## TTS-series (6 Degrees of Freedom Systems)



At least 6 vibration shakers are located in 3D space with integrated control and can create 6 degrees of freedom motion (3 translation degrees of freedom and 3 rotating degrees).

In addition to X, Y, Z axis motion, rotational motion, Roll, Pitch and Yaw is also possible utilising spherical bearings.

Using electro dynamic vibration generators, IMV systems can reproduce waveforms which have components in a wide frequency range with a high degree of accuracy. System maintenance is easy. Systems comprise at least six vibration generators to act along orthogonal axes and also to generate the roll, pitch and yaw components of vibration. A spherical bearing is used to allow the rotational motion. By using electrodynamic vibration generators the system can operate over a wide frequency range with a high degree of accuracy. System maintenance is straightforward.

## ■Ride comfort evaluation system

The addition of rotational motion to a three-axis system enables 6 degree-of freedom testing, as is required for vehicle seat evaluation, for example.

Excitation direction	X axis	Y axis	Z axis
Rated Force(kN)	3.9	7.8	16
Maximum displacement (mmp-p)	150	150	100
Frequency Range(Hz)	1~100		
Table Size(mm)	1800x1800		
Vibration Generator	1	2	4

(Per 1 system)

## ■Large-scale 6 DOF vibration test system

A total of 10 vibration generators (6 vertical and 4 horizontal) and a 4000mm by 3500mm large size table allow the simultaneous 6 DOF vibration testing. This versatile platform is ideal for testing large items such as railway carriage components.

Excitation direction	X axis	Y axis	Z axis
Rated Force(kN)	80	48	96
Maximum displacement (mmp-p)		51	

Frequency Range(Hz)	2~150		
Table Size(mm)	4000x3500		
Vibration Generator	2	2	6

(Per 1 system)

## ■6 DOF simultaneous squeak and rattle test system for vehicle seats

Air-cooled vibration test system for the evaluation of squeak and rattle noise from an instrument panel or other car interior assemblies.



Excitation direction	X axis	Y axis	Z axis
Rated Force(N)	1600	1600	3200
Maximum displacement (mmp-p)	30		
Frequency Range(Hz)	5~100		
Table Size(mm)	1500x3500		
Vibration Generator	2	2	4

(Per 1 system)