Part I

HAST CHAMBERS by HIRAYAMA

When you are looking for a HAST Chamber keep two key aspects in mind:

One: A HAST CHAMBER is a Precision Scientific Instrument –
It is NOT a run-of-the-mill Temperature and Humidity Chamber. It is a piece of testing equipment required to perform

Highly Accelerated Stress Test under very precise set conditions of Temperature & Humidity under Pressure.

Two: NOT ALL <u>HAST CHAMBERS</u> ARE CREATED EQUAL

Anyone looking for a <u>HAST CHAMBER</u> should keep these two key points in mind. If not, they will face the same problems as those who did not consider the above are facing today.

Every <u>HAST CHAMBER</u> manufacturers' specifications appear to meet JEDEC and the JIS standards but in practice may not.

Unfortunately, most test engineers do not discover these short comings until it's too late. Understandably, no one wants to admit a big mistake in the purchase of a fairly expensive piece of capital equipment so the inaccurate testing just continues, undercover.

A truly objective and informed **HAST Chamber** Manufacturer MUST:

- Guarantee the results and performance of a HAST Chamber over long periods of testing and time. Means: Non-Condensing Atmosphere & absolutely No Rain….These two factors are enough to create Leakage paths leading to erroneous failure conditions.
- Explain why moving air with a fan in a HAST environment is an unnecessary complication and can be detrimental to the test. Fans create hot spots and inconsistent atmospheric conditions. These air circulating units also require continuous costly replacements.
- Guarantee that the Chamber will not leak water onto the lab floor.

- Make clear if superior dual-chamber technology, a proven method for over forty years, is offered in the design of the HAST CHAMBER.
- Inform if certain costly key parts/components in the HAST CHAMBER must be replaced frequently and why.
- Admit that a larger chamber may be less accurate than the standard size.
- Clarify why or why not the wet-bulb, dry-bulb is required in a <u>HAST</u>
 <u>CHAMBER</u>. Inform the customer if frequent service calls are required to
 maintain it's HAST CHAMBER.
- Inform the customer that ONLY one company in the world has the patents and rights on this <u>UNIQUE DUAL CHAMBER</u> technology for a HAST CHAMBER.
- Enlighten the customer that there is only ONE company in the world that will provide long term parts and labor warranty for a <u>HAST CHAMBER</u> at almost no cost or very minimal costs to them.
- Notify the customer that there is ONLY one company in the world that
 has its previous five generations of HAST CHAMBERS still in operation
 through out the world A span of OVER THREE DECADES.

Just because a manufacturer makes good <u>Temperature and Humidity</u> <u>Chambers</u>, is not a justification that the same manufacturer can make good precise <u>HAST CHAMBERS</u>. Same goes for aesthetics. A pretty paint job does not necessarily mean better technical and or improved performance. Not by a long shot. One cannot compare apples to oranges.

NOT ALL HAST CHAMBERS ARE CREATED EQUAL

www.hastest.com

Part II

HAST CHAMBERS by HIRAYAMA

NOT ALL HAST CHAMBERS ARE CREATED EQUAL

Why is it that there are hundreds of manufacturers making Temperature and Humidity and other Test Chambers today, but there are only a handful of them making the HAST CHAMBERS, even though this technology is over forty years old? The answer is that this system is too precise and is protected by several international patents to be made by just anyone. It has to be made by the specialists in this unique field.

Here again the Rule number from two Part I applies.

"NOT ALL HAST CHAMBERS ARE CREATED EQUAL"

Consider the high profile list of satisfied customers who have been enjoying the benefits of the <u>HIRAYAMA HAST CHAMBER</u> for over three decades. Contact any Hirayama customer and you will find few to none willing to part with their Hirayamas', regardless of whether the chamber is 20 days old or 20 years old. It is extremely difficult to find a used Hirayama for sale.

Just because a manufacturer makes good Temperature and Humidity Chambers, is not a justification that the same manufacturer can make good precise HAST CHAMBERS. Same goes for aesthetics. A pretty paint job does not necessarily mean better technical and or improved performance. Not by a long shot. One cannot compare apples to oranges.

Furthermore, almost every major Commercial Test Lab in the Bay Area and around the world that does <u>HAST TESTING</u> uses Hirayama HAST Chambers. Commercial Test <u>Labs</u> demand the best because they are dealing with demanding customers, who prefer to blame the test equipment when a failure occurs rather than their test specimen/s under test. No lab can afford to take that chance by using inferior chambers. Those who have done so can say good bye to their HAST business.

When you purchase a Hirayama HAST CHAMBER, you get a <u>Quality HAST</u> system made to the highest standards of manufacturing and engineering excellence. This <u>HAST</u> system will perform year after year and will meet specifications year after year with a low to no maintenance required.

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Part III

HAST CHAMBERS by HIRAYAMA

NOT ALL HAST CHAMBERS ARE CREATED EQUAL

Benefits of the HIRAYAMA HAST Chambers— The Green System from Hastest Solutions

- Non-Condensing atmosphere
- No Rain
- Fully self contained No special facilities or plumbing required
- Plug & Play Connect AC Power, Connect the Drain and you are ready to go
- Occupies only 9 sq ft of footprint
- Abundant Safety Features
- Dual Chamber technology
- Virtually maintenance-free
- No Reach-in requirement Specimens come out in a tray
- Chamber never gets hot
- Without FANS A uniform non-condensing atmosphere
- Self-Cleaning Features
- On-Screen Self Diagnostics
- Problem identification and suggested solutions—On Screen
- Does not require operator computer training—Simple instructions
- GREEN MACHINE:
 - ✓ Low Power Consumption
 - ✓ No Wastage
 - ✓ Does NOT produce any Waste By-Products
- Unique Door Locking mechanism
- Self-locking door with built in safety features
- Drain could be a simple bucket
- Exceeds all levels of manufacturing & workmanship standards

- Every connection, every wire identified throughout the system
- Electronic system totally isolated from the main chamber and plumbing
- Stainless steel plumbing circulates all incoming water
- Non corrosive atmosphere

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