PERFORMANCE TESTING FACILITIES

**ELAB 132**

Max Vertical Load: 10,000 kN
Max Shear Force: 1,000 kN
Max Shear Displacement: +/- 500mm
# Double Shear Configuration
# Single Shear Configuration

**ELAB 140**

Max Vertical Load: 20,000 kN
Max Shear Force: 2,000 kN
Max Shear Displacement: +/- 500mm
# Single Shear Configuration Only

**ELAB 150**

Max Vertical Load: 50,000 kN
Max Shear Force: 5,000 kN
Max Shear Displacement: +/- 1,000mm
# Single Shear Configuration Only

RESEARCH AND DEVELOPMENT FACILITIES

**ELAB 170**

Max Vertical Load: 1000 kN
Max Shear Force: 100 kN
Max Shear Displacement: +/- 200mm
# Single Shear Configuration

**ELAB 121 & ELAB 122**

Max Vertical Load: 1000 kN
Static Compression Loading Rate: 2.5 – 100 N/min

**MRT**
Mechanical Pot bearings
and Elastomeric Rubber Bearings

Penang Second Bridge
Seismic Isolation High Damping Rubber Bearings

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DOSHIN RUBBER PRODUCTS (M) SDN. BHD. (114386-M)
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DOSHIN RUBBER ENGINEERING
eLab Testing & Research Center

Quality
ISO 9001
Cert No: DQS 20110

NBS ISO9001:2008
TESSING
SBAM NO. 372

Certified System

LRT Mechanical Pot Bearings
FIELD OF TESTING: MECHANICAL

SCOPE OF ACCREDITATION:

PRODUCT: LAMINATED ELASTOMERIC BEARING

<table>
<thead>
<tr>
<th>Type of Test</th>
<th>Test Method</th>
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<tr>
<td>Shear Stiffness #Single Shear</td>
<td>BS 5400-1983 Section 9.2 Appendix A</td>
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<td>BSEN 1337-3:2005 [Annex F.7.7]</td>
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<td>BS 6177:1982 Clause 9.5 (Single Shear Configuration)</td>
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<td>#Double Shear</td>
<td>BS 6177:1982 Clause 9.5 (Double Shear Configuration)</td>
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<td>RMS B281 Clause 2.2.5 (Apr’ 12)</td>
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<td>RTA B280 Clause 2.2.5 (2011)</td>
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<td>AASHTO Sec.18 (2003) Clause 18.7.2.8</td>
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PRODUCT: SEISMIC BEARING (HIGH DAMPING RUBBER BEARING)

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<th>Type of Test</th>
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<tr>
<td>Compression Quality Assurance Test</td>
<td>BSEN 15129:2009 Clause 8.2.1.2.8 Compression under Zero Lateral Displacement</td>
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<td>BSEN 15129:2009 Clause 8.2.1.2.7</td>
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PRODUCT: MECHANICAL POT BEARING

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<th>Type of Test</th>
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<tr>
<td>Compression Quality Assurance Test</td>
<td>BS 5400:1983 Section 9.2 Clause 7.2 (b)</td>
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<td>AASHTO Sec.18 (2003) Clause 18.7.2.5 Short-term Compression Proof Load Test</td>
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<td>AASHTO Sec.18 (2003) Clause 18.7.2.6 Long-term Compression Proof Load Test</td>
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<td>BSEN 1337-5:2005 (Annex B)</td>
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<td>BS 5400:1983 Section 9.2 Clause 7.2 (b)</td>
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<td>AASHTO Sec.18 (2003) Clause 18.7.2.6</td>
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<td>AASHTO Sec.18 (2003) Clause 18.7.2.8</td>
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</table>

FENDER TESTING:

Max Vertical Load: 10,000 kN
- Energy Absorption
- Reaction Force
(Standard PIANC 2002)