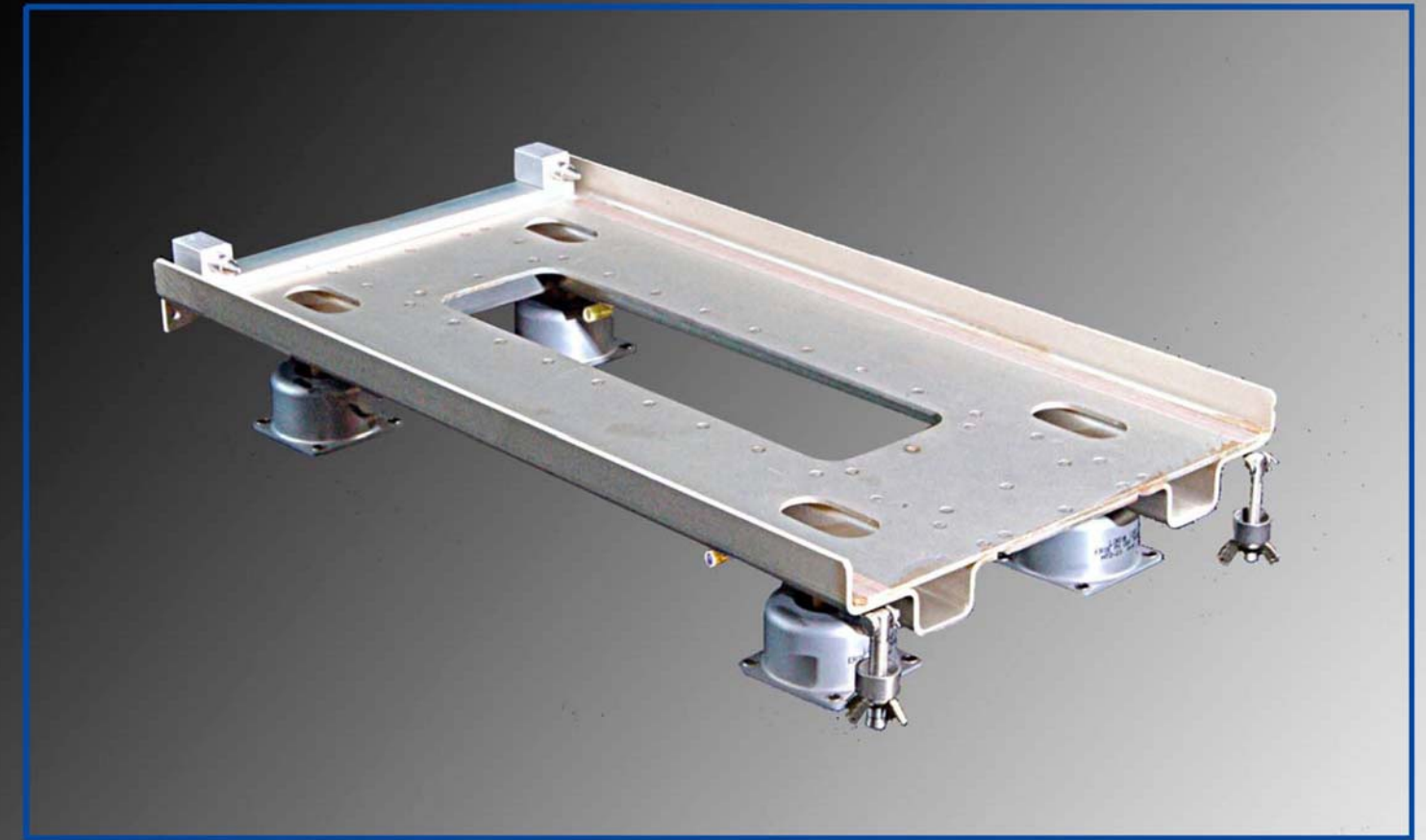


# Shock & Vibration Trays

Shock & Vibration Trays are designed to meet your specifications for:

- Tray dynamic shock and vibration performance.
  - Size and space requirements.
- Weight, loading and material goals.
- Mounting requirements for optimal dynamic performance.
- Tray environmental requirements such as salt and humidity.
  - Wiring and connection conditions.
  - Cooling plenums and fans.



