Collation of FlexPLI Inverse Certification Test Results

Revision 1
- disclosing Information on Master Legs and Pass/Fail Ratio -

7th Meeting of Informal Group GTR9 Phase 2
July 3rd, 2013

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Dataset

• 15 impactors

  ➢ 2 prototypes (leg 4 & leg 5)
  ➢ 13 serial production legs
    - leg 1: Master Leg SN01
    - leg 2: Master Leg SN03
    - leg 3: Master Leg E-Leg

• 7 test labs

• 134 tests

  ➢ 37 tests w/ prototypes
  ➢ 97 tests w/ serial production legs
Results Tibia 1 - Inverse Tests

Tibia 1 - Leg1

Tibia 1 - Leg2

Tibia 1 - Leg3

Tibia 1 - Leg4

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Results Tibia 1 - Inverse Tests

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Results Tibia 1 - Inverse Tests

Tibia 1 - Leg9

Tibia 1 - Leg10

Tibia 1 - Leg11

Tibia 1 - Leg12

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Results Tibia 1 - Inverse Tests

Tibia 1 - Leg13

Tibia 1 - Leg14

Tibia 1 - Leg15

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Results Tibia 2 - Inverse Tests

Tibia 2 - Leg1

Tibia 2 - Leg2

Tibia 2 - Leg3

Tibia 2 - Leg4
Results Tibia 2 - Inverse Tests

Tibia 2 - Leg9

Tibia 2 - Leg10

Tibia 2 - Leg11

Tibia 2 - Leg12

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Results Tibia 2 - Inverse Tests

Tibia 2 - Leg13

Tibia 2 - Leg14

Tibia 2 - Leg15

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Results Tibia 3 - Inverse Tests

Tibia 3 - Leg5

Tibia 3 - Leg6

Tibia 3 - Leg7

Tibia 3 - Leg8
Results Tibia 3 - Inverse Tests

Tibia 3 - Leg9

Tibia 3 - Leg10

Tibia 3 - Leg11

Tibia 3 - Leg12
Results Tibia 3 - Inverse Tests

Tibia 3 - Leg 13

Tibia 3 - Leg 14

Tibia 3 - Leg 15

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Results Tibia 4 - Inverse Tests

Tibia 4 - Leg5

Tibia 4 - Leg6

Tibia 4 - Leg7

Tibia 4 - Leg8

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Results Tibia 4 - Inverse Tests
Results Tibia 4 - Inverse Tests

- Tibia 4 - Leg 13
- Tibia 4 - Leg 14
- Tibia 4 - Leg 15

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Results ACL - Inverse Tests

ACL-Leg1

ACL-Leg2

ACL-Leg3

ACL-Leg4

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Slide No. 24
Results ACL - Inverse Tests

ACL - Leg5

ACL - Leg6

ACL - Leg7

ACL - Leg8

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Results ACL - Inverse Tests

ACL - Leg13

ACL - Leg14

ACL - Leg15

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Results PCL - Inverse Tests

PCL - Leg9

PCL - Leg10

PCL - Leg11

PCL - Leg12

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Results PCL - Inverse Tests

PCL - Leg13

PCL - Leg14

PCL - Leg15

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Results MCL - Inverse Tests

MCL - Leg 5

MCL - Leg 6

MCL - Leg 7

MCL - Leg 8

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Slide No. 35
Results MCL - Inverse Tests

MCL - Leg9

MCL - Leg10

MCL - Leg11

MCL - Leg12

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Slide No. 36
Results MCL - Inverse Tests

MCL - Leg 13

MCL - Leg 14

MCL - Leg 15

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Mean Values - Inverse Tests

**MV Tibia 1**

**MV Tibia 2**

**MV Tibia 3**

**MV Tibia 4**
Mean Values - Inverse Tests

**MV ACL**

**MV PCL**

**MV MCL**
<table>
<thead>
<tr>
<th>Tibia 1: 4 * not met – 130 * met</th>
<th>Serial production legs: 4 * not met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tibia 2: 1 * not met – 133 * met</td>
<td>Prototypes: 1 * not met</td>
</tr>
<tr>
<td>Tibia 3: 7 * not met – 127 * met</td>
<td>Serial production legs: 4 * not met</td>
</tr>
<tr>
<td></td>
<td>Prototypes: 3 * not met</td>
</tr>
<tr>
<td>Tibia 4: 15 * not met – 119 * met</td>
<td>Serial production legs: 4 * not met</td>
</tr>
<tr>
<td></td>
<td>Prototypes: 11 * not met</td>
</tr>
<tr>
<td>ACL: 26 * not met – 108 * met</td>
<td>Serial production legs: 5 * not met</td>
</tr>
<tr>
<td></td>
<td>Prototypes: 21 * not met</td>
</tr>
<tr>
<td>PCL: 4 * not met – 130 * met</td>
<td>Serial production legs: 1 * not met</td>
</tr>
<tr>
<td></td>
<td>Prototypes: 3 * not met</td>
</tr>
</tbody>
</table>

### Summary:

- **95 tests passed inverse requirements**
  - 84 w/ serial production legs
  - 11 w / prototypes
- **39 tests failed inverse requirements**
  (due to one or more segments not meeting the corresponding corridor)
  - 13 w/ serial production legs
  - 26 w/ prototypes
- **Pass / fail ratio**
  - 71% for all legforms
  - 87 % for serial production legs
  - 30 % for prototypes