



GasCube™ Natural Gas Booster Skid Package

The GasCube™ from Spencer Boosts the Natural Gas Pressure You Need

**It's an easy-to-install solution that also
reduces the job-site pressure you don't need**

Fast track schedules. Volatile utility costs.
Shrinking budgets.

That kind of job-site pressure is everywhere today. It drives so much of what happens and affects so many field decisions.

And that pressure just grows as building owners push the need to reduce installation expenses and shorten schedules. When a customer chooses natural gas as a more cost effective fuel, but the street pressure levels are too low to consistently support operations, they need a fast, proven solution.

The Spencer Turbine Company has the solution

The GasCube – Spencer's new UL Listed hermetic natural gas booster skid package series – is the answer for efficiently delivering gas at higher pressure. It allows for a fast and easy installation that boosts pressure levels by as much as 83 inches WC with volumes as high as 240,000 CFH.



Spencer's GasCube provides consistent and reliable support for your operations. And a simple installation process takes the pressure off you and focuses it where your customer wants it – in the system's power source. Spencer's skid packages are engineered by the company's technical experts, factory assembled and tested before shipping. It arrives at your site prewired and prepiped, ready for easy installation. The GasCube package is ready for connection to field power and gas lines and has a compact footprint of 36" wide x 50" long x 76" high for Series 20 and 24, and 34" wide for Series 21.

GasCube Advantages

Reliable

Quiet Operation

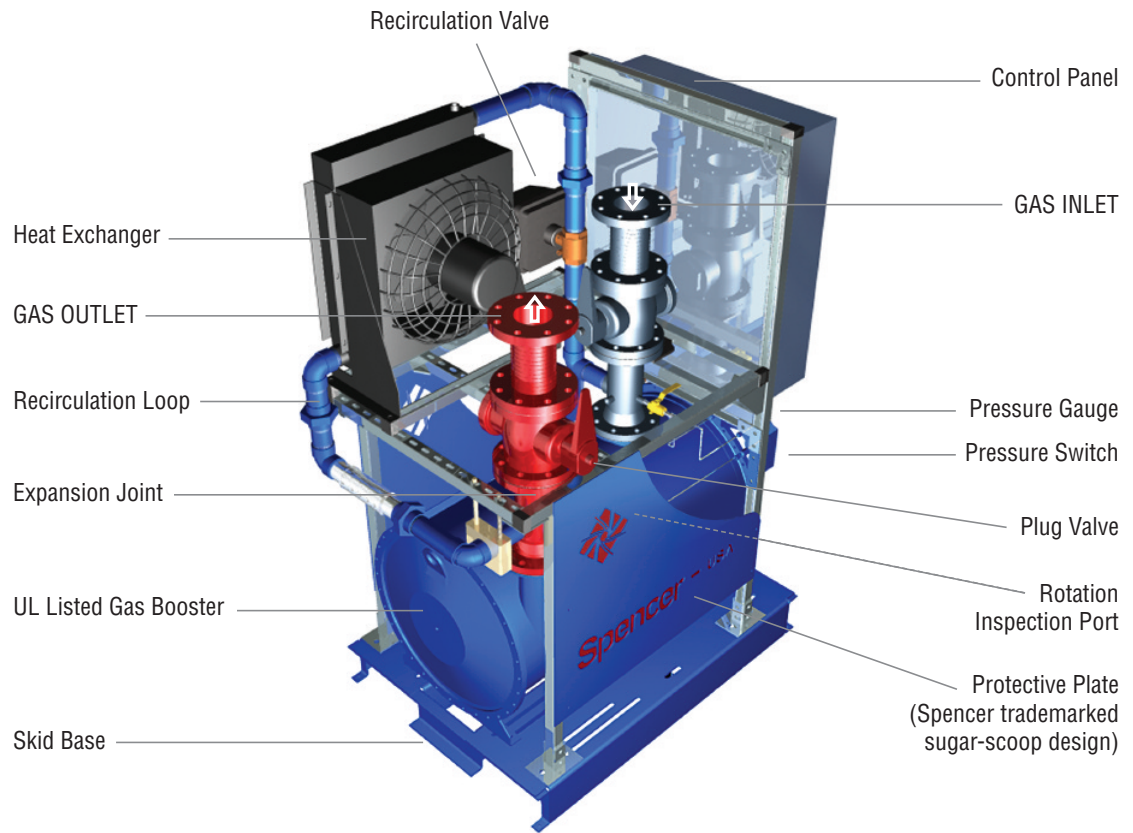
Hermetic Design

Explosion Proof Motor

Compact Footprint

Easy to Install

Technical Assistance



Highest industry performance from the leading UL Listed hermetic gas booster

The GasCube natural gas booster skid package incorporates Spencer's experience and proven innovation. The company introduced the first UL Listed hermetic gas booster in 1975 and it continues to be the technology leader. Spencer's hermetic gas booster designs deliver the industry's highest performance – boosting pressure levels by as much as 83 inches WC with volumes as high as 240,000 CFH.



Spencer's gas boosters have delivered the added pressure customers need to boost equipment operation above the incoming utility supply pressure for nearly four decades. Leaktight hermetic design, simple direct drive arrangement and generous internal clearances add up to long-term reliability and quiet operation – well within OSHA limits.

The Spencer design also provides a continuous flow of incoming natural gas around the UL Listed explosion-proof motor, cooling the motor and extending its life.

