The lab is inaugurated by Hon. Sh. Sundaresan I.A.S., Secretariat, Ministry of Heavy industries & PE on 29 June 2012.

Hon. Sh. Nitin Ramesh Gokarn, I.A.S., CEO & P.D., NATRIP has visited the lab on 25 Oct 2012 during his visit to GARC.

Installation and Commission activities:

The Fatigue Lab building is ready and vibration shaker equipments are stored inside the lab—Nov 2011.

The shakers are temporarily installed and controlled with the help of computers in an open space. The Climatic chambers were received from supplier end and stored by the time

The Equipments - large vibration shaker; medium vibration shaker and medium climatic chamber are installed.

Vibration testing has been started from Jan 2012.

Large climatic chamber was installed on May 2012. The Vibration Shaker lab is fully ready for commercial operations.

Fatigue Lab Business Process:

It has been exciting and profitable year for vibration shaker laboratory.

Since the entire effort aims to strengthen the organization institutionally and technically for improved service delivery.

Our success continues to be tied to our strategy of opportunistically entering complementary market segments with attractive best in class service to the customers.

Special Mention:

♦ Total revenue - Rs 18,03,155.20.
♦ Total hours Tested - 550 Hrs.
♦ Work in hand - 100 Hrs.

List of Equipments:

- Large Climatic Chamber
- 6Ton Electrodynamics Shaker
- 3Ton Electrodynamics Shaker
- Medium Climatic Chamber

Team Members:

Under the guidance of Site Head—GARC,
Mr. M.V. Ramachandran, Sr. Dy. Director,
Mr. V.M. Dhanasekkar, Assistant Manager,
Mr. N. Kalyana Prasad, Engineer,
Mr. S. Thiravida Selvan, GET,
Mr. R. Prasanna Kumar, GET.

Fatigue Lab 2012, and its Steps:
(FAT 2) Vibration Shaker lab - Equipments & Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>6 Ton ED Shaker</th>
<th>3 Ton ED Shaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Force</td>
<td>6000 Kgf</td>
<td>3000 Kgf</td>
</tr>
<tr>
<td>Max frequency</td>
<td>2000 Hz</td>
<td>2000 Hz</td>
</tr>
<tr>
<td>Displacement (pk–pk)</td>
<td>51 mm</td>
<td>51 mm</td>
</tr>
<tr>
<td>Max Velocity</td>
<td>2 m/s</td>
<td>2 m/s</td>
</tr>
<tr>
<td>Max acceleration</td>
<td>115 g</td>
<td>90 g</td>
</tr>
<tr>
<td>Payload capacity*</td>
<td>700 kg</td>
<td>500 kg</td>
</tr>
<tr>
<td>Armature dia</td>
<td>440 mm</td>
<td>360 mm</td>
</tr>
<tr>
<td>Mounting Base Dim.</td>
<td>1.2 m x 1.2 m</td>
<td>0.8 m x 0.8 m</td>
</tr>
<tr>
<td></td>
<td>Climatic Chamber</td>
<td>Climatic Chamber</td>
</tr>
<tr>
<td>Usable size</td>
<td>2m x 2m x 2m</td>
<td>1.5m x 1.5m x 1.5m</td>
</tr>
<tr>
<td>Temp range</td>
<td>60°C to +180°C</td>
<td>60°C to +180°C</td>
</tr>
<tr>
<td>Temp Rate</td>
<td>4 K/min</td>
<td>4 K/min</td>
</tr>
<tr>
<td>Humidity</td>
<td>10% to 95% RH</td>
<td>10% to 95% RH</td>
</tr>
</tbody>
</table>

* Usable frequency/acceleration reduces with attachments and increasing payload

FATIGUE LABORATORY

Global Automotive Research Centre, Plot E1, SIPCOT Industrial Growth Centre, Oragadam, Sriperumputhur Taluk, Kanchipuram Dist, Chennai - 602105, Tamil Nadu, India.

For lab facility enquiries, contact
Mr M V Ramachandran,
Site Head, GARC.
Email: mv.rama@natrip.in,
Mobile: +91-7708020777

For fatigue lab test feasibility enquiries, contact
V M Dhanasekkar,
Asst. Manager, Fatigue Lab.
Email: vm.dhanasekar@natrip.in,
Mobile: +91-9842531134

The Electrodynamics Vibration Shaker lab facilities used by more than 12 customers including 5 OEMs.

FAT1, part of Fatigue Lab will commissioned soon. This Lab consist the following test equipments:

Upcoming equipments

- MAST (Multi Axial Shaker Table)
- 4 poster
- Universal Test Benches