

G3500B

Cat® Gas Engines for Gas Compression Applications



THE NEWEST HEAVY IN PETROLEUM

Have a powerful impact on your business with an in-engine solution that erases your compliance concerns. Caterpillar has always stayed ahead of even the most stringent emissions standards, and the G3500B engine family offers so much more. You get fuel efficiency without sacrificing reliable performance.



WEIGHT POWER

IS ALL ABOUT BEING LEAN.

The G3500B engine family has become the industry benchmark for gas compression work. Building on the proven design we've incorporated a breakthrough combustion formula, improved air and fuel mixing, enhanced turbo strength, and more sophisticated controls. The results are unparalleled:

- Lower environmental impact
 - Lowest ever engine-out emissions in an open-chamber engine
- Higher return on investment
 - Higher power density and superior altitude, ambient, and turndown capabilities result in lean fleet management
- Lower operating costs
 - Top fuel efficiency in its class
 - Extended maintenance intervals
- Higher workforce efficiencies
 - Industry standard platform
 - Common technology from 690-1725 bhp



LEAN IS THEIR MIDDLE NAME...



Set it and forget it

Emissions reduction was the driving force behind the development of ultra lean burn technology. We began with the lean burn combustion concept of high air-fuel ratio. Then we designed component improvements to extend the efficiencies and capabilities of an already high-performing engine.

Lower emissions

- Reduced NO_x, CO, and VOCs
- NO_x emission settings at 0.5 and 1.0 g/bhp-hr without aftertreatment
- Meets 2010 U.S. EPA SI Stationary NSPS*

Lower cost of ownership

- Lower fuel consumption
- Requires no NO_x aftertreatment, reducing lifetime operation and maintenance costs
- Cooler combustion extends life of cylinder head, exhaust system components, and oil

BUT THERE'S *NOTHING LEAN* ABOUT THEIR PERFORMANCE.

The G3500B engines are stingy on emissions and fuel, while maintaining the performance and reliability Caterpillar is known for. From the legendary Cat[®] iron to the most innovative controls, these engines stand up to the rigors of gas compression work, and deliver up to 1725 hp.

* with the use of an oxidation catalyst



Smart

The ADEM™ A3 engine management system offers advanced capabilities in engine electronics, with:

- Integration of speed control, NOx sensor within air-fuel ratio control, and ignition/detonation controls, resulting in:
 - Optimized performance
 - Lower emissions
 - Simplified diagnostics
- Comprehensive engine protection with displays/alerts/shutdowns
- User-friendly operator interface

Powerful

- Dry exhaust manifolds deliver greater exhaust energy to the turbos, providing more power at higher altitude

Strong

- Built on the durable Cat diesel engine platform, exceeding structural requirements for natural gas engines
- Robust construction of block and crank extends life and reduces owning and operating costs

