Block-on-Ring Wear Test System – BRW140

◆ General Information
The BRW140 system measures sliding wear and rolling wear characteristics. It is configured to do perform testing according to ASTM G77, ASTM D2714 and ASTM D3704 standards.

It also measures rolling fatigue wear by rolling contact through two rolling test methods, controlled by a jig change.

This test system can measure the static coefficient of friction and kinetic coefficient of friction according to the counter-material and can be used to measure the lubricating characteristics of oil. The system is designed to precisely measure friction force and is devised to harmonize according to specimen size, which can be changed during a rotation-type roller or Block-on-Ring test so that it is not affected by the size of the specimen.

◆ Control Parameters
- Rotation/Oscillation Speed
- Load (N)
- Temperature (°)
- Time (sec)
- Cycle

◆ Recorded Parameters
- Rotation/Oscillation Speed (m/sec)
- Slip Ratio (%)
- Load (N)
- Friction force (N)
- Temperature (°)
- Test Time (sec)
- Test Cycle (cycle)
- Friction Coefficient (µ)

◆ Setting Parameters
- Counter (cycle)
- Speed (rpm, m/sec)
- Temperature (°)
- Time (sec)
- Distance (m)

◆ Application
- Sliding Contact Wear
- Rolling Contact Wear
- Gear Wear
- Bearing Life
- Scuffing Wear
- Friction Test
- Friction Coefficient

◆ Test Modes
### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Range</td>
<td>Max. 4,000 N</td>
</tr>
<tr>
<td>Speed</td>
<td>Max. 1,000 rpm (optional 6,000 rpm)</td>
</tr>
<tr>
<td>Heating Range</td>
<td>Room Temperature – 200°C (lubrication chamber)</td>
</tr>
<tr>
<td>Oscillation Test Speed</td>
<td>7.9±0.16 m/min</td>
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<tr>
<td>Angle of Oscillation</td>
<td>30° – 90°</td>
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<tr>
<td>Test Ring</td>
<td>Type S-10</td>
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<tr>
<td>Test Block</td>
<td>Type H-30</td>
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<tr>
<td>Data Acquisition Rate</td>
<td>Max. 1000 Hz</td>
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</tbody>
</table>

- Scuffing Wear
- Friction Force
- Friction Coefficient
- Time
- Cycles
- Lubrication
- Slip Ration Control (optional)
- Vibration Monitoring (optional)
- Two Rolling Tests (optional)

- Wear test equipment for heavy loading bearing material using hydraulic systems. It can accommodate heavy loads with low speed testing.
- Exclusive test equipment for Block-on-Ring. Performs stable friction wear test.

### Software & Graphic Display

The main control and settings screen are set to control test conditions and continuously observe test results.