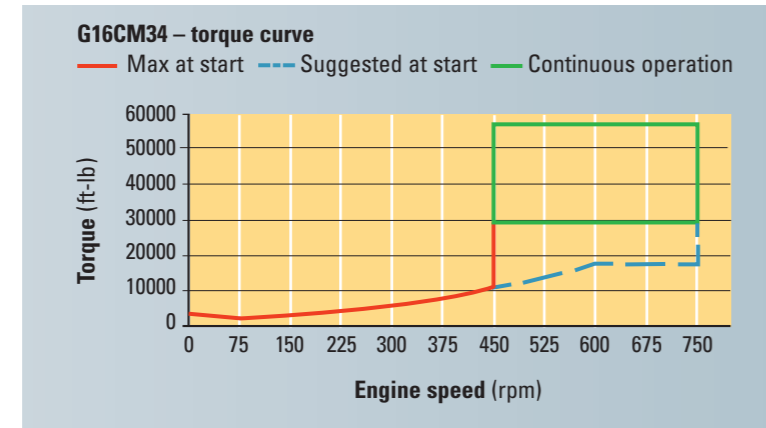


GCM34 • HIGH TORQUE

Flexible

The GCM34 has wide speed and torque ranges, and enables you to optimize fuel efficiency and emission control.

- 750–450 rpm (40% turndown capability)
- 100–50% of rated torque range



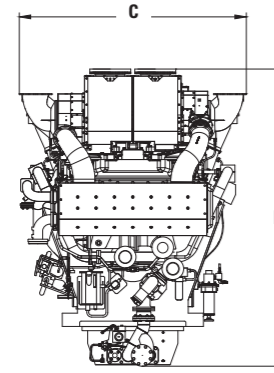
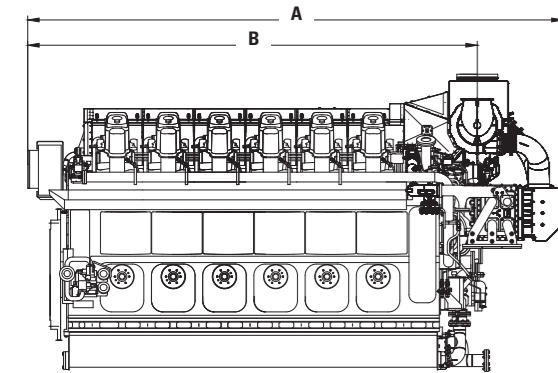
Reliable

The GCM34 drive train (piston conrod, and crankshaft) is based on the very successful and reliable well proven VM 32 C diesel engine. Advanced electronic engine monitoring minimizes downtime and helps prevent failures.

- Virtually no unscheduled downtime
- Continuous performance at full rated load for 30,000 hours before top end service
- Up to 120,000 hours before major overhaul



Measurements



Dimensions		G12CM34	G16CM34
Length (A)	mm (in)	7,055 (278)	8,405 (331)
Length (B)	mm (in)	5,925 (233)	7,275 (287)
Width (C)	mm (in)	2,992 (118)	2,992 (118)
Height (D)	mm (in)	3,917 (154)	3,917 (154)
Package Weight	kg (lb)	66,000 (146,000)	82,000 (181,780)

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GCM34

Cat® engines optimized for gas compression

- Speed variation through a wide operating range
- Established and proven design
- CSA certified, Class I Div. II



