



Keeping a **Stronghold** on GEnx™-1B Jet Engines and Related Components

Champion GSE is a leading designer and manufacturer of engine stands, containers and affiliated ground support equipment (GSE) for the commercial aerospace, general aviation, military and power generation industries. Our innovative Stronghold products are used to safely and securely service, transport and store jet engines, turbines and other critical equipment in the most demanding environments.

Products

- Stronghold engine stands
 - Split stands
 - Fan stands
 - Rollover stands
 - Test stands
 - Shop dollies
- Stronghold containers
- Affiliated GSE tools
- Spare parts

Services

- Custom product design and engineering
- Container refurbishing
- Engine stand refurbishing
- Live engine load and product testing
- Consulting
- Product life cycle support

GEnx-1B

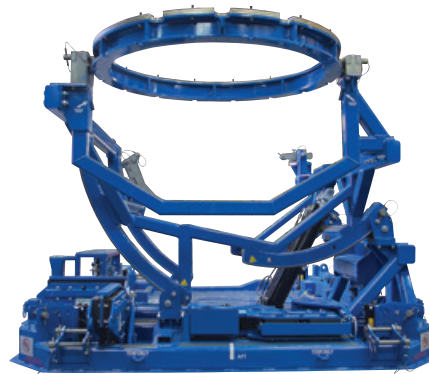
Engine Stands

As a producer of items made under license from GENERAL ELECTRIC COMPANY, USA, Champion GSE manufactures a certified, integrated family of Stronghold engine stands for the GEnx-1B engine. Our innovative rollover, split and fan stands allow ground crews to service, transport and store the complete GEnx-1B engine as well as its propulsor and fan modules — on the ground or in the air. We build each stand with features designed to maximize crew safety, enhance usability and keep a stronghold on the GEnx-1B engine.

Rollover Stand

Hydraulic automation provides rollover capability and contributes to the safe transport of the complete GEnx-1B engine and its propulsor.

- Two double-acting hydraulic cylinders safely actuate the automated rollover system
- Hydraulic jacking legs allow for safe caster installation and removal, as well as fan module removal and installation
- On-board pneumatic air drive powers rollover system and jacking legs
- Stainless steel shipping pallet provides on-board shock mount storage and features non-slip surfaces
- Spacer blocks provide alternative to hydraulic jacking feet
- Separate container stores casters and all other removable engine hardware



Split Stand

Simplifies engine build-up, installation, storage and transport of the GEnx-1B propulsor and fan modules.

- Hydraulic jacking legs allow for safe caster installation and removal, as well as fan module installation and removal
- Four double-acting hydraulic cylinders actuate an automated cradle lifting system to improve safety and reliability of propulsor loading
- On-board pneumatic air drive powers hydraulic cradle lifting and jacking legs
- Stainless steel shipping pallet provides on-board caster storage and features non-slip surfaces
- Operates in conjunction with fan stand to transport the GEnx-1B fan module
- Field changeable to GEnx-2B split stand with optional assembly fixtures



Fan Stand

The Stronghold fan stand provides secure transport of the GEnx-1B fan module once it is removed from the propulsor.

