

To Whom So ever it May Concern

We are pleased to share complete information about Plasma Rock fragmentation as under:

PROCESS:

- We drill the hole of diameter 51 mm to a depth of minimum 2.5 to 3 meter.
- We inserted the prewired Impact cell to the bottom of hole. Impact cell is mainly a composition of Aluminum powder & Cupper Oxide Powder wrapped in wax paper.
- We used plastic seal & than sand for plugging the hole.
- The cell is connected to Electro Power Impactor (EPI) through connecter & switch.
- EPI provide very high current & voltage pulse i.e. 134 Megawatt for 1 millisecond.
- The Power Pulse allows to react two metal powder in Plasma stage & release the energy. While it reacting it generates high temperature & after reaction it converted in to Aluminum Oxide & Cupper.
- EPI is recharge by 30 KVA, 380 Volt, 3 phase, 50 Hz supply through Generator. Charging time is almost 3 minutes to store required energy.

BENEFITS:

- No Gas & No Shock Wave.
- Very Low vibration, sound & dust. The level is well below the permissible level specified in each country.
- No flying of Rocks & no Toxic gas / fumes.
- Vibration Frequency is 50 to 120 Hz & it do not overlap with building / structure vibration frequency which is generally ranging from 15 to 30. Hence no Resonance between two frequency. So no effect on nearby structure / buildings.
- Classified worldwide as non-explosive product for usage, storage & transportation.
- Unless the specified power pulse is applied from EPI, two metal powders will not react.
- Even Impact cell two terminals directly inserted in 415 volts 3 phase supply, no reaction will take place. So it is absolutely safe for normal usage.
- If Impact cells are thrown in fire than at two melting temperatures of metal powder the powder will get melt. So it is absolutely safe for normal storage.

LIMITATIONS:

- Very expensive.
- Under water rock cannot be fractured with this technology.
- Shallow depth up to 2 meter cannot be effectively fractured & it works out to be more expensive.
- Minimum 8 weeks required for delivery at site.
- RCC cannot be fractured with this technology.
- Rock with cracks & soil in between reduces the effectiveness.

ADVANTAGE OVER DETENOTOR BLASTING:

- Once you ignite the detonator, it release GAS & Gas creates enormous pressure on surroundings. This gas pressure blast whatever material surrounded to detonator.
- Gas creates high pressure on surrounding surface, which breaks the surface with huge sound, beyond specified limit of sound by authority.
- Detonator has the vibration frequency of 15 to 25 Hz. This overlap to vibration frequency of building / structure i.e. 15 to 30. This developed the resonance between two frequency & create the cracks in the buildings / structure.
- Detonator can be placed anywhere, which requires breakage.
- License & Permission required for usage, storage & transportation.

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