R2D2 Does Vault Inspections

Meet the field technician of the future. Did you ever think that a part of your crew would be a robot? Kraft TeleRobotics, Inc. has developed what could be the safest way to do utility vault inspections. The M5-A Scout remotely-operated inspection vehicle embodies all the necessary components for doing vault inspections.

The Scout was designed to be deployed through the compact entryways of underground electric utility vaults. During a typical vertical entry, the unit is lowered into the utility vault using a proprietary launching device. When using the launcher, the machine will pass through a 29-inch diameter opening. If necessary, the unit can be deployed through a 24-inch diameter opening, without its launcher.

The machine’s color inspection camera provides highly advanced capabilities, including auto focusing, 8X zoom, and macro close-up inspection capability. The machine also incorporates a low-light level, wide angle navigation camera that allows the remote operator to maneuver the unit with ease, even in low light conditions. A telescoping camera mast can raise the pan/tilt mounted color inspection camera to a height of more than six feet above the floor. With the camera mast retracted, the machine is only 44-inches tall.

A two-way audio system on the vehicle allows the operator to listen for any audible sounds that may be generated within the remote environment. Ultrasonic sensors built into the audio system allow the remote operator to detect ultrasonic emissions.

The machine’s built-in gas analyzer will detect and measure Oxygen levels, Carbon Monoxide, Hydrogen Sulfide, Methane, and many other toxic and combustible gases. All analyzed gas data is displayed on the operator’s monitor, where a permanent video recording can be made. The vehicle is completely sealed and water-tight, and therefore may be operated continuously in a flooded or gas filled environment. All gas analyzing is accomplished without compromising the unit’s watertight integrity.

The Scout can perform infrared non-contact temperature measurements. The laser aimed infrared temperature sensor allows the remote operator to perform accurate temperature measurements at distances of ten feet or more. All temperature data is displayed on the operator’s color monitor where it can be recorded on video tape.

The unit will operate for 10 hours or more on a single charge. If necessary, it can be recharged in the field using a vehicle alternator. The operator control unit (OCU) may be operated with a 12 VDC or 120 VAC source. The machine can rotate about its own axis, travel down a 24-inch wide corridor, and drive over obstacles such as cable runs.

For additional information on the M5-A Scout, contact Steve Harbur, Director of Product Development, Kraft TeleRobotics, Inc. (913) 894-9022. Fax: (913) 894-1363.

Lighting Balloon System

Airstar Central has developed the Sirocco, a 2,000 watt auto-inflating lighting balloon system with an integrated blower assembly. With its halogen light source, the unit provides in excess of 11,000 square-feet of lighting coverage. Deployment takes less than one minute once power is applied. Elliptical in design, the lighting system withstands up to 60 mph wind speeds. Its proprietary shape provides multi-directional uniform light output with minimal glare. Utilizing a 110V ac power source, the unit draws less than 19 amps. For additional information, call Airstar Central (800) 217-9001. Fax: (817) 735-4824.

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Slide Rail Shoring System

The SBH Slide Rail System will satisfy the most stringent requirements with uncompromising safety that exceeds OSHA standards. The system is designed to handle deep trench excavations, close to existing buildings and adjacent to active roadways, without settlement. The compact size and center position of the “H” shaped rolling strut offers optimum working room during all operations. The construction of the double slide rail has the guide for the inner panels start four-feet below the top of the rail. System allows a minimum continuous pipe clearance of nine-feet 10-inches and can be used for trench depths up to 29-feet six-inches. For additional information, call American Shoring, Inc. (800) 497-4674.

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Reflective Numbering Kits

William Frick and Company’s reflective kits make it easy to identify pedestals, transformers, poles and other pieces of equipment. Snap latch box keeps labels organized and secure. The 3M Engineer Grade reflective labels are also laminated, which extend the life of the label and provide abrasion and chemical resistance. Standard sizes and colors are available. For additional information, contact William Frick and Company (847) 634-6341.

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