Vehicle modifications

Suspension upgrade (heavy duty)
Front and rear impact protection
Tow bar (drop pin)
Fire suppression system
Fire extinguisher (dry powder)
Stop blocks
Modified light configuration

Underground vehicle modifications

- Emergency brake system (Zips-SABS)
  - Rear hydraulic discs (Fail-safe)
- Emissions catalytic purifier
- Emissions fume diluter
- Raised working platform
- Underground light configuration
- Gear lockout selection
  - Low range 4 x 4
  - Gears 1-2 and reverse

Charging unit design features

Emulsion tank capacity	700 kg
Sensitiser tank capacity	30 L
Water tank capacity	50 L
Pumping rate	40 kg/min
Max. hose length	15 m (¾"HDPE)
Compatible emulsions	HEF 100
Pre-set mass of emulsion/hole	

ICR – Intelligent controlling and recording system