## **PULSAR MEASURING SYSTEMS LTD**

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#### **BLASTHOLE PROBE**



## <u>PULSAR</u> BLASTHOLE PROBE

For surveying the inclination and azimuth of deviating, wet blastholes.

#### **PULSAR BLASTHOLE**

**PROBE** is a fully electronic tool which produces, accurate 3 dimensional maps of blastholes and the depth at which water is present.

## **FEATURES**

Portable, light weight, winch operated system.

### NO RODS REQUIRED.

- Easy to use depth of hole electronically measured every 0.1m and automatically recorded in Datamat 5.
- Depth of hole continuously displayed in Datamat 5.
- Compatible for use with Blast Designer 32, Quarry.4 &
- Winprof rockface surveying software.
- Every measurement displays inclination angle, heading, depth down hole, presence of water and battery status of Probe prior to recording in Datamat 5.
- Supplied with standalone HOLEVIEW software enabling graphical and numeric analysis of individual surveyed holes

### **OPERATING METHOD**

Lower probe to bottom of the hole, then retrieve taking measurements at pre-selected intervals (2, 3, 5m etc.) depth intervals. A typical 15m hole can be surveyed in less than 2 minutes.



Winch with Datamat 5

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PULSAR BLASTHOLE PROBE
TECHNICAL DATA
<b>Tool Dimensions</b> 800mm long x 57 mm diameter.
Case MaterialType 304 Austenitic Stainless steel. Maximumimmersion depth 1000m.
Tool Weight 4.5Kg.
<b>Inclination Sensor</b> Dual axis, digital, self compensating magnetometer with separate dedicated microprocessor. Tilt operating range $\pm 40$ degrees.
Accuracy $\pm 0.25$ degree inclination $\pm 1.0$ degree azimuth.
Main microprocessor 16 bit microcontroller.
Calibration/Configuration All sensors can be calibrated without opening the case.
<b>Power Supply</b> Internal, sealed Ni Cd rechargeable batteries giving up to 14 hours continuous use between charging. Batteries are charged without opening case. Battery strength indicator displayed in logger.
<b>Suspension Cable</b> 35m length of 7mm diameter polyurethane jacketed sub-marine cable. This cable is completely non kink and has extremely high abrasion resistance.
Connector Wet pluggable sub marine type moulded to cable
<b>Deployment winch</b> Hand operated type with heavy duty slip rings, brake and ratchet. Weight 7.5kg complete with 35m cable.
Data Output/input Full RS232 serial communications at 4800 baud.
OVER 75 SYSTEMS CURRENTLY IN USE
When used with the Datamat 5, every measurement displays the following data :-
• Depth down the hole

- Depth down the hole Inclination angle
- ٠
- Heading ٠
- Whether the hole is wet or dry ٠
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Battery status of Probe