BUILT FOR IT.™



BUILT FOR IT.™



GCM34 • HIGH PRESSURE

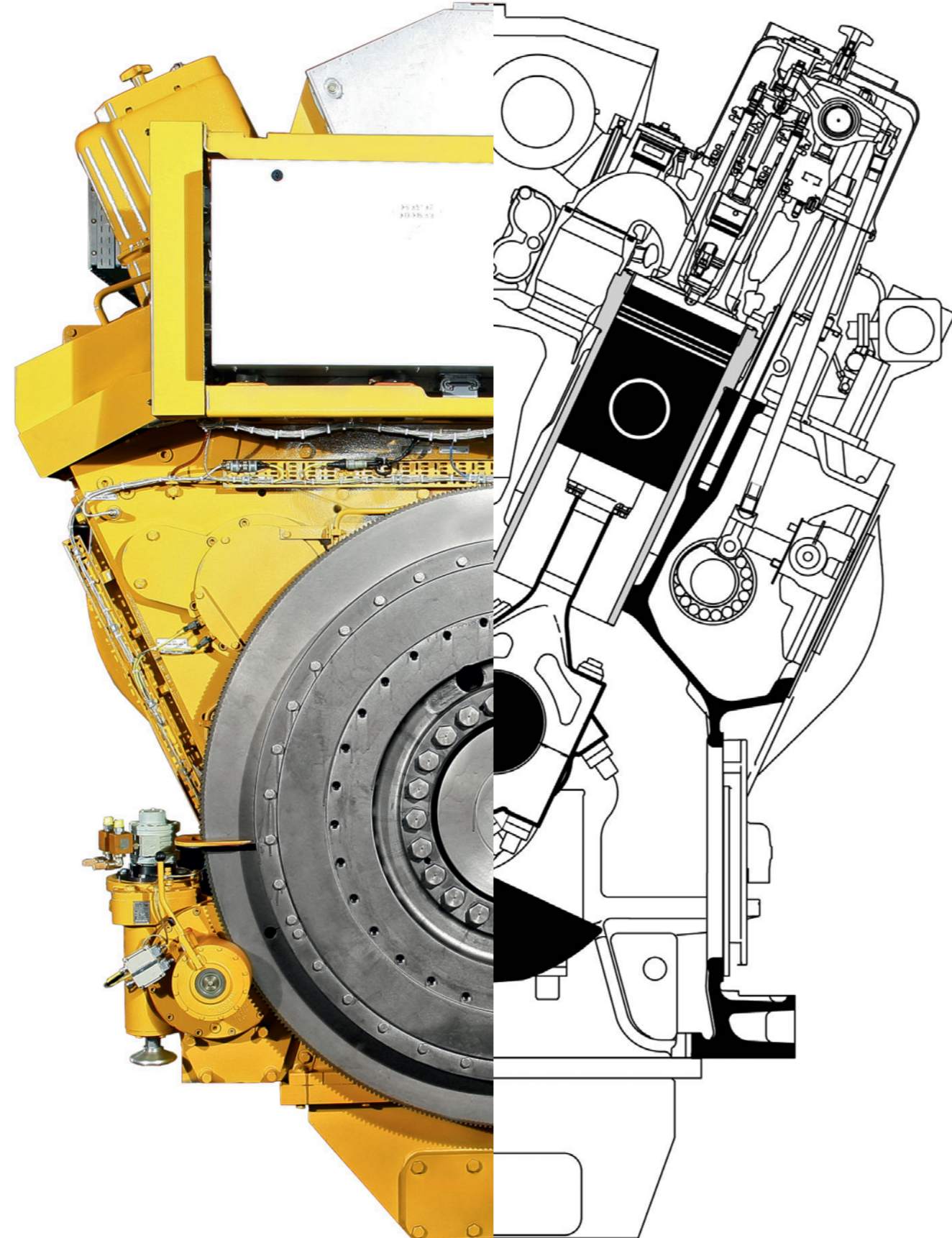
The relentless nature of the Oil & Gas industry doesn't allow for downtime. In gas compression work, the pressure is always on — literally. Your equipment must constantly maintain optimal productivity because anything less means a constant loss of profit.

By driving your application, your engine drives your bottom line. That's why Caterpillar® has been pioneering advances in gas engine design to suit the unique needs of the petroleum industry for more than 60 years. In gas compression applications alone, more than 19 million Caterpillar horsepower are at work around the world.

One of the reasons for this success is Cat GCM34 engines. They offer the economical, clean, and reliable medium-speed service you need in 6,135 and 8,180 bhp configurations. Whether you're powering pipeline transmission, processing, or gas storage and withdrawal, these 12- and 16-cylinder, long-stroke units deliver peak performance under most ambient and load conditions.

Key features

- Engine speed turn down (450–750 rpm) at maximum torque optimized for compressor applications
- High reliability (more than 98.5% uptime)
- Low fuel consumption (44% efficiency)
- Wide fuel flexibility regarding gas quality (55–100 MN)
- Low emissions (NO_x control)
- Service-friendly design reduces downtime



GCM34 • LOW STRESS

Clean

Emission control is important for Caterpillar. A closed loop NO_x control system is incorporated on these engines to achieve outstanding performance and efficiency, thus emissions remain constant throughout the entire operating range.

- Meets EPA NSPS emissions requirements
- 0.5–0.7 g/bhp-hr NO_x

Economical

Cat GCM34 engines provide a remarkably low cost solution per million cubic feet of gas transmitted. Electronic ignition and combustion enhance fuel economy, while electronic monitoring protects critical systems, reducing maintenance and repair costs. Oil consumption is low and maintenance needs are streamlined.

- Less than 5,800 Btu/bhp-hr fuel consumption
- Gas admission valve on each cylinder ensures precise fuel delivery
- Greater than 44% mechanical efficiency
- Greater than 98.5% uptime
- Enhanced cooling for key components extends service intervals
- Service-friendly design and fewer components reduces downtime

GCM34 • HIGH POWER

Intelligent

The ADEM III electronic control system is the intelligence behind many of the performance and efficiency benefits of the GCM34, providing:

- Electronic ignition
- Cylinder by cylinder regulation of combustion
- Cylinder and prechamber fuel delivery control
- Precise engine response to load variations
- Individual cylinder detonation sensing
- Critical system monitoring and protection

User friendly

With advanced on-site or remote monitoring and control, it is easy to stay in command of the GCM34. The PLC-based control panel is shipped loose and requires minimal wiring for networking. Engine, compressor, and auxiliaries may be managed from a single system.

- Operator interface includes extensive operating parameter statuses, alarms, shutdowns, and diagnostics
- Customer configurable