3225 Bennett Street North, STE B  
Saint Petersburg, Florida 33713

O (727) 528-1621 x14  
O (727) 528-1621 x10  
F (727) 528-1622  
E [jjta@cobra-design-eng.com](mailto:jjta@cobra-design-eng.com)

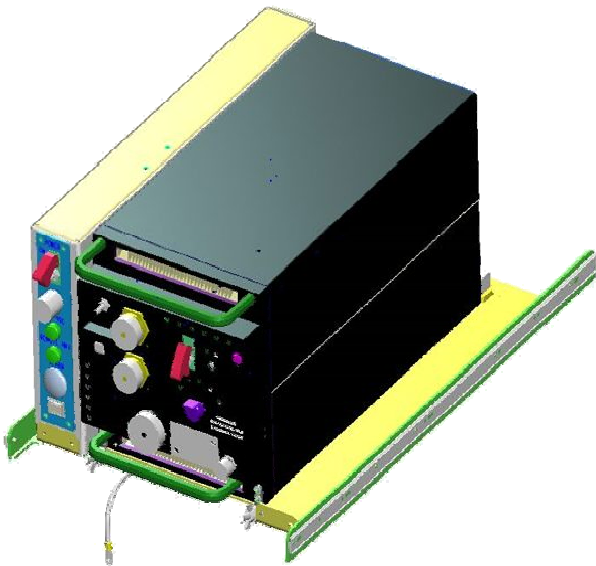
Standard ATR sizes are available from 1/2 to 1 ATR per ARINC 404A, for applications in aircraft electronic equipment, vehicular electronic equipment, shipboard equipment as well as racking systems. Cobra Design and Engineering, Incorporated, a firm with full, technically sophisticated product development capabilities, can meet your specific engineering requirements with a detailed approach from original concept through to a fully functional prototype, suitable for performance evaluation.



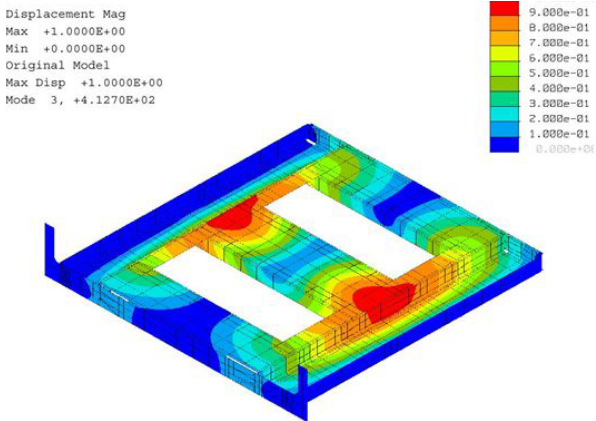


- Complete design and 3D modeling.
- FEA analysis using specific environmental inputs.
- Available environmental testing services.

