ARGUS Robotics: Underground Mine Rescue Vehicle



Current problem: With increasing World demand for energy, underground coal mining is a major industry, but also one of the most dangerous. All countries have mining safety standards, nonetheless accidents and/or explosions happen, often with large number of miners being killed. When accidents happen time is a critical factor for rescue teams to help trapped personnel. Therefore, to help rescue teams and trapped miners there is a need for a mobile platform that can assist these efforts.

Current Solution: Use an existing robotic vehicle design to provide a mobile platform to support mine rescue teams. The vehicle will be battery powered with approved control and operational systems. Such design can be controlled manually, remotely and/or be autonomous with state of the art electro-hydraulic controls. It will have a series of high performance tools to assist and provide information to the rescue team as they proceed into the mine after an accident/explosion.

Benefit: Such a design will be easily transportable, thus a small number of units can be placed within a large geographical area. Thus the rescue team can arrive with the vehicle within one hour of the accident/explosion, and other units will be brought to the site for additional support. The vehicle can be immediately deployed to determine the scope of the accident, and from this the best course of action for the rescue team. It may also be part of a system. Such system may consist of this vehicle; mine rescue chambers, and backup/air communication systems. In addition, due to strict standards for electrical devices in coalmines, the control and battery systems can be adapted to support military usage and performance in dusty theatres of operation.

Group	Use	Availability	Cross	Technical	Price
			Reference	Reference	
Military	Primary		A1, A2, A3,	B1, B2,	Option
	-		A3a, A4, A5.	В3	dependent
			A6, A7		_
Construction	Secondary	120 days			
Industrial	Primary		U.S. Patent Nos. 7,267,354,		
Applications			7,275,459, 7,565,941, and		
Homeland	Secondary		Patents Pending.		
Security					

www.argusrobotics.com
P.O. Box 335 – Hurricane, WV 25526
john@argusrobotics.com-- 304-767-4576