



POWERING GLOBAL AGRICULTURE SINCE 1919

Since our very first engine, the HVID, was manufactured in 1919, Cummins has pioneered many industry firsts. From being one of the first companies to instigate the use of diesel in commercial vehicles, to running the first diesel-powered race car, Cummins has consistently been at the forefront of technological innovation. We have built a solid reputation for reliability, durability and dependability.

As a global power leader, we design, manufacture, distribute and service engines and related technologies including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. Alongside our diesel technology, we are developing a range of complementary power solutions such as electric, hybrid, natural gas and fuel-cell technologies to meet or exceed environmental sustainability requirements. We partner with our customers to find the best power solution for their needs.



YOUR LOCAL PARTNER

Up to one million Cummins-powered agricultural machines are in operation around the world in applications such as tractors, sprayers, harvesters and specialist autonomous equipment. Not to mention Cummins-powered pickup trucks and generators. We have built a strong brand reputation in the farming community, powering equipment for more than 20 major agriculture OEMs.

Support from Cummins goes way beyond the sale. We make products exactly where customers need them and have common product platforms that give you consistency of installation, with emissions capability and cost tailored to your regional needs. Our dedicated global network is the largest in the industry and this gives confidence to equipment manufacturers and farmers who know that support is available for their products, all around the world.

TRANSFORMING THE FUTURE.

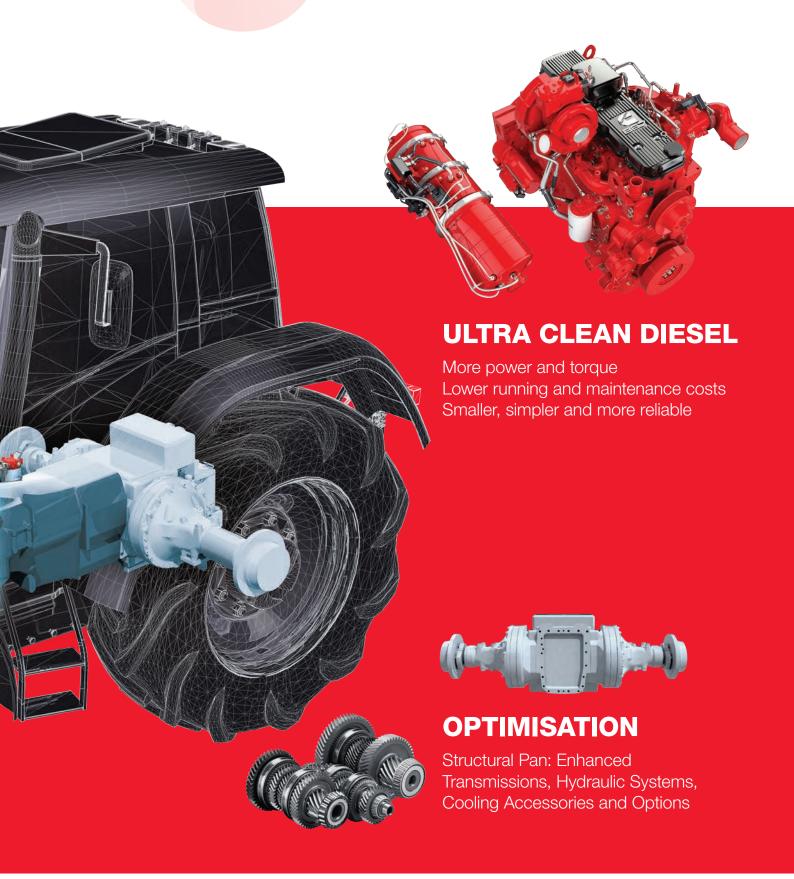
Cummins is at the forefront of developing and applying new technologies to meet future customer requirements and emissions legislation. We invest close to \$1 billion per year, focused not just on reducing environmental impact, but also engineering value for our customers through benefits in performance, machine capability and lower running costs.

We are driving your business, moving your equipment, generating your power and maintaining your valuable assets with one objective: to help you succeed.



