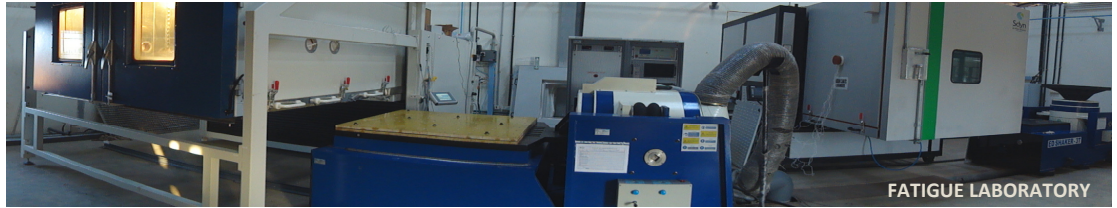




## FATIGUE LABORATORY



### *Fatigue Lab 2012 , and its Steps:*

#### 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 a 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.



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.



#### List of Equipments :

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

#### Team Members:

Under the guidance of  
Site Head- GARC,

Mr.M.V.Ramachandran,  
Sr.Dy. Director,

Mr.V.M.Dhanasekhar,  
Assistant Manager,

Mr.N.Kalyana Prasad,  
Engineer,

Mr.S.Thiravida Selvan,  
GET,

Mr.R.Prasanna Kumar,  
GET.

#### 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.

### *National Automotive Testing and R&D Infrastructure Project*

(Under Ministry of Heavy Industries & PE, Govt. of India)

Head Office : NBCC Place, South Tower 3rd Floor, Bhishma Pitamah Marg,  
Pragati Vihar, Lodhi Road, New Delhi—110003



**GLOBAL  
AUTOMOTIVE  
RESEARCH  
CENTRE**

**FATIGUE  
LABORATORY**

*(FAT 2 ) Vibration Shaker lab - Equipments & Specifications*

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

\* Usable frequency/acceleration reduces with attachments and increasing payload

## FATIGUE LABORATORY

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Asst. Manager, Fatigue Lab.

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

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

### Upcoming equipments



MAST (Multi Axial Shaker Table)

4 poster



Universal Test Benches



[www.natrip.in](http://www.natrip.in)

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