



IGNEO™

Intrinsically Safe™ Initiating System for Very High Temperature Mining Applications

Designed for very high temperature mining applications and based on DynaEnergetics' patented IS2™ technology, the Igneo Intrinsically Safe Initiating System is the only available blasting system in the industry capable to withstand temperatures up to 150°C (302°F) for up to 48 hours encountered in either underground or open cut environments. The system also enables rapid programming, testing and simultaneously initiation of up to 1000 HTD150 detonators.

Developed for one of the most extreme mining environments, a geothermally active extinct volcano, the Igneo Initiating System offers a significant advantages for the customer operating in high temperature and reactive ground conditions.

- DynaEnergetics IS2 technology delivers leading improvements in personnel safety and operating efficiency, both on the bench and at the face.
- The 150°C (302°F) temperature rating brings significant cost reductions on products and labor used to monitor and control hole temperature.
- The high temperature rating allows for larger blast to be achieved, enhancing the operations efficiency and providing significant cost saving:
 - The amount of oversized rocks is significantly reduced
 - Blasting can be done less frequently, shortening the mine's downtime
 - Planning is improved, as equipment does not travel unnecessarily between blasting sites

THE DETONATOR

The core of the Igneo system is the HTD 150, an intrinsically safe high temperature resistant detonator with user programmable time delay. The detonator is radio frequency, stray current and stray voltage safe. It can withstand temperatures of up to 150°C (302°F) and pressures up to 3 bar (43.5 PSI) for as long as 48 hours. Its copper shell with anti-corrosion coating makes it suitable for high reactive ground/hot holes conditions. The time delay is user programmable from 1ms to 1500ms in 1ms steps.



BOOSTER CHARGE

Used together with the specially designed Booster Charge, the HTD 150 detonator can safely and reliably initiate blast holes without the need for sensitized booster emulsions. The Booster Charge is robustly attached to the detonator by using the Booster Housing Kit to form a very compact package that can be quickly and safely lowered in the blast holes. The 1.4D shipping classification makes it suitable for air cargo deliveries, simplifying logistics and supply chains.



DIGITAL FIRING PANEL

The Igneo Digital Firing Panel has been specifically developed to initiate the DynaEnergetics high temperature resistant mining detonator. It has a highly intuitive user interface and allows the operator to safely test and reliably initiate simultaneously up to 1000 detonators, connected to the panel's five firing channels. The panel is battery powered and it is packed inside an easily transportable and robust plastic case to offer unrestrained mobility and to withstand the most challenging operating conditions. The Igneo Digital Firing Panel can be used with either a wired or a wireless trigger.



PROGRAMMING AND TESTING DEVICE

The Igneo Programming and Testing Device can safely and securely program and test the HTD 150 mining detonator. The blast pattern can be setup either manually, directly on the device, or, in a more convenient way, using the dedicated computer software. The programming of the time delay is performed directly after connecting each detonator to the harness. Every detonator can be individually tested while still connected to the harness, giving the operator the peace of mind that each detonator is correctly programmed and wired. Up to 50 detonators can be checked while connected to the same harness. The device is battery powered and has a sturdy and tough aluminium construction which is IP67 rated.