POWERTRAIN EVOLUTION





PERFORMANCE THAT'S **CUTTING EDGE:** STAGE V

Performance Series engines deliver higher power and torque for more machine capability, while simpler architecture means more reliability, productivity and improved fuel efficiency. In addition, Cummins latest Single Module™ aftertreatment is up to 40% smaller and 20% lighter than previous systems, allowing the removal of EGR from F3.8, B4.5, B6.7, L9 and X12 engines and facilitating easier packaging.

That's cutting-edge performance for an Always On industry.





Displacement

3.8 Litres

Power

74 hp / 55 kW* 100-173 hp / 75-129 kW

Max. Torque

620 Nm

Emissions Level

Stage V/Tier 4 Final

Product Technologies

Single Module DPF/SCR **EGR-Free** Wastegate Turbo



Displacement

4.5 Litres

120-200 hp / 90-149 kW

Max. Torque

780 Nm

Emissions Level

Stage V/Tier 4 Final

Product Technologies

Single Module DPF/SCR **EGR-Free** Wastegate Turbo



Displacement

6.7 Litres

155-326 hp / 116-243 kW

Max. Torque

1375 Nm

Emissions Level

Stage V/Tier 4 Final

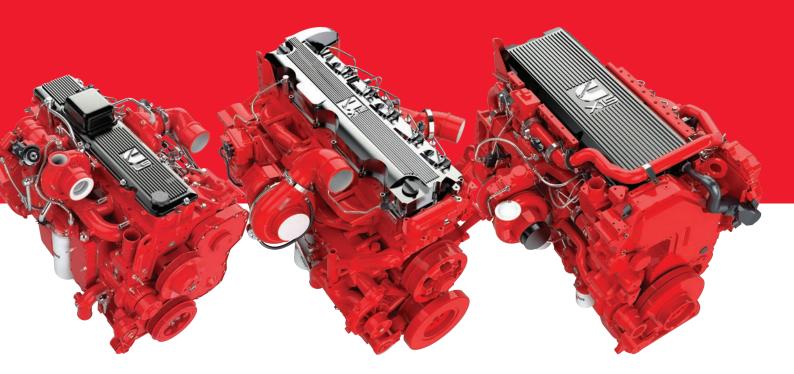
Product Technologies

Single Module DPF/SCR

EGR-Free

Variable Geometry Turbo

^{*74} hp / 55 kW rating available for compact equipment requiring high levels of torque. Product technologies include cooled EGR and DOC/DPF aftertreatment system.





Displacement

9 Litres

Power

275-430 hp / 206-321 kW

Max. Torque

1846 Nm

Emissions Level

Stage V/Tier 4 Final

Product Technologies

Single Module DPF/SCR EGR-Free Wastegate Turbo



Displacement

12 Litres

Power

335-512 hp / 250-382 kW

Max. Torque

2305 Nm

Emissions Level

Stage V/Tier 4 Final

Product Technologies

DPF/SCR & EGR-Free Wastegate Turbo



Displacement

15 Litres

Power

450-675 hp / 336-503 kW

Max. Torque

2779 Nm

Emissions Level

Stage V/Tier 4 Final

Product Technologies

DPF/SCR & Cooled EGR Variable Geometry Turbo

STRUCTURAL ENGINE CAPABILITY

F3.8 / F4.5 STRUCTURAL

Displacement: 3.8 litres and 4.5 litres

Power: 67 – 149 kW / 90 – 200 hp

Max. torque: 780 Nm

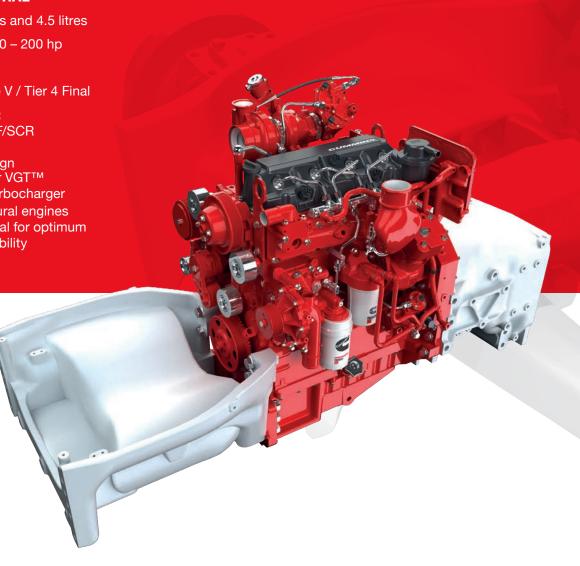
Emissions level: Stage V / Tier 4 Final

Product technologies:

- Single Module[™] DPF/SCR
- EGR-free
- Structural block design
- Holset® wastegate or VGT™ variable geometry turbocharger
- F3.8 and F4.5 structural engines are externally identical for optimum OEM packaging flexibility







Delivering the power bulge and torque backup that tractors require, Cummins' structural engine designs are flexible to suit a variety of installations. Proven through thorough structural analysis and testing, each engine has been designed for optimum strength at minimal product weight.

The result is a solution that is exactly what farmers need to get the job done.

B6.7 STRUCTURAL

Displacement: 6.7 litres

Power: 116 – 243 kW / 155 – 326 hp

Max. torque: 1375 Nm

Emissions level: Stage V / Tier 4 Final

Product technologies:

- Single ModuleTM DPF/SCR
- EGR-free
- Holset® VGT™ variable geometry turbocharger
- Structural oil pan design







Delivering more power and torque with less complexity, Cummins Performance Series is compliant to EU Stage V and Tier 4 Final, as well as a range of lagging emissions standards. For global manufacturers, this means the same installation can be used across many countries, with the only difference being the aftertreatment system.

PERFORMANCE S E R I E S

KEY DESIGN FEATURES

SIMPLICITY

Engines up to 12 litres are EGR-free. The simpler architecture means lower maintenance and higher reliability in a smaller, lighter package.

PROVEN IN-HOUSE TECHNOLOGIES

Performance Series uses proven Holset® wastegate or VGT™ variable geometry turbocharging technology for responsiveness with fuel-efficient performance. The lineup's single turbocharger configurations are simpler and easier to maintain than equivalent series turbocharger setups.

For 3.8 to 9 litre displacement engines, Cummins latest Single Module™ aftertreatment technology is smaller and lighter than its predecessor.

The savings are up to 40% in envelope size and up to 20% in weight. The higher NOx conversion efficiency enables the required level to be met without the use of EGR. The system also removes 99.9% of all particulate matter (PM) by weight and count.

GLOBAL ENGINE PLATFORMS

Having a shared installation for domestic and export business means manufacturers can have increased production flexibility, with common integration points wherever the equipment will be sold. The exhaust aftertreatment is the only key difference between specifications. Engine envelope differences between the latest and lagging emissions products are minimised in the design, reducing complexity for OEMs in their manufacturing processes. With no EGR, the high sulphur fuel tolerance of up to 5,000 ppm (without aftertreatment) adds to this global capability.

START-STOP

Integrated stop-start capability delivers lower emissions, reduced noise levels and improved operating costs by reducing fuel burned and urea consumed. With start-stop, less maintenance is required due to fewer engine running hours, optimising uptime and improving machine resale values.

CUSTOMER BENEFITS

FOR EQUIPMENT MANUFACTURERS

The Performance Series' higher power density offers downsizing opportunities for manufacturers to potentially save costs by using a lower displacement engine with no impact on operation. Alternatively, machine capability can be increased to improve competitiveness and add more value to farming operations.

The smaller, lighter engine packages with Single ModuleTM aftertreatment are easier to install, saving engineering resources and time. The EGR-free design lowers installed costs, with less to cool, driving potential cost savings on the cooling package.

