The Duramax 2.8L is the cleanest diesel truck engine ever produced by General Motors, and it meets some of the toughest U.S. emissions standards, thanks in part to a cooled Exhaust Gas Recirculation (EGR) system.

The engine is part of GM’s global family of turbo-diesel four-cylinder engines and features a variable-geometry turbocharger for optimal power and efficiency across the rpm band and a balance shaft for smoothness.

A broad torque band makes the 2.8L Duramax very powerful at low rpm, while the turbocharged performance provides a confident feeling of immediate and smooth horsepower on demand.

**STATE-OF-THE-ART TECHNOLOGIES**

**Cast-Iron Engine Block**
- Oil jet-spray piston-cooling feature enhances durability, ensuring piston robustness at critical operating conditions.
- Forged-steel crankshaft anchors rotating assembly, reducing noise and vibration, which in turn leads to enhanced durability.

**Aluminum Pistons**
- Lightweight aluminum pistons result in less mass inside the engine – leading to more efficiency, decreased vibration, and bolstering performance at high rpm.

**Cylinder Head**
- Aluminum cylinder head cast with advanced semipermanent mold technology – providing excellent strength and reduced machining with optimal port flow.
- Heat-treated casting reduces residual stress, enhancing engine durability.
- Four-valve architecture ensures optimized breathing of the engine and clean combustion process.
- Includes premium valve seat, valve guide, and valve materials, ensuring good durability without required adjustments found on other engines.

**Rotating Assembly**
- Features friction-reducing polymer coating on skirts to help reduce friction.
- Less piston weight results in less reciprocating mass in the engine – resulting in less inertia for greater operating efficiency.

**ADDITIONAL FEATURES**
- Iron cylinder block and aluminum DOHC cylinder head
- Oiling circuit that includes a dedicated feed for the turbocharger to provide increased pressure at the turbo and faster oil delivery
- Piston-cooling oil jets
- Balance shaft that contributes to smoothness and drives the oil pump
- Laminated steel oil pan with upper aluminum section that contributes to engine rigidity and quietness
- B20 biodiesel capability
2.8L LWN

SPECIFICATIONS

- COMBUSTION SYSTEM: Compression ignition
- INDUCTION SYSTEM: Variable-geometry turbocharger
- DISPLACEMENT: 2776 cc
- ENGINE ORIENTATION: Longitudinal
- COMPRESSION RATIO: 16.5:1
- VALVE CONFIGURATION: Dual overhead camshafts
- VALVES PER CYLINDER: 4
- VALVE TIMING: Fixed
- ASSEMBLY SITE: Rayong, Thailand
- FIRING ORDER: 1 - 3 - 4 - 2
- BORE X STROKE: 94.00 x 100.00 mm
- FUEL SYSTEM: Direction-injection common rail
- FUEL TYPE: Diesel/B20 biodiesel compatible
- ENGINE MASS: 236 kg (520 lb)
- HORSEPOWER: 181 hp (135 kW) @ 3400 rpm*
- TORQUE: 369 lb-ft (500 Nm) @ 2000 rpm*
- MAXIMUM ENGINE SPEED: 5000 rpm
- EMISSIONS CONTROL: Close coupled diesel oxidation catalyst, selective catalytic reduction with urea injection, diesel particulate filter, cooled exhaust gas recirculation valve, positive crankcase ventilation
- EMISSIONS STANDARD: Tier 3 BIN 125/ULEV 125 (Colorado/Canyon)
- Tier 3 BIN 250/ULEV 250 (Express/Savana)
- BLOCK: Gray cast iron
- CYLINDER HEAD: Aluminum
- INTAKE MANIFOLD: Composite
- EXHAUST MANIFOLD: Cast iron
- CRANKSHAFT: Forged steel
- CAMSHAFT: Powdered metal/sintered lobes
- CONNECTING ROD: Forged steel

*As tested in Chevrolet Colorado.