HAZARDOUS SITUATIONS REQUIRE A DEPENDABLE BRAKE

Today, we live in a dangerous world. Terrorism is real and a part of our everyday lives. We hear and see reports almost on a daily basis, yet there are probably dozens of other thwarted terrorism attempts that we will never hear of. Among the hundreds of entities devoted to avoiding disaster, a company in Tennessee stands out.

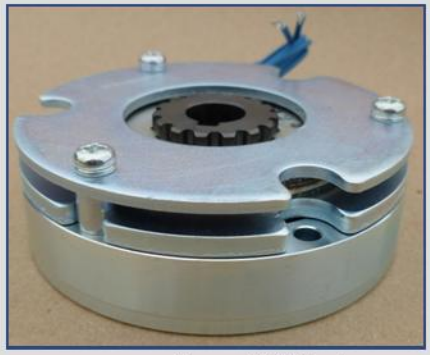
Remotec, a subsidiary of Northrop Grumman Corporation, manufactures a fleet of unmanned hazardous duty vehicles, called ANDROS. There are 5 unique robots in the fleet and are comparable in size from a child's wagon all the way up to a skid-steer loader. Designed primarily for EOD (Explosive Ordinance Disposal), the line-up is also available for Hazmat, tactical and CBRNE (chemical, biological, radiological, nuclear and high-yield explosive) uses. You may have seen the HD-1, the smallest of the fleet, in the opening scene of the Academy Award-winning film "The Hurt Locker" or possibly delivering the game ball in the 2010 Military Bowl. Coincidentally, the ANDROS robots were the inspiration for the main character in the Walt Disney Pixar film "Wall-E ®".

Andros robot

OIC is honored to supply (4) brakes on the ANDROS HD Series, the successor to the HD-1. The most versatile and lightweight robot in the fleet, the HD features (3) cameras, including a pan/tilt surveillance camera with a 216:1 zoom and can travel up to 4.3 miles per hour. Weighing in at 40 lbs., it can maneuver through mud, snow and sand, and through openings as small as 26" wide, and over obstacles 8" tall. The robotic "hand" or gripper can open to 6" and raise to a height of 6 feet, as well as having the capability to reach beneath automobiles. It can lift up to 30 lbs. at full 6 foot extension.

When searching for a brake to reliably perform the demanding functions of the arm axes, Remotec chose the Ogura RNB. Holding the shoulder, elbow and wrist joints accurately in place with 18 in. lb. of torque, the Ogura power-off brake is the perfect choice for a small envelope because of its low profile. The long-life friction material provides thousands of holding cycles. Since braking force is produced via springs, fluctuations in voltage and temperature have no effect on the brake.

The Ogura RNB brake is primarily a holding brake but will accommodate emergency stops. When the coil is energized, the magnetic field attracts a pressure plate compressing springs within the coil housing. This allows the friction disc/hub that is attached to the motor shaft to spin freely. When power is intentionally cut or accidentally lost, the magnetic field degrades quickly allowing the springs to push on the pressure plate squeezing the friction disc between the pressure plate and the outer housing, clamping it in place. Many sizes are available to handle different torque requirements.



Ogura RNB brake

As Mike Knopp, President of Remotec recently stated, "(Our customer's) continued confidence in Remotec's Andros platforms is testament to the experience and praise of those in the field who use them, the performance and reliability of the equipment, and the people of Remotec who stand behind them." Ogura is proud to be an integral part of that equipment.

To learn more about the RNB Series, as well as other Ogura clutches and brakes, please visit our website at www.ogura-clutch.com.