**BRAZILIAN TEST APPARATUS**

**HR72.395**

**Brazilian Test Apparatus**

**Introduction**

Brazilian Test is a test for indirect measurement of tensile strength of rocks. The apparatus for carrying out this test, meets the essential requirements of IS:10082-1982 for use with 'NX' size core samples. The equipment comprises the following:

i) A loading frame, 100kN Capacity, having a base and a cross head joined together with two solid pillars with nuts. At the top, the pillars have long threads for height adjustment. On the base, a 100kN hydraulic jack is centrally fixed between the pillars. This jack has an integral pumping unit and oil reservoir. A 100kN capacity pressure gauge is fixed to the jack for indicating the load on the specimen. An operating handle for the jack is also provided.

ii) One Brazilian Attachment for 'NX' core size specimen with thickness half the diameter. It has two loading jaws. The lower jaw has two guide pins fixed with it and the upper jaw has two guide holes for the guide rods to hold the two jaws aligned. The upper jaw has a spherical seating on the upper side to seat a ball for self-alignment. Supplied complete with the steel ball.

**HR72.396**

**Brazilian Test Apparatus**

Same as HR72.395 but having a loading capacity of 200 kN.

Note: Brazilian Test Attachment for other sizes of rock core specimens available on request.
Rock Bolt Pull Out Test Apparatus
As per B.I.S. - 11309, ASTM D4435, ISRM.

The objective of the test method is to measure the working and ultimate capacities of rock bolt anchors.

The system comprises of a central hole jack, hand pump with load gauge, directional control valve (only for central hole jacks above the capacity of 500kN), flexible pipes, truss high tensile test rod with coupling.

In general the pull out force is indicated on load gauge, however a load cell can be used for the measuring of pull out load. Arrangement is provided for fixing dial gauge for estimating deflection against the load.

Different size of adopters are provided with the high tensile test rod.

**Adaptors**
- HR72.450.1: Thread size M 20 LH
- HR72.450.2: Thread size M 25 LH
- HR72.450.3: Thread size M 30 LH
- HR72.450.4: Thread size M 32 LH

**Dial Gauge**

**ACCESSORY**

Load Cell with central hole
- HR72.455: 200kN
- HR72.460: 1000kN
- HR72.465: 1500kN

HR72.470: Digital display unit for one load cell - 3½ digits.

<table>
<thead>
<tr>
<th>Catalogue No.</th>
<th>Capacity in kN</th>
<th>Central Bore mm</th>
<th>Collapsed Height mm</th>
<th>Std. test rod</th>
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<tbody>
<tr>
<td>HR72.400</td>
<td>100</td>
<td>21</td>
<td>155</td>
<td>M 20</td>
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