# 구매규격서

## COMMODITY DESCRIPTION

품목번호	관세분류번호	정부물품분류번호(8자리)  Korean Government  Commodity Classification  Code(eight-digit)	품 명	단위	수량
Item No.	HSK No.		Description	<b>Unit</b>	Q'ty
1	9031.80.9099		Ultra Highly Accelerated Life Test System	System	1

#### I. 용도(End-user's Use)

- 1. The equipment can be used to carry on the accelerated life test such as ESS, HALT, HASS etc.
- 2. The composition of this equipment is a multi axis (6DOF) vibration system, high fast temperature change rates system.
- 3. The system provides multi stress testing capability for during design and production to assure robust and mature product with reliable long life.
- 4. This system has two Bi-Parting opening(Wing Type) with inspection window both front and back.
- 5. Automatic and manual control of temperature and vibration.
- 6. Control S/W with PC system included.

## **II.** 성능 및 규격(Performance and Specification)

- 1. Temperature range: more than -100°C~+200°C
- Temperature Rate: 70°C/min product temperature change rate for heating and cooling with 25Kg of Aluminum mass loaded.
- 3. Cooling: Liquid Nitrogen direct injection.
- 4. Thermocouples:
  - \* For control:

One(1) air and one(1) for product.

\* For monitoring

Fourteen (14) channels.

- 5. Internal dimensions:
  - Over 1000 \* 1000 \* 1200 (W\*D\*H)mm
- 6. Vibration Tables:
  - Two separate tables for Max 200Grms with table size:

over 910 x 910mm with 100mm grid pattern for Max 100 Grms vibration table. over 2,826 cm² for Max 200 Grms vibration table

- Both vibration table should be interchangeable easily
- 7. Acceleration : up to 100Grms with 90% of vibration energy in 5-4000Hz for maximum low energy in low frequency range.

Wide frequency range: 2 ~10khz, with 10kHz cutoff function

- For high G vibration table performed over 1000G spike.
- 8. Max. Payload: more than 320kg.

- 9. Door: Two(2), Bi-parting opening both front and back
- 10. Window: Four(4). Tempered multi-layer glass in each door with defrosting function.
- 11. Ports: Three(3) 150mm diameter for customer use
- 12. Insulation: Multi-layer staggered insulation for superior thermal and noise insulation.
- 13. Internal lighting: more than 3ea.
- 14. Control System
  - a) PC system
    - Pentium 4, 3.0GHz, 1GB RAM, 320G, HDD, CD/RW, 19" LCD Monitor, Key board and mouse.
  - b) Built-in computerized control system in chamber.
  - c) Vibration spectrum analyzer system
    - 4 Input channels for Accelerometer
  - d) Serial ports: RS232/RS485 MODBUS

#### 15. Utility

- a) Electric Power:
  - Voltage: 380V/60Hz/3ph
  - Wire work : from electric distributor to chamber.
- b) LN2 System
  - Minimum capacity of 3 ton tank included in base construction
  - Piping construction from tank to chamber by vacuum jacket insulation
  - GN2 purge system
  - LN2/GN2 liquid and gas separation system
  - Tank installation work included.
- c) Compressed Air
  - All related components included such as compressor, reserve tank, air cooler, air dryer, filter, housing, piping connection.
- 16. Accessories
  - 1) Fixture set
  - 2) Oxygen sensor system
  - 3) Fourteen(14) thermocouples
  - 4) Four(4) accelerometer with cable(3m)
  - 5) One(1) 3 axis mounting block for accelerometer
  - 6) Wifi system with wireless camera (1EA)

## 皿. 기타 조건(Remarks)

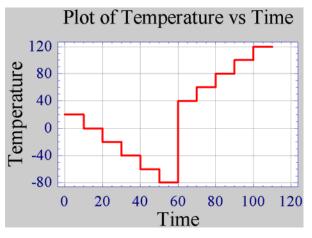
- 1) Inspection: Factory final inspection for 1 week, 2 peoples. All related cost will be included.
- 2) Training:

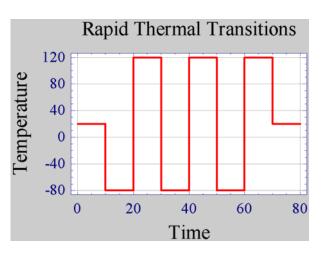
1st: during inspection at factory.

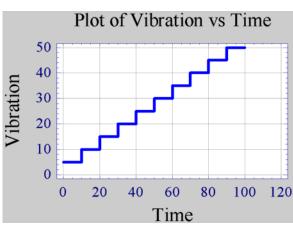
2nd : after installation at customer site.

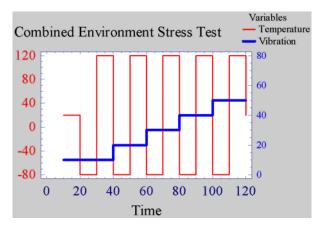
3rd: 2 months later from secondary training.

- 3) The verification for the following performance should be presented separately with the real test pictures and tested data together with application forms.
  - a) Proposed temperature performance data
  - b) Proposed max acceleration data: PSD vs Acceleration @ Max Payload
  - c) Proposed frequency excitation range data
- ※ Examples of Test Data (refer GMW8287)









- 4) The proposed HALT chamber must be available to perform 'GMW8287 Test Procedure Analysis (Highly Accelerated Life Testing)'.
- 5) Delivery: F.O.B 3 months after receipt of L/C.
- 6) Payment: 80% after shipping, 20% after acceptance
- 7) Manual: 2 copies of operation in English and Korean
- 8) Warranty: 3 years after issued F.A.
- 9) Supplier should support all related utility connection.
- 10) After installation, final test examination report should be submitted with a test check list.
- 11) The company who has HALT Chamber supply experiences of similar (or larger) requirements described in 'Section II' is strongly preferred.
- 12) The introduction material of a supplier and a manufacturer with recent brochures.