A standard recirculation valve control is also included on systems that require lower operating flows than the specified gas booster rated flow. If the gas flow is required to go below the allowable operating range, a modulating recirculation valve with an air-cooled heat exchanger will be installed in the recirculation loop to keep the flow just above the minimum to ensure reliable motor operation.

All this and more makes the GasCube an integrated package solution for gas temperature management, with components engineered to meet the rigorous standards needed to continuously operate industrial equipment.



The compact footprint of the GasCube 24, at only 36" wide x 50" long x 76" high, was designed to fit through most conventional factory and building doorframes. The total skid package can easily be moved with a pallet jack.

Fast delivery, compact footprint

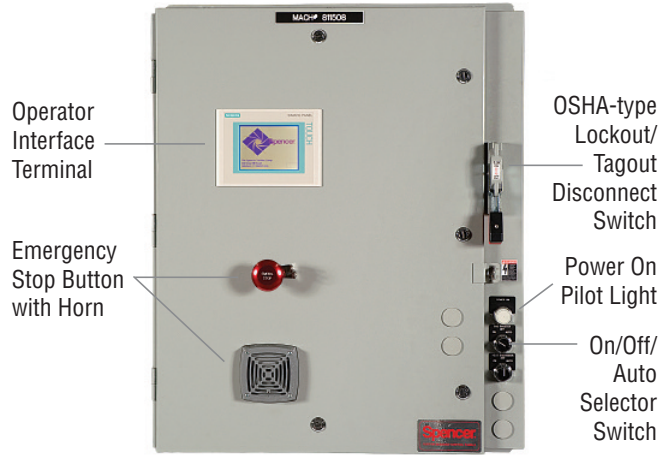
Spencer's engineering expertise has led to a skid package that can be provided with a very short turnaround time between ordering and delivery. The company's experts work with you to meet the tightest of deadlines – even at the height of the heating season when customers are eager to get equipment online.

And Spencer's lightweight natural gas booster skid package has a compact footprint. The footprint of the GasCube 20 and 24 skid package is 36" wide x 50" long x 76" high (Series 21 is 34" wide), and it can easily be moved around with a pallet jack. If your clearances are extra tight, you can order the skid package in modules that are well organized, and you can easily complete final assembly on site.

Better control during installation, and after

Spencer's natural gas skid package is an easy-to-install solution that gives you control over your schedule and your ability to meet your customer's requirements. Set-point adjustments are easy to make using a pre-engineered PLC control panel with monitor. And after it begins operating, your customer can see various system-operating parameters and make adjustments efficiently.

In addition, standard GasCube package accessories include flexible expansion joints, low inlet pressure switch, inlet and discharge pressure gauges, heat exchanger, and recirculation valve, as required. Additional optional accessories are also available, including check valves, pressure regulators, low- and high-discharge pressure switches, and enhanced control features.



Spencer's panel is pre-engineered to control:

Actual flow (CFH) and current draw (Amps)

The PLC will monitor actual flow (CFH) based on current (Amps) draw of blower motor. CFH and current values will be displayed at operator interface terminal (OIT).

Recirculation valve

The PLC will monitor the current load of the blower and open the recirculation valve to prevent the blower from operating in a surge condition or close the recirculation valve when there is sufficient system load on the blower for normal operation.

The PLC is pre-programmed at Spencer with machine specific data allowing for more precise control in a machine and PLC "matched set" configuration. The Amps/CFH ratio will be tailored to the machine performance as determined by factory testing.

Motor temperature monitoring

This prevents motor overheating during low/high flow conditions. An internal motor temperature switch is an additional safety feature that will shut the motor down if the temperature goes too high. An alarm is included to alert you of dangerous conditions.

Magnetic motor starter

A combination starter is provided for power distribution and protection to the booster motor. Main disconnect switch/circuit breaker combines with a motor starter and overload relay to provide proper motor protection.



All the support you will ever need

Spencer's local sales representatives and in-house sales and engineering groups are available to provide technical expertise and to assist you with product selection and design. Spencer's in-house and field service group is available for startup, maintenance, and customer personnel training to maintain and operate your Spencer natural gas booster skid package.

The right solution for your project

Backed by Spencer's more than 115 years of experience, you are assured of the right solutions, even in the face of the most challenging customer needs. The Spencer GasCube series is the ideal natural gas booster package solution for a variety of industrial, institutional, and commercial installations, including restaurants, sports arenas, warehouse/distribution centers, manufacturing plants, healthcare facilities, schools, office complexes, apartment buildings — everywhere you need to boost gas-line pressure to meet your specific needs.

The GasCube series is also just the right choice when clearances, budgets, or schedules are tight. And if you need something other than the standard skid package, Spencer's technical sales and engineering groups can work with you to provide exactly what you need for your specific project requirements. Visit www.spencerturbine.com for more information regarding Spencer's products and services and to find your local sales representative.



A GasCube configuration with recirculation loop and manual valve. This model does not require a heat exchanger to operate at low flow.




This custom duplex with heat exchanger package boosts pressure to feed chillers that keep a rooftop ice rink cool in Metropolitan New York City.



A custom duplex natural gas booster skid package with skid mounted control panel feeds a boiler to keep students warm at a Baltimore, Maryland school.



Spencer can design a package to fit your needs, whether you need it installed inside or out. Gas booster skid package components can also be provided individually, rather than as a pre-assembled skid package.

The  **Spencer** Turbine Company, 600 Day Hill Road, Windsor, CT 06095-4706

TEL 800-232-4321 ♦ 860-688-8361 ♦ FAX 860-688-0098 ♦ www.spencerturbine.com

