Satellite Assembly, Integration and Test Center (AITC)

Services Provided:

- Assembling two satellites up to mass 600kg at the same time
- Measuring the alignment with high precision during and after satellite assembly
- Measuring mass property [Center of Gravity (COG) and Moment of Inertia (MOI)] of the satellite
- Thermal Vacuum Test (TVT)
- Vibration test
- Solar array deployment test
- Optical payload test
- And many others…

Facilities Available:

- Assembly hall
- Alignment system
- COG measurement system
- MOI measurement system
- Thermal vacuum test system
- Vibration test system
- Solar array deployment test stand
- EMC test Laboratory with working frequency range from 30Hz to 18GHz and supports the test items
- Optical test system aims at optical payload whose focal length is less than 6m and diameter is less than 600mm
- Integration test Laboratory

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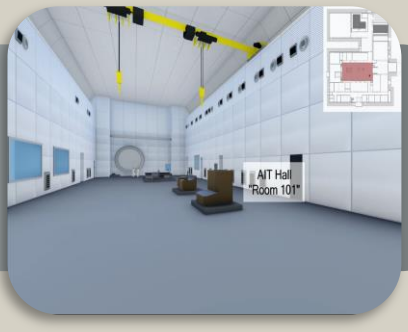
egsa.gov.eg
Global Online Education Website:
egsa-space-technology-portal.com

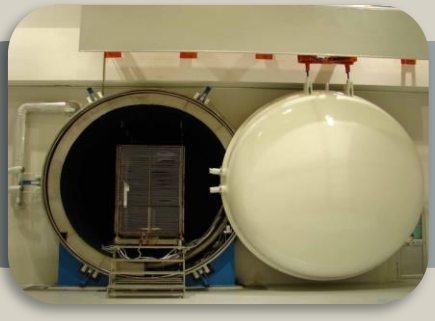
Part of our Facilities / Services:

Assembly hall classified (ISO-8)
Area around 540m^2 with full Mechanical Ground Support Equipment (MGSE)



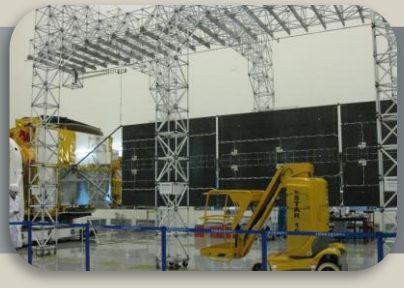
Alignment system
Three electronic theodolites with angular measurement precision of (0.5"), type Leica TM6100A
Multiplexer for theodolites Interface Type: 8pin LEMO-1

Vibration test system
Max sine force: 120-kN, Max random force: 90-kN
Max displacement: 51-mm (P-P) and frequency range: 5～2000Hz
Slip table: 1200mm × 1200mm with static load up to: 1000kg
Vertical expansion table: 1200mm × 1200mm, static load up to: 1000kg



Thermal vacuum test system
Vacuum chamber with internal effective dimensions
Φ4.5m × 6m (D×L)
Temperature : 100K or less
Non-load ultimate pressure below 6.5× 10^{-5}Pa

Solar array deployment test stand
Simulates the folding and deployment process of the solar array under conditions of zero gravity.
Outline dimension :7000mm × 4000mm × 5500mm
Maximum load of single-point hanging: 10kg



And many others... Contact us to know more about our Services.

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