

Are Your Products Reliable ?



BE ANALYTIC

"Your One Stop Shop for Reliability Solutions"

Test Facilities:

BE Analytic has established world class test facility for quality and reliability assurance of different Mechanical, Electronic and Electro Mechanical Products. The infrastructure includes climatic testing lab, dynamic testing lab, HALT and HASS. Environmental testing facilities are suitable to perform tests as per JSS 55555 & MIL-STD, IEC-60529, EN, DIN and ISO-20653, GS 95024-3-1, SAE J1455, ASTM C 150 specifications and determine whether the systems/ subsystems perform consistently in the Service environment or not.



BE Analytic also help developing Test plans for Reliability Growth Analysis, Reliability Demonstration, Burn-in, HALT and HASS screens. Apart from performing compliance related tests, we also do testing of equipment for Failure Mode Analysis and Reliability/ MTBF estimation during prototype phases. This help companies identify the failures modes and comparing with warranty goals set which will in turn reduce cost and time of the product development.

1. **HALT/HASS** (12"*12" Bench top model and a 36"*36" chamber with fully automated data acquisition capability)
2. **Thermal Cycling** (2 Chambers supports smaller samples and above 1 meter cube size samples also)
3. **Combined Thermal and Vibration interface** with 1.2-meter cube working volume, temperature range from +180 degC to -70 degC. And vibration parameters with Rated Force 4000 Kgf, Frequency Range 5 to 2000Hz, max acc. 120g, max Velocity 2000mm/s, Displacement 70mm, Payload Capacity 150Kg.
4. **Altitude combined with Humidity and Temperature** of 1 cubic meter size with a ramp rate of 2deg./ min, temp range -70 to +180 deg and goes upto 1 milli Bar (100000 ft)



5. **IP Test Chambers:** Ranging from 1X TO 9X (Covers all IP Protection Test tests like Dust, Water, High Velocity Water, Immersion, High pressure cleaning, shower, dust bombardment, Drip)
6. **Vibration Shaker System:** A system to determine the resistance of subsystem/ system to vibrational stresses expected in the application environments. Three types of tests viz. sine, random and sine-on-random vibration tests can be carried out. This facility will accommodate a sample size of (25 Kgs – 200 Kgs)

7. **Shock Test Equipment:** The facility to carry out non-repetitive mechanical shocks to determine the structural integrity and performance.
8. **Acceleration Test Facility:** To carry out steady state acceleration test to assure that equipment can structurally withstand the g-force, up to 200g, that are expected to be induced by acceleration in aircraft, helicopter, unmanned aerospace vehicles and missiles.



9. **Thermal Shock Chamber:** To carry out thermal cycling / temperature tests.
10. **Hot and cold temperature chambers:** With temperature range from -70° C to 170° C with gradient of 5° C/min
11. **EMI-EMC Test Facilities:** The EMI/EMC test and measurement facilities are housed in an all welded and shielded chamber





AUTO

- Voltage Transient Emission Test
- Transient Immunity Test
- Electrical disturbances from Electro Static Discharge (Powered-up test)
- Electrical disturbances from Electro Static Discharge (Unpowered test)
- Direct radio frequency (RF) power injection
- Bulk Current Injection (BCI)
- Conducted Emission, 100 kHz to 108 MHz [5 μ H / 25 Amps]
- Radiated Emission, 9 kHz – 6 GHz at 1 Meter
- Test methods for electrical disturbances from electrostatic discharge



MIL

- | | |
|-------|-------|
| CE101 | CS115 |
| CE102 | CS116 |
| RE101 | CS118 |
| RE102 | RS101 |
| CS101 | RS103 |
| CS114 | |



STANDARDS

- MIL STD 461G
- CISPER 25
- ISO 11452-2
- ISO 7637-2
- ISO 16750-2
- ISO 10605
- IEC 61000 Series
- CENELEC
- DO-160
- FCC ETSI



BE Analytic Solutions, B131/A, Devasandra Industrial Estate,
Mahadevapura, Bengaluru 560048, India
Desk: 080-95000439 www.beanalytic.com

BE Analytic's Reliability & Safety Engineering team improves and maintains the safety and reliability of products throughout the development life cycle. Once a product is in service, they assess safety and reliability issues and help identify potential solutions, communicating with Design/ System Engineers to find the optimal balance between reliability and performance. BE Analytic successfully handled increasingly stringent legislation, and more demanding customers. Our Reliability Engineers are well read in different Aero & Defense Standards.



