

The U.S. Army Recognizes C&M Corporation's MMIP™ Product Line

MILITARY MOLD IMPROVEMENT PLATFORM



THE APPLICATION

Faced with a war centered in the mountainous terrain of Afghanistan, the Department of the Army moved quickly to engage new technology designed to save the lives of US Soldiers serving in this theater of operation. One such piece of sophisticated equipment which is designed to quickly identify hidden enemy positions required networking protocols initially designed for offices and other controlled environments.

THE CHALLENGE

Standard networking cables, in this case Category 5e, utilize materials and assembly methodologies not suitable for the heat, sand, and other environmental conditions found in Afghanistan. C&M was tasked with developing a ruggedized cable assembly that could deliver Category 5e performance at the required distances and could perform reliably even under the most difficult battlefield conditions. Additionally, once approved for use, production quantities had to ramp up immediately to support the rapid deployment schedule specified by the Army.

THE SOLUTION

The C&M MMIP™ product line embraces the ruggedized COTS and MOTS philosophy and uses commercial materials and methodologies to create cable assemblies that meet or exceed the performance requirements of MIL-STD-810 for environmental and MIL-STD-461 for EMC requirements. The MMIP™ methodology uses high pressure insert injection molds that produce functional strain reliefs, seal the connectors, and prevent the most common form of field failure - pins being bent and/or pushed out of the insert. Utilizing the strengths of C&M's vertical integration that include cable design, mold tooling design, documentation, manufacturing, and testing capabilities, a molded assembly product was designed that met all requirements of the system and the military's specified test protocols.

THE OUTCOME

C&M processed over 1 million feet of cable into thousands of assemblies for the program and supported the on time deployment of several hundred finished systems. To date there have been no reported field failures. In a letter of appreciation to C&M issued by the Department of the Army, the Lieutenant Colonel in charge of the program recognized the speed of C&M's delivery timetable as "...one I have never seen before." Additionally, C&M's efforts were praised as, "...accomplishments that reflect true American pride in supporting our U. S. forces as they persevere in the fight in Afghanistan."

MMIP is a trademark of C&M Corporation

