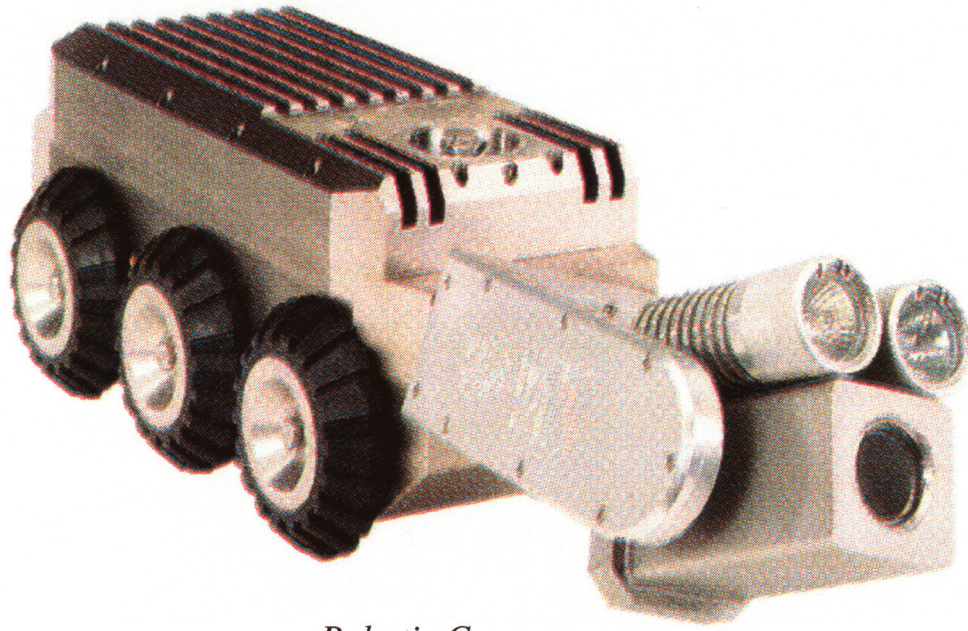


OGURA Clutch Brake Application Ideas!



Robotic Camera

Ogura clutches and brakes have applications in the growing market of robotic, remote viewing inspection systems.

The application illustrated above uses an Ogura AMC clutch which allows the operator to remotely disengage the camera pan and tilt linkage from the gearhead motor that drives that part of the inspection system. An Ogura RNB spring applied brake is also used on motorized cable reels to prevent the cable from spooling off the reel when it is not required. In some applications a large truck mounted reel is used where long lengths of pipe need to be inspected and a long cable is required.

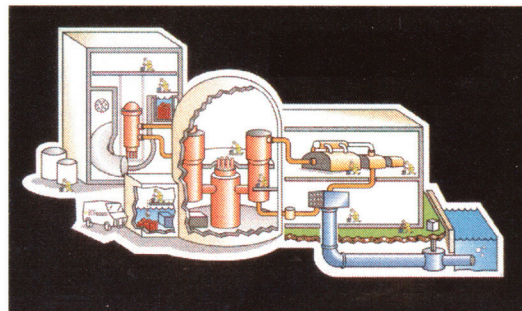
The Ogura AMC-10 is incorporated into the pan and tilt drive system to provide a means to disengage the camera positioning system from the drive in the event the motor fails or the gearbox becomes jammed. In applications where a pipe is the only convenient way in to inspect a tank or a process containment vessel, the robot enters with its camera lowered. Once inside the tank, the camera can be raised to allow the operator to explore for areas that require closer attention.

Operating in difficult environments (i.e., high heat, moisture, corrosives, radiation, high pressures, alien beings, evil robots from another dimension, etc.) can cause problems for the robot's operating systems. If the camera is in the raised position and the gearhead drive becomes disabled or seized, the AMC clutch can be disengaged and the camera can drop to its retracted position. The robot can then be retrieved back through the pipe it entered.

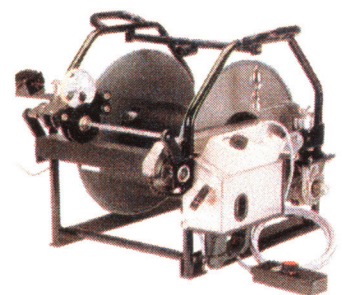
The AMC clutch was chosen because of its compact size, flexibility in its mounting, and the high quality standards and reliability for which Ogura is known around the world.



Fuel Rod loading surveillance



Representation of nuclear power plant components that a VIT can inspect



Motorized cable drum with level-wind feature