Custom Tray Design

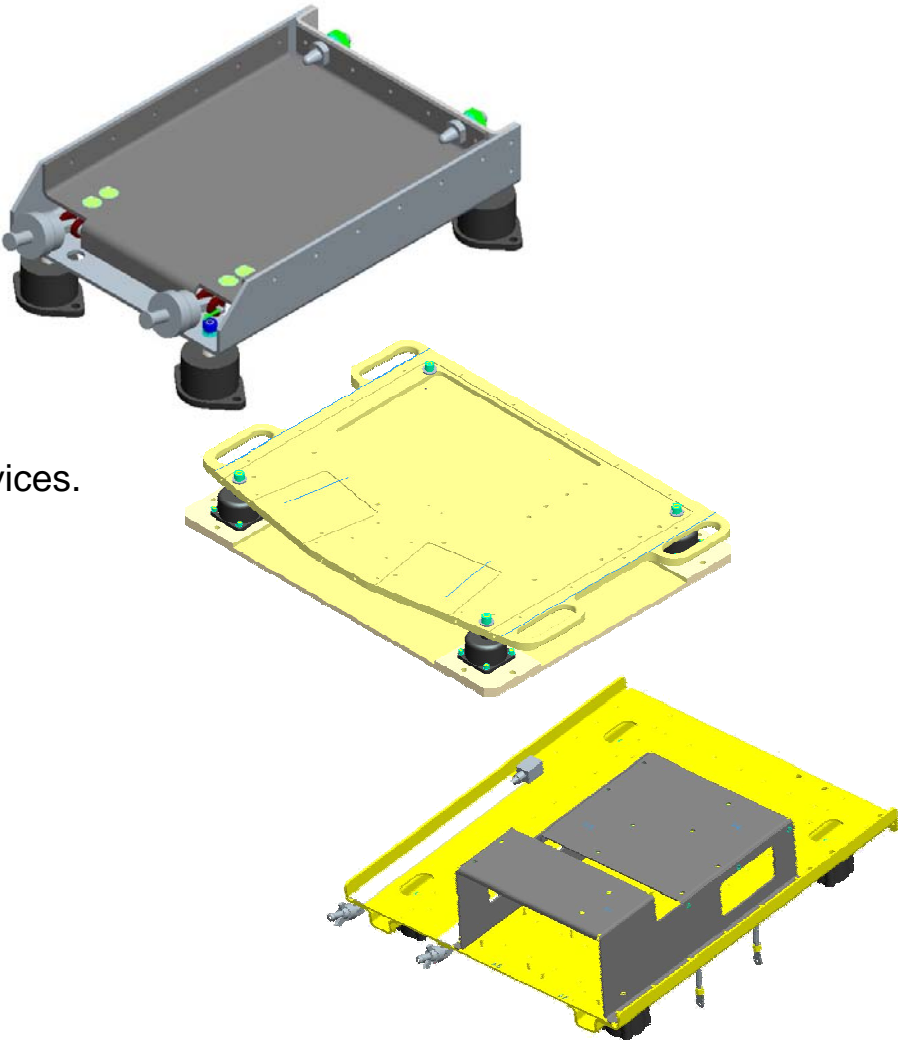


Tray Structural Analysis

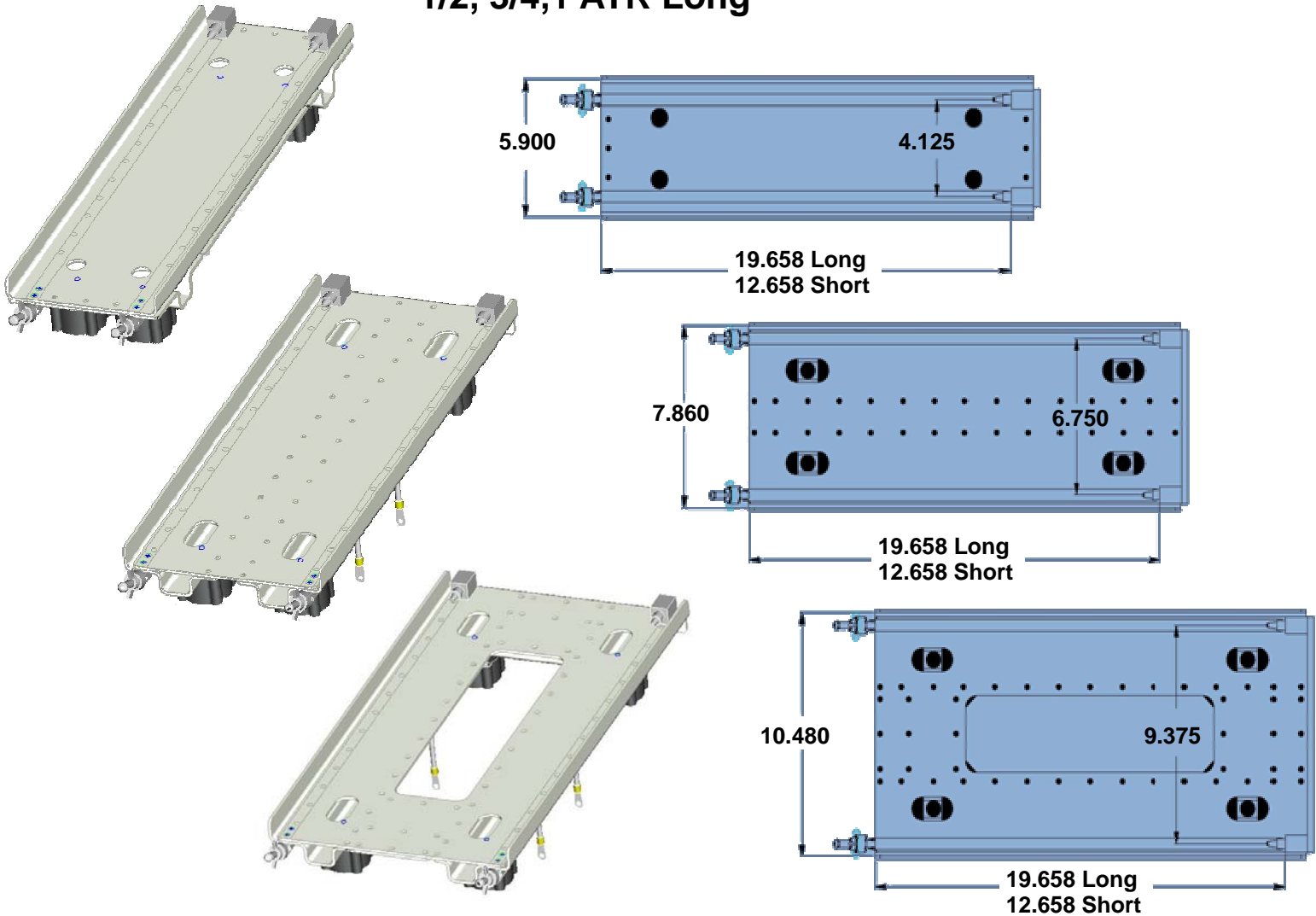


# Shock & Vibration Tray Product Line

Custom Trays



1/2, 3/4, 1 ATR Long



ATR Product Line

Model Number	Description	ATR Weight Max
03-ATR14SH-001	1/4 ATR Short	12 lbs(5.4 kgs)
03-ATR14LG-001	1/4 ATR Long	30 lbs(13.6 kgs)
03-ATR38SH-001	3/8 ATR Short	15 lbs(6.8 kgs)
03-ATR38LG-001	3/8 ATR Long	35 lbs(15.9 kgs)
03-ATR12SH-001	1/2 ATR Short	18 lbs(8.2 kgs)
03-ATR12LG-001	1/2 ATR Long	40 lbs(18.1 kgs)
03-ATR34SH-001	3/4 ATR Short	30 lbs(13.6 kgs)
03-ATR34LG-001	3/4 ATR Long	45 lbs(20.4 kgs)
03-ATR10SH-001	1 ATR Short	45 lbs(20.4 kgs)
03-ATR10LG-001	1 ATR Long	60 lbs(27.2 kgs)

## Shock & Vibration Tray Features:

- Aluminum alloy base with Alodine anodized finish.
- Military qualified isolators selected to match design loads.
- Military stainless steel hardware and retainers with passivated finish.
- Custom design configurations for special applications.
- Suitable for all mounting systems that require natural frequencies Above 20 MHz in the ambient temperature from –65 degrees Fahrenheit to +300 degrees Fahrenheit.

To bring your requirements to life, contact  
John Tischner or Brian Rennick at Cobra Design & Engineering today.