BE Analytic involves with Design & Development team/Systems Engineering Team and ensures that your products will meet all the Reliability & Safety compliance, BE Analytic do execute routine tasks like performing:

- MTBF/Reliability Prediction for Electronic, Mechanical and Electro Mechanical parts
- FMEA/ FMECA
- Maintainability Analysis (MTTR)
- RBD
- FRACAS
- Direct Maintenance Cost Analysis
- MSG-3
- MMEL
- Life Data Analysis

Or execute full turnkey projects like complete System Safety Analysis.



ITEM ToolKit



Integrated Reliability & Safety Analysis Platform

ITEM ToolKit™ is a suite of comprehensive prediction and analytical modules all contained within an integrated environment. It has the benefit of object-oriented architecture, delivering accuracy, flexibility and ease of use. It offers you convenient features that provide a consistent format for all your analyses. This enables learning carry-over from one module to another.

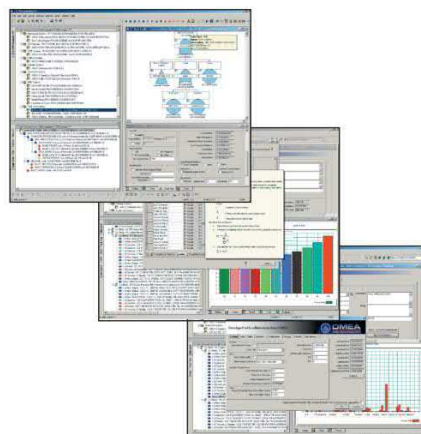
ITEM ToolKit has standardized many critical functions, shortcuts, and other features that operate identically in each module. This saves you time and effort, increasing productivity.

The program uses globally recognized standards and methodologies to analyze components, systems and projects. It enables a total system approach to analyzing individual systems and components, allowing you to optimize your design targets with respect to component selection, increased safety and reduced liability.

No other tool offers the diverse User Interface like that of ITEM ToolKit. You can create and analyze multiple systems and projects simultaneously, and share data with other engineers and departments.

An easy-to-use User Interface makes it faster and easier to maneuver throughout your project or system. You can view your data in a tabular grid, dialog box, hierarchy tree, chart or graph. Editing is as simple as a click on any of the standard options such as cut, copy, paste, drag and drop.

With its user-defined powerful import and export facilities, data can move seamlessly to and from BOMs, Excel, Access, text and comma delimited file formats. The creation of templates makes this even easier.



ITEM ToolKit Modules:

- Reliability Prediction
- MIL-HDBK-217
- Bellcore/Telcordia
- NSWC
- IEC 62380 (RDF)
- China 299B
- FMEA/FMECA/FMEDA
- Reliability Block Diagram
- Fault Tree Analysis
- Event Tree Analysis
- Markov Analysis
- Maintainability
- Spares Scaling & Ranging

The purchase and installation of your software has been a refreshing experience.

D.L. L-3 Comm.

We were delighted with the integrated approach to the Safety Analysis... ITEM ToolKit was able to identify weak areas of our design and improve overall reliability.

P.M. Knorr-Bremse



CONTACT :

HEAD OFFICE :

BE Analytic Solutions LLP ,
B131/A, Devasandra Industrial Estate,
Mahadevapura, Bengaluru 560048, India.
Ph: +91-80-65470039, Mob: 9986074309,
www.beanalytic.com, sales@beanalytic.com