

## SFI TEST REPORT FOR LIGHT ALLOY WHEEL

|                      |            |                            |              |
|----------------------|------------|----------------------------|--------------|
| Reference No.        | 090726     |                            |              |
| Type                 | 2014 SPOKE | Nominal designation of rim | 20×11J       |
| Offset (mm)          | +78        | P.C.D. (mm)                | 127          |
| Number of bolt holes | 5          | Structure                  | 1-PC         |
| Material             | A356-T6    | Manufacturing method       | FLOW FORMING |

### MODEL#AB42S

Corporate name: Forgestar

Contact: Wong



#### 1. Tire used for test

| Item                       | Nominal designation of tire |
|----------------------------|-----------------------------|
| Radial load endurance test | 285/35R20                   |
| Impact test                | 285/35R20                   |

PCD  $\phi$  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) | Rotational speed for test | Damage to disk wheel | Loosening of tightening section | Evaluation             |
|------------------------------------|---------------------------|----------------------|---------------------------------|------------------------|
| 380                                | 100,000 circles           | None                 | OK                              | Qualified/Disqualified |

Used in calculation of bending moment [kN]{kgf} r 725.76(m) d0.078(m) W0.3556 (kgs)

Calculated bending moment value M [kNm] {kgfm} r 379.63 (m) 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 <sup>2</sup> } | Radial load during test [kN]{kgf} | Rotational speed for test | Damage to disk wheel | Loosening of fixture section etc. | Evaluation             |
|---|-----------------------------------|---------------------------|----------------------|-----------------------------------|------------------------|
| 460   | 1633                              | 500,000circles            | None                 | OK                                | Qualified/Disqualified |

Used in calculation of Radial load[kN]{kgf} Calculated Radial load Q 725.76 {kgf} W 1632.95 (kgs)

##### (3) Impact test 13°

Date of test, (Month) 07 (Day) 24 (Year) 2009

Testing equipment approval number C-127-②

| Pre-test air pressure [kpa]{kgf/cm <sup>2</sup> } | Total width (mm) | Weight mass (kg) | Drop height (mm) | Impact position (°) | Damage to disk wheel | Air leakage | Evaluation             |
|---|------------------|------------------|------------------|---------------------|----------------------|-------------|------------------------|
| 200   | 289              | 616              | 230              | 0°/180°             | NONE                 | OK          | Qualified/Disqualified |

##### (4) Overall evaluation Qualified/Disqualified