



Multi-Functional Tactical Cable Reel

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Categories:

- Mechanical Engineering
- NSWC Crane

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- Crane
- Fiber Optics Cable
- Mechanical Engineering

The United States military stores 1,500 meters of 100 pound fiber optic cable on a reel that has a center made of four rods. The cable is wound around the four rods, which bends the cable at about 90 degrees, causing signal loss and permanent deformation to the cable. Deploying the cable requires significant manpower and time. Often the spool is rolled on the ground to deploy the fiber cable, which damages the fragile cable due to spool hub and rim diameter differential.

Naval Surface Warfare Center, Crane Division (NSWC Crane), has developed and patented a cable reel suited for 100 pound fiber optic cable. This technology reduces failures, increases the capability of the cable by protection its inherent qualities, and increases mean time between failures. The cable reel allows easier rewinding with a hand crank while the reel is stationary, rolling on the ground, or in the back of a moving vehicle. In addition, the cable reel reduces the amount of manpower required to employ these cables, reduces set up time, and tear down time.

Advantages:

- Damage control
- User friendly
- Saves time

Potential applications:

- Communication
- Military

People:

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Intellectual Property:

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