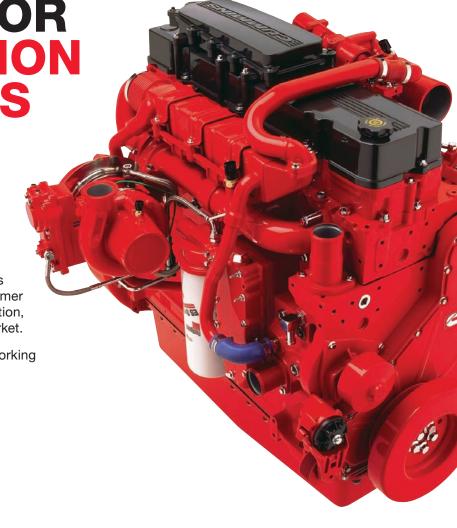
FOR FARMERS

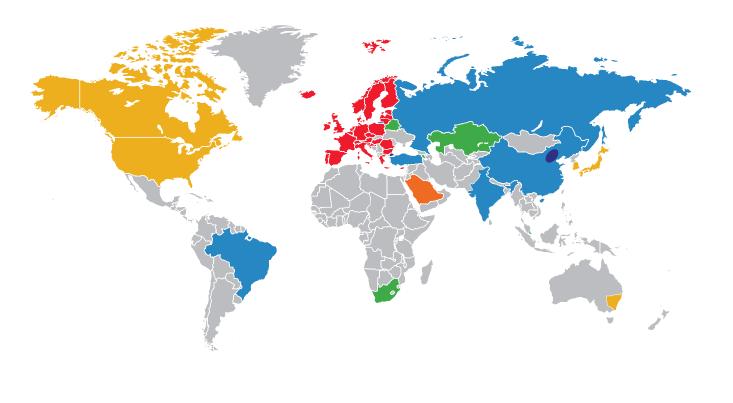
Cummins' reputation for durability means that farmers and equipment contractors have a product they can trust. With improved reliability, operators have higher machine availability, while lower noise and near-zero emissions support sustainable operations. Higher fuel efficiency, longer service intervals, reduced running costs and increased responsiveness means that work gets done quicker. Plus, Cummins' latest telematics capability enables a faster response time for repairs, reducing downtime as service technicians arrive on-site fully informed and with the right tools and parts.

ENGINES FOR ALL EMISSION STANDARDS

With the most extensive engine lineup in the industry, Cummins provides optimised engine and generator set solutions wherever you are in the world. Our leadership in driveline innovation ensures we can achieve our goal of maximising customer value by providing the most appropriate solution, integrated into each equipment type and market.

No matter what emissions standard you're working to, we have a solution to meet your needs.







Ratings could differ depending on specific engine at different emission standards.

A selection of the engines above are available for lagging emissions regions. Please consult your Cummins representative for more details.

Engine capacity in litres is noted in the product name.

FROM THE ROAD, TO THE FARM, TO THE FUTURE

For more than 100 years, farmers all over the world have trusted Cummins. From tractors, sprayers and pickup truck engines, to backup generators and irrigation pumps, Cummins has you covered in terms of both the equipment you run – and support you can depend on.

POWER GENERATION - WHEN EVERY SECOND MATTERS

Reliability is paramount when it comes to livestock farming, where a power outage can disrupt automated feeding and watering systems, as well as HVAC systems. When there's a power disruption from the grid, backup generators have to fire up immediately and stay on for the duration.

We design, manufacture and integrate every component from the engine, alternator and electronic controls into a complete backup generator system. That means each element is optimised for maximum performance and efficiency, and total quality control is maintained.

THE RIGHT SIZE.

Whether you are specifying backup power for a single enclosure or multiple containment units, Cummins offers a range of outputs up to 3500kW to cover all the electrical needs of your critical equipment. These units are optimized for livestock enclosures based on most commonly specified options.

