VS-4 Vibration System Specifications

(Image for reference)

SYSTEM FEATURES

HALT/HASS Vibration System: Up to100 Grms with markedly improved Air Consumption/Grms. This system can be integrated to a chamber.

This new and improved system is based on 15 years of continuous development and combines rapid thermal cycling of products under test with six-degree-of freedom (6DoF), singularly, or in combination.

US Patented.

Vibration Table and Vibrators:

Vibration Table with ceramic surface thermally insulates table surface from vibration table base for improved temperature cycling and vibrator life.

Vibration enhancing mounting standoffs for improved vibration energy transfer and air circulation under test specimen.

LubeMist™ lubricated vibrators with adjustable ball valves, one for each pneumatic vibrator for low G-level performance using fewer vibrators. SoftStart™ designed vibrators minimize starting shock to products.

Three (3) year warranty for Controller, Vibration Table and Vibrators.

Summery of Hanse Vibration Features

VIBRATION FEATURES	Hanse
Range of vibration 0 to 100 GRMS (25-30° C)	X
Easy Self starting vibrators	X
Self oiling vibrator system	X
High tempter hose with bulk head fittings	X
Easy removable hose (JIC fitting)	X
Ball valve control on each vibrator	X
Harden piston for long life and low wear	X
Low air consumption vibrator	X
Vibrators work in -100° to +200° C environment	X
Requires clean dry air	X
Balanced vibrators for load size	X
Vibrators able to be retrofit to other systems	X
Three (3) size vibrators available	X
Precision air control regulators	X
Ceramic insulated vibration table	X
Stainless steel mounting insert 3/8-16 or M10	X
Full table surface no restrictions	X
Can be integrated with chambers	X
3 Year warranty on controller, table and vibrators	X

Performance

Vibration

1.1 **Tri-Axial:** Six-Degree-of-Freedom (6DoF) Vibration, non-coherent broadband vibration 10-10,000Hz, up to 100 GRMS, at 25° to 30°C with unloaded table. 90% of vibration energy in 5-4000Hz for maximum low energy in low frequency range.

1.2 **Table:** 24” x 24” (609 mm x 609 mm) with 3/8-16 (M10) standoff mounting inserts.

1.3 **Accelerometers:** One (1) Model Dytran 3030B5, with cable and three axis mounting block.

1.4 **Vibration Actuators:** Two (2) Medium and Two (2) Large pneumatically actuated. Table vibration, ± 1 GRMS within one (1) minute of settling.

1.5 **Load:** 700 lbs

Enclose Construction

2.1 **Exterior:** 30”W x 30”D x 32”H (nominal)

2.2 **Walls:** Removable service access wall with insulted panels and insulated panel Floor.

2.2.1. **Insulation:** Acoustic Sound insulation lining inside of walls

2.3 **Weight:** 1,500 lbs

Instrumentation

3.1 **Programmable Vibration Control:** Programmable vibration ramps, GRMS level, and test duration

3.2 **Optional Synchronization:** With the temperature controller.

3.3 **Accelerometers:** One (1) accelerometer, cable and 3 axis mounting block provided. One (1) channel GRMS meter capability. Optional analysis package allows up to 16 accelerometers to be monitored.

3.4 **Serial Ports:** RS232/485 MODBUS

Software

4.1 **Hanse View™:** For vibration programing, control and dataloging.

Safety

5.1. **Interlocks Connection:** Provide Interlock Connection to shut down vibration.

5.2. **Emergency Power Off (EPS):** EPS activation shuts off system operation

Utilities

6.1. **Electric:** 110-220 VAC 1 Phase 15 Amp Outlet
6.2. **Compressed Air:** 3/4” NPT (19 mm) Supply 120 psig, 45 SCFM

Installation

7.1 The customer is responsible for unloading system and rigging into place.
7.2 Utilities and services necessary for system operation, electrical, LN2, compressed air, exhausts, etc. shall be provided by customer and connected to the system.
7.3 Any leasehold improvements or building alterations are the responsibility of the customer.

Options

8.1. **Hanse View ™ Vibration Analyzer:** Control/Analyzer/Data Logger with 4 Accelerometer channels.
8.1 **Additional Accelerometer Channels:** Additional four (4) Accelerometer channels up to a total of sixteen (16). Includes Current Source.
8.2 **Additional 14 thermocouples:** Total of 16 monitored (1 dedicated plenum air, 1 specimen). Data is integrated into Hanse View ™ Control or Analyzer
8.3 **Additional Accelerometer:** Model Dytran 3030B5, with cable.
8.3. **Additional Mounting Block:** Three axes.
8.4. **Communication Ports: O**ptional Ethernet TCP/IP.
8.5. **Vibration Fixtures:** Specially designed for HALT/HASS applications.
8.6 **Sound enclosure:** Top, Manual or automatic opening. Port and or view windows available.

Stand-Alone:

9.1 Temperature Cycling Chambers
9.2 Six- degree-of-vibration (6dof) Vibration Tables

Note: Specifications are subject to change without notice.
Any Hanse system can be modified to fit your requirements