



Additional Industrial Applications

Our team is exploring potential uses by the Department of Defense in a wide range of applications. We anticipate the GOC could find uses in the Construction Industry such as by-pass tunneling in the construction of dams, highway tunnels, and the splitting of large rocks in slide situations where the clearing of highway passage is essential. Additional usage would be for excavating building foundations or trenches for electrical conduit, water mains or to access drain field for sewage systems in solid rock terrain. In its application related to rescue operations, the GOC could be efficiently used to clear access for those trapped in natural disasters such as earthquakes, mine cave-ins, or spelunking misadventures. Because the GOC and its support components are modular and of relatively small size and light in weight, they may be easily moved to any site without the use of “heavy equipment” and can be transported by helicopter as necessary. The prime mover for the GOC and any ancillary equipment so mounted has the ability to travel up to twenty meters per minute on level ground with a three hour battery life. The prime mover is also capable to climbing up to a thirty degree incline with any of our equipment mounted on board or pulling a companion equipment cart.

In commercial applications:

- Easily transportable.
- In construction projects for the preparation of blast holes two to three inches in diameter by two to eight feet deep.
- Safety rock bolting along highways (falling rock).
- In constructions projects where blasting is prohibitive (near habitation).
- In trenching for foundations in solid rock structures.
- In trenching for cables or piping through rock structures.
- In construction of by-pass tunnels in dam building projects.

In rescue operations:

- Easily transportable by helicopter.
- Cutting through concrete in building collapses.
- Tunneling in the case of a mine collapse.
- Rescue in spelunking misadventures.

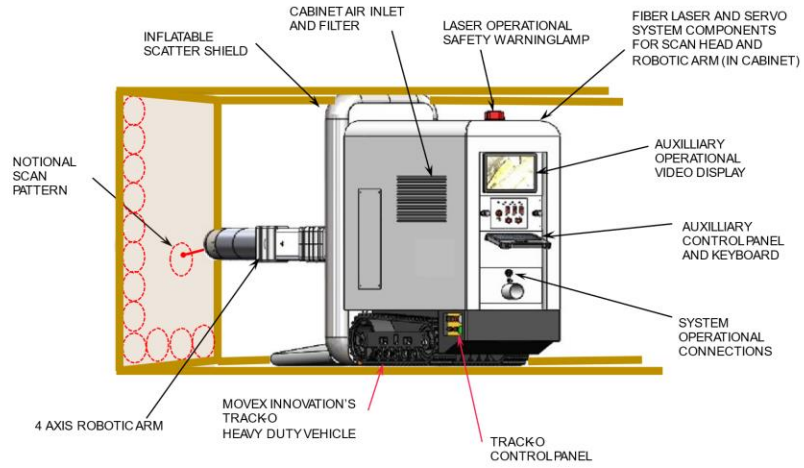
In military applications:


- Easily transportable by truck or helicopter.
- In road or airfield construction or repair functions where small rock shapes are desired or required.
- Excavation of revetments in rocky terrain.
- Preparation of approaches to streams or washes in rocky terrain where the sound of blasting is prohibitive.
- Any construction where the sound of blasting is prohibitive.

NASA:

- Mining on Mars (proposed several years back).
- Mining on Asteroids.

Method of Thermal Fracturing



This CAE Model was created using  **SOLIDWORKS**