# SFI Test Report for Light Alloy Wheel

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>100903</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>F14</td>
</tr>
<tr>
<td><strong>Nominal designation of rim</strong></td>
<td>22×8.5J</td>
</tr>
<tr>
<td><strong>Offset (mm)</strong></td>
<td>+51</td>
</tr>
<tr>
<td><strong>P.C.D. (mm)</strong></td>
<td>130</td>
</tr>
<tr>
<td><strong>Number of bolt holes</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td>1-PC</td>
</tr>
<tr>
<td><strong>Material</strong></td>
<td>A356-T6</td>
</tr>
<tr>
<td><strong>Manufacturing method</strong></td>
<td>FLOW FORMING</td>
</tr>
</tbody>
</table>

## 1. Tire used for test

<table>
<thead>
<tr>
<th>Item</th>
<th>Nominal designation of tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radial load endurance test</td>
<td>315/50R22</td>
</tr>
<tr>
<td>Impact test</td>
<td>245/30R22</td>
</tr>
<tr>
<td><strong>PCD</strong> §15.75*24.5 **HUB:**74.1</td>
<td></td>
</tr>
<tr>
<td>**MAX LOADING:**2200LBS</td>
<td></td>
</tr>
</tbody>
</table>

## 2. Testing conditions and results

1. **Rotary bending fatigue test**
   - **Date of test**: (Month 07, Day 17, Year 2010)
   - **Testing equipment approval number**: A-238
   - **Bending moment during test (kgf.m)**: 579
   - **Rotational speed for test (100,000 circles)**: 100,000 circles
   - **Damage to disk wheel**: None
   - **Loosening of tightening section**: OK
   - **Evaluation**: Qualified

   Used in calculation of bending moment [kN][kgf] $= 997.92 (m) d 0.051 (m) W 0.4445 (kgs)$

   Calculated bending moment value $M$ [kNm] [kgf|m] $= 578.24 (m) d (m)$

2. **Radial load endurance test**
   - **Date of test**: (Month 07, Day 19, Year 2010)
   - **Testing equipment approval number**: B-224
   - **Pre-test air pressure [kpa][kgf/cm²]**: 460
   - **Radial load during test [kN][kgf]**: 2246
   - **Rotational speed for test [500,000 circles]**: 500,000 circles
   - **Damage to disk wheel**: None
   - **Loosening of fixture section etc.**: OK
   - **Evaluation**: Qualified

   Used in calculation of Radial load[kN][kgf] $= 2245.31 (kgs)$

3. **Impact test 13º**
   - **Date of test**: (Month 07, Day 16, Year 2010)
   - **Testing equipment approval number**: C-297
   - **Pre-test air pressure [kpa][kgf/cm²]**: 200
   - **Total width [mm]**: 249
   - **Weight mass [kg]**: 779
   - **Drop height [mm]**: 230
   - **Impact position (º)**: 0º/180º
   - **Damage to disk wheel**: NONE
   - **Air leakage**: OK
   - **Evaluation**: Qualified

4. **Overall evaluation**: Qualified/Disqualified

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**Model#:CB42S**

Corporate name: Forgestar

Contact: Wong