



Facility Factsheet

Aerospace Structures Test Facility

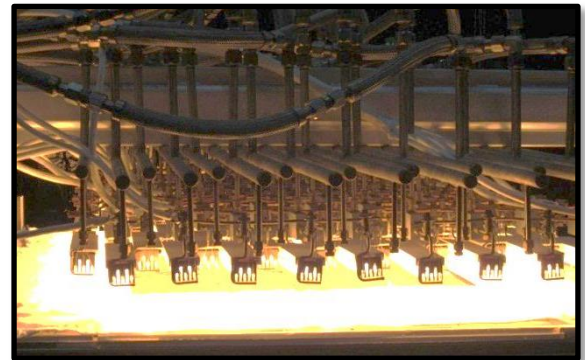
Main Test Floor (MTF)

Purpose:

The MTF is employed to validate advanced structural concepts and verify new analytical methodologies. Test articles range in size from subcomponent to full airframe. Test conditions are typically representative of aerospace vehicle flight maneuvers and/or aerodynamic heating. Common test parameters include mechanical load, radiant heating, cooling, and pressurization.

Capabilities:

- 251 by 170 ft wide
- Reinforced load bearing floor rated at 10,000 lb for every 5 ft
- Clear working heights of 121 ft at the center bay and 86 ft at each of the adjacent bays
- Hanger doors 60 ft high and 120 ft wide
- Three mobile bridge cranes incorporating 7 hooks ranging from 10 to 75 tons
- 82 Moog load control channels
- 500+ channel HBM data system
- 350 gpm of 3200 psi hydraulic oil system for load actuators
- 900 CFM 110 psig compressed air supply
- 10,000 gal liquid N₂ Dewar with vaporizers
- 3M BTU/hr of deionized cooling water and 15M BTU/hr of condenser/tower cooling water
- 24 MW of electrical power
- 69 discreet PLC controlled electrical power channels to radiantly heat articles at 120 BTU/ft²sec using quartz lamps.



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