## SFI TEST REPORT FOR LIGHT ALLOY WHEEL

**Reference No.** 090726  
**Type** 2014 SPOKE  
**Nominal designation of rim** 20×10J  
**Offset (mm)** +57  
**P.C.D. (mm)** 127  
**Number of bolt holes** 5  
**Material** A356-T6  
**Structure** 1-PC  
**Manufacturing method** FLOW FORMING

### 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>285/50R20</td>
</tr>
<tr>
<td>Impact test</td>
<td>255/40R20</td>
</tr>
</tbody>
</table>

**PCD** $\frac{15.75}{30.93}$  
**MAX LOADING**: 1600LBS

### 2. Testing conditions and results

1. **Rotary bending fatigue test**  
   - Date of test: (Month) 07, (Day) 24, (Year) 2009  
   - Testing equipment approval number: A-226  
   - Bending moment during test (kgf.m): 397  
   - Rotational speed for test: 100,000 circles  
   - Damage to disk wheel: None  
   - Loosening of tightening section: OK  
   - Evaluation: Qualified/Disqualified  
   - Used in calculation of bending moment [kNm] $r \times 725.76(m)$  
   - Calculated bending moment value: $396.53(m) \times d(m)$

2. **Radial load endurance test**  
   - Date of test: (Month) 07, (Day) 25, (Year) 2009  
   - Testing equipment approval number: B-90-②  
   - Pre-test air pressure [kpa] [kgf/cm$^2$]: 460  
   - Radial load during test [kN] [kgf]: 1633  
   - Rotational speed for test: 500,000 circles  
   - Damage to disk wheel: None  
   - Loosening of fixture section etc.: OK  
   - Evaluation: Qualified/Disqualified  
   - Used in calculation of Radial load [kN] [kgf]: 725.76 [kgf]  
   - Calculated Radial load Q: $1632.95(kgs)$

3. **Impact test 13º**  
   - Date of test: (Month) 07, (Day) 24, (Year) 2009  
   - Testing equipment approval number: C-127-②  
   - Pre-test air pressure [kpa] [kgf/cm$^2$]: 200  
   - Total width (mm): 259  
   - Weight mass (kg): 616  
   - Drop height (mm): 230  
   - Impact position (º): 0º/180º  
   - Damage to disk wheel: NONE  
   - Air leakage: OK  
   - Evaluation: Qualified/Disqualified

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

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**MODEL#AB42S**  
**Corporate name**: Forgestar  
**Contact**: Wong