

CAN YOU AFFORD NOT TO KNOW HOW YOUR EXPLOSIVES AND ACCESSORIES ARE PERFORMING

BLASTING PERFORMANCE AFFECTS MINING COSTS.

EXPLOSIVES AND ACCESSORIES PERFORMANCE AFFECTS BLASTING PERFORMANCE.

EXPLOSIVES AND ACCESSORIES PERFORMANCE CAN BE MEASURED WITH MREL'S VOD/DATA RECORDERS.

MREL manufactures the **world's most popular** family of explosives continuous velocity of detonation (VOD) recorders:



With **unmatched ease of use and unmatched economy**, these instruments record the VODs in explosives samples and explosives in blastholes. Additionally, the instruments record the hole and explosive deck delay times. Applications include:

EXPLOSIVES SAMPLES

1. Test the quality, consistency, and reliability of explosives to meet quality control standards set for the explosive by the explosive manufacturer.
2. Test the continuous VOD in any charge diameter, "unconfined" in cardboard tubes and "confined" in steel pipe.
3. Determine the critical diameter and critical density for an.
4. Determine the gap sensitivity for an explosive, using water, stemming and air.
5. Measure the timing accuracy of electric, electronic and non-electric delay detonators.
6. Determine the continuous VOD of primers/boosters.
7. Determine the minimum primer/booster size for any explosive by measuring the run-up VODs.

EXPLOSIVES IN BLASTHOLES

1. Determine the continuous VOD in any length of explosive in any hole diameter in any hole conditions, wet and dry.
2. Determine the continuous VOD in multiple holes per blast with one recorder.
3. Determine whether full detonation, low order detonation, or failure occurred in the explosive column and where in the explosive column.
4. Test the VOD against the manufacturer's specifications in full scale surface or underground blasting environments.
5. Determine the effects of detonating cord downlines on explosives.
6. Determine the minimum primer/booster size for any explosive by measuring the run-up VODs in full scale blasting environments.
7. Measure the timing accuracy of electric, electronic and non-electric delay detonators in full scale blasting environments.
8. Determine the effects of water, drill cuttings, rocks, stemming etc... trapped within the bottom, middle and top of the explosive column.
9. Determine the minimum length of explosive column to use as an explosive deck in decked holes, considering the ingress of stemming and drill cuttings, water pick-up etc... and the explosive run-up distance to full VOD requirements.
10. Determine the correct length and type of material to use as stemming between decks of explosives to ensure that sympathetic detonation between the explosive decks, and/or explosive deck desensitisation does not occur.
11. Determine the effects of dynamic pressures from holes and explosive decks detonating on earlier delays, on gas and micro-balloon sensitised emulsions and heavy AN/FOs.