60 HZ PRODUCT RANGE

kW	Standby – 10 kW to 3500 kW; Prime – 9 kW to 3000 kW
Fuels	Diesel, natural gas and propane
Engine	Cummins (above 20 kW)
Phase	Single and 3 phase
Voltages	120/240 AC single phase, 120/208 AC 3 phase and 277/480 AC 3 phase
Enclosures	Open, weather protective and sound attenuated
Breaker	No breaker or customer specified
Listing	UL-2200
Battle Short	Factory enabled or customer defined
Options	Fuel tanks, remote displays and paralleling solutions. Can be customized with many other options – please consult your sales dealer

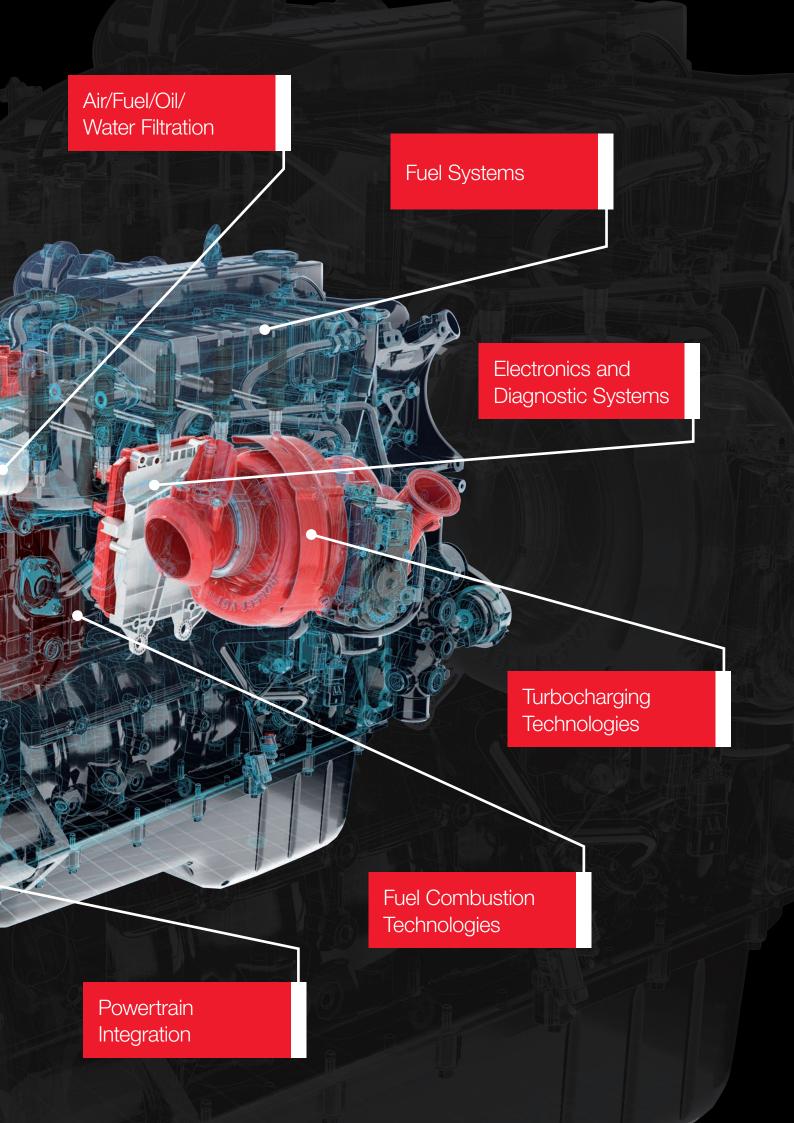






Cummins' ability to develop and integrate its own in-house component technologies including air handling, combustion, electronic controls, filtration and exhaust aftertreatment enables the production of engines that add value to both equipment manufacturers and operators.

Aftertreatment Technologies



DIGITAL SOLUTIONS FOR MAXIMUM UPTIME

MONITORING:

CONNECTED DIAGNOSTICS™

Make informed decisions on when to really stop and when to continue working by understanding the suggested root cause of fault alerts and knowing how long you have before an issue is likely to escalate. Wirelessly connect engines to Cummins using telematics for continuous monitoring and diagnosis using alert notifications sent via a convenient mobile app, email or web portal.

REPORTING: CONNECTED ADVISOR™

Keep on schedule by planning service stops more productively, using streamlined engine health reports that include daily and monthly summaries of engine health, required field actions and active campaigns. You'll know exactly what's wrong and how to resolve it using our integrated and detailed expert recommendations that automatically accompany each report.

