

Loadbank Testing FAQs

What is loadbank testing?

Loadbank testing involves using an artificial load to bring the engine up to its operating temperature and maximum-rated load. This simulates the generator being used at maximum capacity and tests how the generator functions when the full load is applied, in a safe and controlled environment. It is a great way to keep production flowing and reduce the risk of downtime.

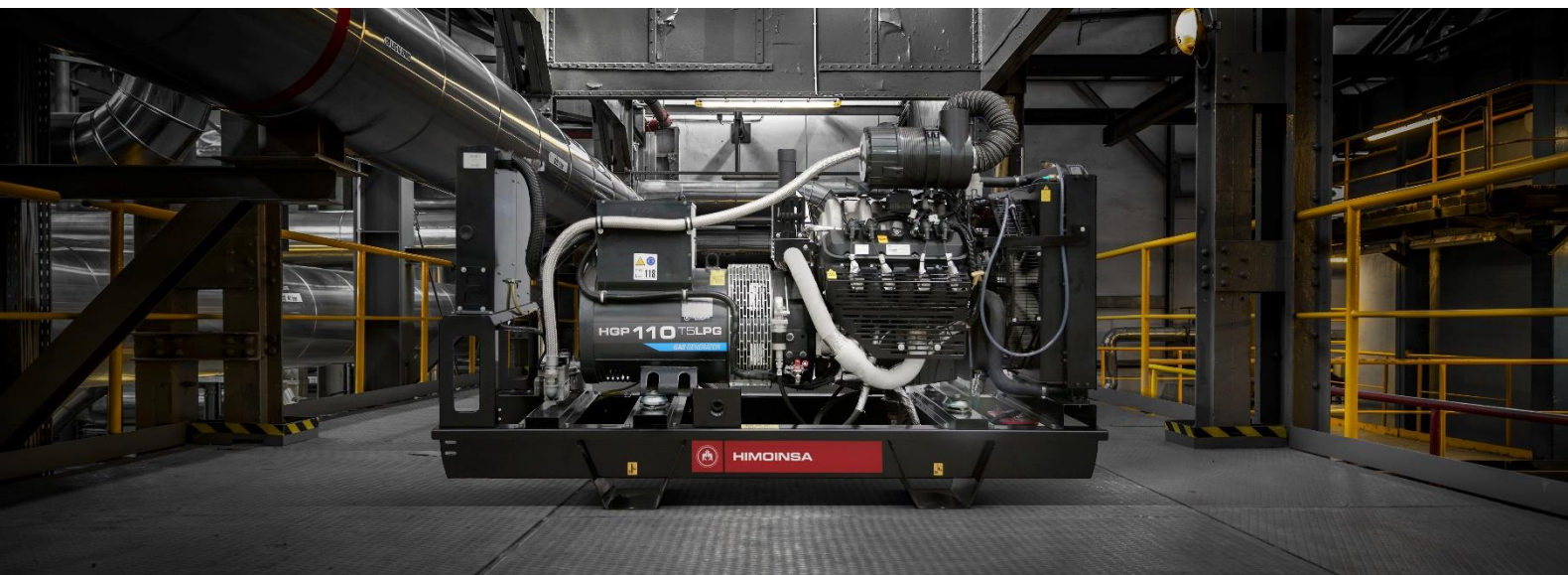
Loadbank testing is important as it checks that the generator is able to perform at the required power needed in an emergency power outage. As generators typically run at a lower level than the unit's rated output capability, testing is vital to ensuring that the generator is in full working order and can operate at maximum capacity.

How does loadbank testing work?

A loadbank is an industrial piece of equipment used to test electrical power supplies. During a loadbank test, our expert technicians will connect the loadbank to the generator and apply a full load. The generator will reach its maximum-rated operating temperature and load to ensure it's functioning efficiently. This will enable our technicians to identify any running problems and take the necessary corrective action within a controlled test environment.

Our loadbank testing equipment can be used to test any power system, regardless of whether or not it's been purchased through Woodlands. We offer a range of resistive-only and resistive-reactive loadbanks, available in a wide selection of voltage outputs. Applications include:

- Generators and turbines
- Uninterrupted power systems (UPS)
- Data centre power systems
- Cooling systems.



What's the difference between resistive and resistive-reactive loadbanks?

Resistive-only loadbanks are the most common type of loadbank, and mimic the operational load that a power source will see in actual use, at a unity power factor. They convert electrical energy (current) into heat using power resistors and dissipate the heat using air.

Resistive-reactive loadbanks combine both resistive and reactive elements in one loadbank package, and more closely simulate real world conditions your generator will encounter. While the resistive-only method validates the function of the generator's engine only, resistive-reactive loadbanks allow you to test whether the generator can deliver the power factor specified.

What are the benefits of loadbank testing?

Loadbank testing is a preventative measure to ensure you don't encounter performance issues in the event of an emergency. Diesel engines that run on very low loads can become unreliable, which can lead to smoky exhausts, carbon build-up, fuel system problems and lubricating oil deterioration. Our loadbank testing equipment has been used to test critical infrastructure sites throughout the UK and Europe, including hospitals, data centres and utility networks.

Loadbank testing checks that your generator works exactly as it should and helps to prevent unplanned power outages, giving you peace of mind that your facility is protected from downtime. Other key benefits include:

- Prevention of wet stacking, which reduces engine life cycle and efficiency
- Cleaning the generator by removing all the carbons from the engine.

Generator loadbank testing should be carried out at least once a year. If you'd like to know more about our preventative maintenance services, please get in touch on 0845 600 3335 or via email on info@woodlandspower.com and we'd be happy to help.

