

## SFI TEST REPORT FOR LIGHT ALLOY WHEEL

|                      |         |                            |              |
|----------------------|---------|----------------------------|--------------|
| Reference No.        | 120808  |                            |              |
| Type                 | CF10    | Nominal designation of rim | 21×11J       |
| Offset (mm)          | +65.5   | P.C.D. (mm)                | 130          |
| Number of bolt holes | 5       | Structure                  | 1-PC         |
| Material             | A356-T6 | Manufacturing method       | FLOW FORMING |

### Model#BC83S

Corporate name: Forgestar

Contact: Wong



#### 1. Tire used for test

| Item                       | Nominal designation of tire |
|----------------------------|-----------------------------|
| Radial load endurance test | 295/40R21                   |
| Impact test                | 275/40R21                   |

PCD  $\phi$  15.75\*28.5

MAX LOADING:2200LBS

#### 2. Testing conditions and results

##### (1) Rotary bending fatigue test

Date of test, (Month 07 (Day) 18 (Year) 2012

Testing equipment approval number A-238

| Bending moment during test (kgf.m) | Rotational speed for test | Damage to disk wheel | Loosening of tightening section | Evaluation                     |
|------------------------------------|---------------------------|----------------------|---------------------------------|--------------------------------|
| 545                                | 100,000 circles           | None                 | OK                              | <u>Qualified</u> /Disqualified |

Used in calculation of bending moment [kN]{kgf}  $r$  997.92 (m)  $d$  0.0655(m)  $W$  0.3937 (kgs)

Calculated bending moment value M [kNm] {kgfm}  $r$  544.61 (m)  $d$  (m)

##### (2) Radial load endurance test

Date of test, (Month) 07 (Day) 19 (Year) 2012

Testing equipment approval number B-224

| 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   | 2246                              | 500,000circles            | None                 | OK                                | <u>Qualified</u> /Disqualified |

Used in calculation of Radial load[kN]{kgf} Calculated Radial load  $Q$  997.92 {kgf}  $W$  2245.31 (kgs)

##### (3) Impact test 13°

Date of test, (Month) 07 (Day) 17 (Year) 2012

Testing equipment approval number C-297

| 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   | 279              | 779              | 230              | 0°/180°             | NONE                 | OK          | <u>Qualified</u> /Disqualified |

(4) Overall evaluation: Qualified Disqualified