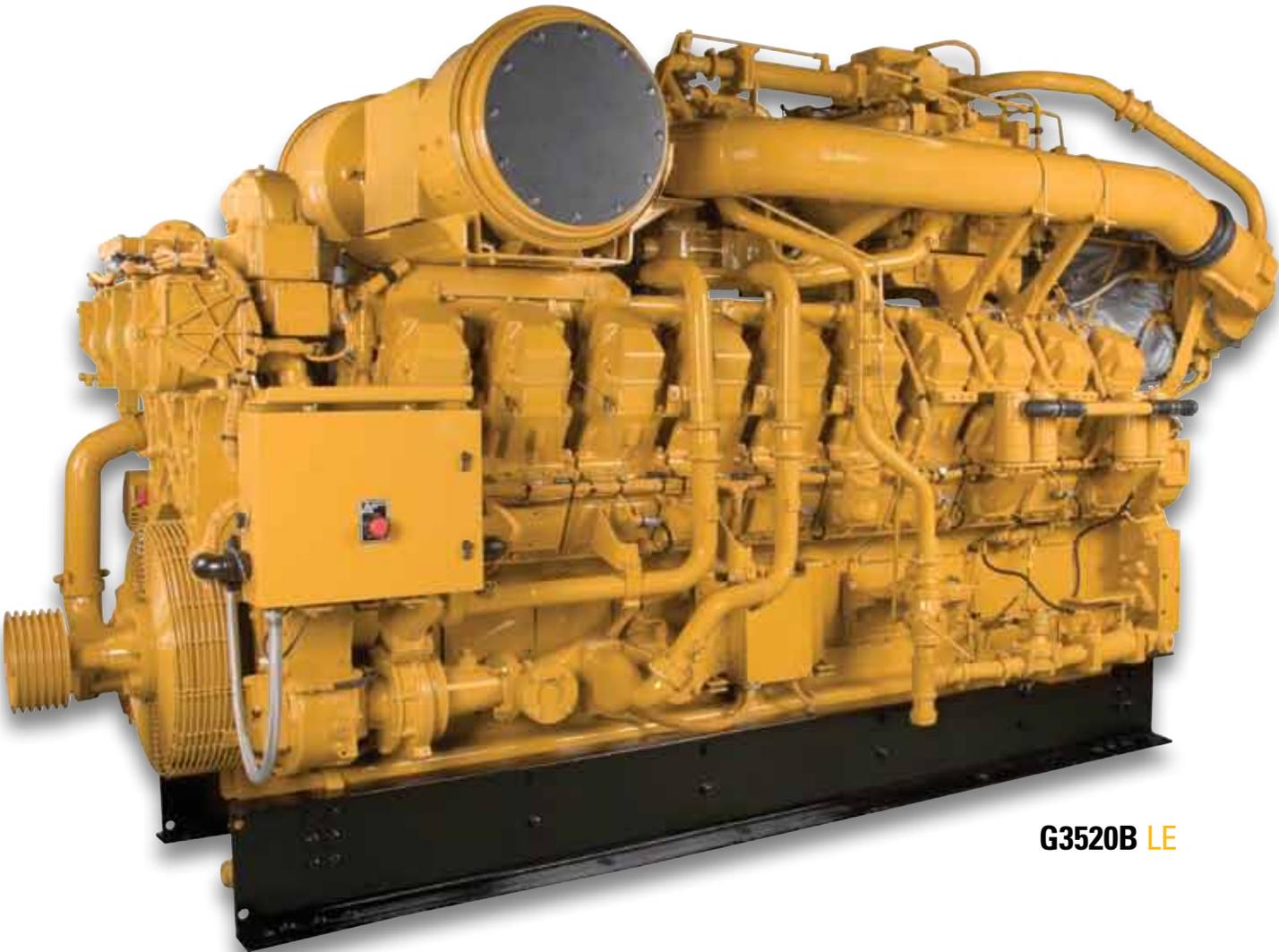
Flexible

- Operates with a broad range of fuel qualities and types
- Performance settings for emissions or efficiency
- Lower heat rejection eases engine swing into existing packages

Ratings

G3500B LE RATINGS

	1400 rpm		1200 rpm	
	bkW	bhp	bkW	bhp
G3520B LE	1286	1725	1104	1480
G3516B LE	1029	1380	—	—
G3512B LE	772	1035	—	—
G3508B LE	515	690	—	—



G3520B LE

Standard and Optional Equipment

Starting System

- 90 or 150 psi turbine starter and prelube motor

Factory CSA Certified – Class 1 Div 2

- Electrical system including ADEM A3 and control panel
- Air starting motors

Power Take-Offs

- Front stub shaft

Fuel System

- Electronic fuel metering valve
- Pilot-operated gas pressure regulator
- Gas shutoff valve

Flywheels and Housings

- SAE 00 flywheel and housing
- SAE standard rotation

Instrumentation

- Remote-mounted Advisor control panel
- Interconnect harness

Lube System

- Turbo oil accumulator
- Pre-lube system
- Oil filter and oil sampling valve

Torsional Vibration Analysis

- Available through Caterpillar





Lean machine, powerhouse partner.

When you put a Cat engine to work in your operation, you'll never work alone. More than 15 million Cat horsepower are already at work driving gas compression applications around the world. Along with industry-leading performance, Cat power solutions

come with industry-leading support. The Cat dealer network, with more than 2,200 outlets is the largest and most responsive in the world. Caterpillar expertise and genuine parts follow Cat equipment wherever it's working,

whenever it's needed. With G3500B engines, you can be confident you're in emissions compliance and getting the best possible efficiency and performance available. And with Caterpillar as your partner, it will stay that way.

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Learn more about how big an impact this "lean" engine can make on your operation. Call your Cat dealer or visit www.catoilandgasinfo.com today.

LEDW0003-01

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