CALIBRATING:

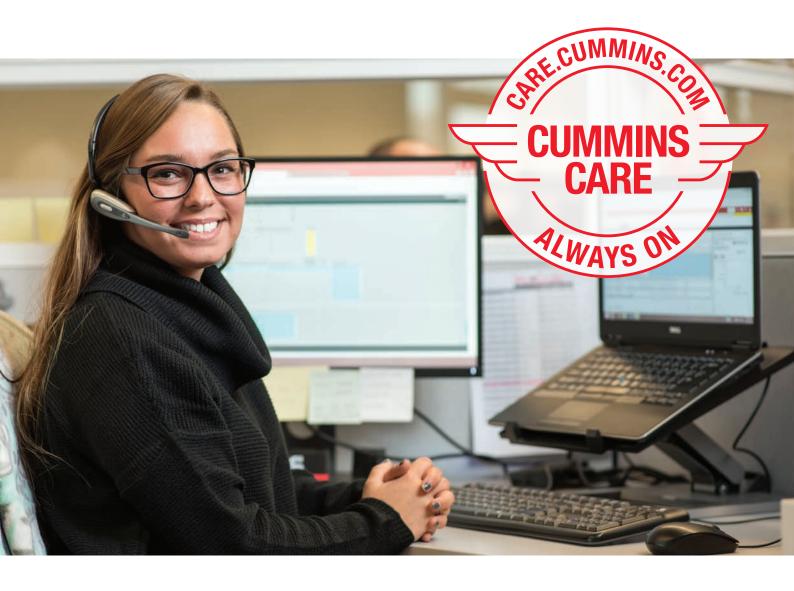
CONNECTED SOFTWARE UPDATES™

Cummins-powered equipment can remain on the farm while beneficial performance or fuel efficiency enhancements are applied at a fraction of the cost using integrated telematics systems and wireless, over-the-air connectivity services. This enables farmers to calibrate engine control modules remotely with minimal downtime.

SERVICING: CUMMINS GUIDANZ®

Guidanz technology is a simple, plug-in device that streamlines every aspect of the Cummins service experience, accelerating the diagnostic and repair process in a few simple steps. The Guidanz mobile app, when paired with the Bluetooth®-enabled INLINE™ mini datalink adapter, displays Cummins fault codes and other key engine information anywhere you need it. Its Immediate Assessment feature enables you to determine root cause of a fault, review estimated repair times and identify the most likely parts for easier service. You can provide this information to your nearest certified service provider, who will arrive fully informed and with the correct parts.

The Guidanz mobile app is compatible with Stage IIIA/Tier 3 and newer off-highway engines.



ANY CUSTOMER, ANY QUESTION, ANY CHANNEL, ANY LANGUAGE, ANY TIME.

Cummins Care is not a typical call centre. We are a solutions centre helping to prevent issues, provide answers quickly and reimburse accurately. We are your connection to a whole new level of customer service that is Always On to support and deliver faster personal attention with rapid results. From the moment you engage Cummins Care, you will have access to a Cummins expert with specialised skill sets, experience and in-depth knowledge to take care of your needs.

- **CUSTOMER SERVICE**
- WARRANTY ASSISTANCE
- **TECHNICAL SUPPORT**
- CONNECTED SERVICE

We are experts with advanced technology to make your life easier while providing a seamless support experience. Contact us at **00 8000 286 6467** or email **cceurope@cummins.com**.



WHEN YOU CAN'T AFFORD TO STOP, WE'RE ALWAYS ON.



Cummins Inc. Box 3005, Columbus, IN 47202-3005, USA Tel: 1-800-CUMMINS $^{\text{TM}}$ (1-800-286-6467)

Cummins Ltd. Yarm Road, Darlington, DL1 4PW, UK Tel: +44 (0) 1325 554829 Fax: +44 (0) 1325 362481 E-Mail: cceurope@cummins.com

cummins.com

Bulletin 5544048 Printed in UK Rev. 10/19 ©2019 Cummins Inc.