Torque/Tension Control Clutches and Brakes
Founded in 1938, Ogura is the world’s largest manufacturer of electromagnetic clutches and brakes. Current manufacturing capacity is over 30 million units per year. Clutches and brakes are produced in 14 manufacturing plants spread throughout four continents. Ogura is ISO 9001-2000, 14001 and ISO/TS 16949 certified. With over 3,000 models in production, Ogura is sure to meet your specific product needs.

Where Ogura Torque/Tension Control Clutches and Brakes are Used

**Railroad switch gear**  
Permanent magnet slip clutch to prevent motor overload in case of jammed condition

**Cash dispenser**  
OPL helps control proper cash dispensement

**Sign printer**  
Magnetic particle clutch  
Tension control for printing

**Cosmetic capping machine**  
PHT slip clutch controls cap tightness

**Bubble wrap machine**  
Tension controlled by magnetic particle clutch

**Printers and copiers**  
The clutch prevents paper jams and overfeeding

**Motor testing**  
Permanent magnet brake supplies constant drag to test motors

**Coil Winding**  
Permanent magnet brake controls wire tension

**Underwater probe**  
Magnetic Particle clutch controls cable tension
### Permanent Magnet Clutches and Brakes

| OPL/OPR Series | **Permanent-Magnet, Mag-Particle, Slip Clutches and Drag Brakes**  
| | Torque Range: 0.27~3.5in-lbs / 0.03~0.4Nm  
| | Designed for continuous slip or overload protection. Torque is produced magnetically eliminating high breakaway torques that can occur with mechanical devices. Since units do not produce wear particles, there is no concern about contamination. Torque is consistent over given speed range. Units can be provided with hollow bores or with stainless steel customized shafts. |

| PHT Series | **PHT Permanent-Magnet Hysteresis Clutch/Brake**  
| | Torque Range: 0~62in-lbs / 0~7Nm  
| | Permanent magnet hysteresis units can be configured as a clutch or a brake depending upon mounting. Torque is (produced magnetically) accurate and dependable. Torque is consistent over a given speed range. Because there is no wear, units have an extremely long life. Since units do not produce wear particles, there is no concern about contamination. Each unit has an adjustable torque range that can be set by the user. Units operate via permanent magnets, so no external controls or power is required. |

### Magnetic Particle Clutches and Brakes

| OPC Series | **OPC Electromagnetic Mag-Particle Clutch**  
| | Torque Range: 4.4~71in-lbs / 0.5~8Nm  
| | Magnetic particle clutch designed for industrial applications requiring fast response time and a stable torque. Units can be set for continuous slip which makes them ideal for tension applications. Voltage to torque is linear, so output torque can be easily controlled. Torque is transmitted via internal particles, so there is no contamination. |

| OPB Series | **OPB-N Electromagnetic Mag-Particle Brake**  
| | Torque Range: 4.4~71in-lbs / 0.5~8Nm  
| | Magnetic particle brake designed for industrial applications requiring fast response time and a stable torque. Units can be set for continuous slip which makes them ideal for tension applications. Voltage to torque is linear, so output torque can be easily controlled. Larger units have optional fan kits for added cooling. |

### Powered Hysteresis Clutches and Brakes

| HB Series | **Electromagnetic hysteresis brakes**  
| | Torque Range: 0.4~8.9in-lbs / 0.05~1Nm  
| | In hysteresis brakes, torque is independent of slip speed and can be easily controlled by varying the current. Since there is no frictional contact between the magnets, the units have an extremely wide torque range and are ideally suited for testing machinery and/or application that are required to produce consistent and smooth torque over a wide range. |

| HC Series | **Electromagnetic hysteresis clutches**  
| | Torque Range: 0.4~8.9in-lbs / 0.05~1Nm  
| | In hysteresis clutches, torque is independent of slip speed and can be easily controlled by varying the current. Since there is no frictional contact between the magnets, the units have an extremely wide torque range and are ideally suited for testing machinery and/or application that are required to produce consistent and smooth torque over a wide range. |
Other Products Available

From Ogura

1. Multiple disc clutches for use within a gearbox
2. Superchargers to increase performance and keep fuel usage low
3. Electric clutches for use on gas and diesel engine driven equipment
4. PTO clutch/brakes for cutting blades on consumer and commercial mowing equipment
5. Electric clutches for pumps and compressors
6. Spring-applied holding brakes for servo motors and industrial machinery