Resistoflex Spring Damper System Isolates 98% Vibration of Railway Axle Testing Machine at IOCL Faridabad

Challenge:-

Indian Oil Corporation Limited R&D Centre at Faridabad was experiencing problem with continuous operation of their Railway Axle Testing Machine, used to test lubrication of Railway Axle Bearings, which help in smooth operation of trains.

Whenever the Grease Testing machine was in operation, the complete floor of building was experiencing heavy vibrations generated by machine. Due to this there adjacent labs with high precision Electron Microscopes where not able to work.

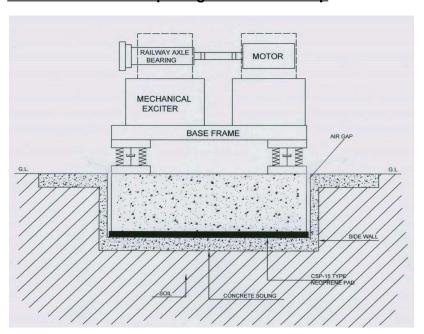
Solution:-

Resistoflex has recommended 2 – stage vibration isolation solution for Grease Testing Machine.

The solution consists of following:-

- Primary stage Resistoflex Spring Damper System
- Inertia Block below primary stage
- Secondary stage Resistoflex specially designed Neoprene pads stack

Schematic sketch depicting the actual set up

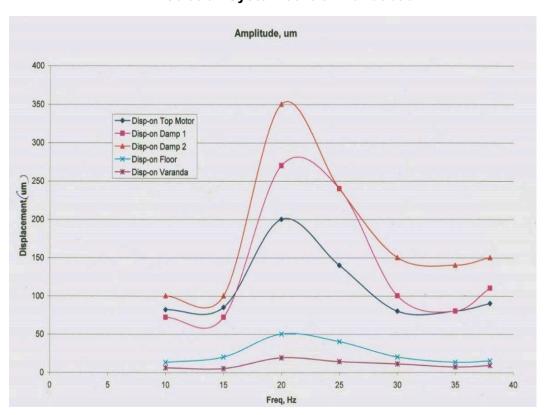


Results:-

Calculated results showed 90% isolation of vibrations generated by Railway Axle testing machine.

However, after measurement by third party it was established there was 98% reduction in vibration levels on the building floor.

Measured results of before and after installation of Resistoflex Vibration Isolation System at IOCL Faridabad.



Links:-

- Appreciation certificate received from IOCL
- Spring Damper System
- Square cell pads.