

### Quester Made to go the extra mile

Uni

Quester

Going the Extra Mile

## Made to go the extra mile.

At UD Trucks we have a passion for Ultimate Dependability. To always run the extra mile in everything we do. We leave nothing to chance, making sure you get an optimal transport solution for your business. Quester is a great example of this approach. It's a reliable heavy-duty hero on the road and a champion on saving money for your business.

Quester is the first in a new generation of UD Trucks specifically developed for the world of heavy-duty construction. It derives from our Japanese quality heritage and insights from our local markets. And it's the first to be developed with the global resources of the Volvo Group, of which UD Trucks now is a part.

Our passion is to make your working day simpler and more productive. Whatever your line of business, whether it's distribution, construction or mining we have a complete solution for you.

Quester is UD's most cost-efficient truck ever. Not only when you buy it, but also when you drive it. It cuts fuel costs and maximizes uptime, giving you quick dependable payback that will help you succeed with your business.

Our aim is to help you to reach your goals. That is why Quester is designed to be enduring like a endurance runner. And like the best runners it's built to deliver the extra mile, to run further.

It's a truck that excels on durability. Robust and easy to maintain, the Quester is a vehicle, a tool that can handle tough daily use, especially off the beaten track. It stands for great quality that lasts over a long time. This is backed up by a wide range of configurations with easy body mounting offering you a tailored, purpose-built solution for all types of applications.

Quester is the optimum transport solution for businesses that want to grow. And we at UD Trucks are your most committed partners.

Let's get ready, set and go!

Queste



## **First-rate** fuel economy.

Quester has built-in fuel-efficiency. The wide driveline offer gives the ability to optimize the powertrain with respect to power output, transmission and rear axle ratio. A well specified powertrain ensures that the engine operates at its peak efficiency at all times, enabling good fuel consumption and high average speeds.



# in

#### Less fuel per ton carried

Quester has a wide range of different product types such as 6×2R and 8×4R which combined with well dimensioned components and axles offers high GCWs and GVWs. This maximizes the payload and reduces the fuel consumption per ton carried.

#### Reduced air resistance

Minimizing aerodynamic drag is important since it decreases the wind resistance, leading to better fuel consumption.



#### Optimized powertrain

The Quester powertrain delivers best-in-class fuel economy. The two engine alternatives – 8 liters and 11 liters – include a well-balanced combination of features that matter most for fuel-efficiency. You get flexibility to select the powertrain combination that best suits your needs. No matter what you choose, you get a trouble-free driveline with high-capacity components.



## Rough road toughness

The secret of Quester lies in its versatility. With Quester, UD Trucks offers a vehicle that allows customization for any transport requirement. So we can provide you as truck owner, or bodybuilder, with great freedom of choice at a competitive price.

6-

Oueste

#### Bodywork made easy

The Quester is designed for ease of superstructure installation with comprehensive bodybuilder instructions and drawings. The parallel side members, designed bodybuilder mounts and a range of power take-offs add to the ease of installation.

#### Five different configurations

Quester offers ideal axle positioning, being available in 4×2T, 6×2R, 6×4R/T and 8×4R configurations for distribution construction and mining work.

#### Optimized wheelbase range

The correct wheelbase and overhang is necessary to optimize the body length and payload. Quester is available with a large wheelbase range direct from the factory – from 3500 up to 6285 mm – and in addition the length of the rear overhang can be ordered in different intervals.

#### Distribution

Reliable, manoeuvrable and economical – these are the essential characteristics of Quester for short-haul and distribution.

#### Advantages for distribution:

- Wide product offer designed for ease of superstructure installation
- Ease of maintainability with low maintenance cost for driveline and chassis
- Ergonomic and functional workplace
- Easy entry and exit
- Available as 4×2T, 6×2R, 6×4T/R and 8x4R

#### **Construction and mining**

Quester is especially adapted for the construction and mining industries. It is strong, reliable and designed for handling high payloads.

#### Advantages for construction and mining:

- Reliable chassis for rough and hilly conditions
- Hub reduction available on the tandem axles with the tried and tested T-Ride rear suspension
- Steel offroad bumper with high ground clearance and excellent approach angle
- Rolling form frame suitable for both vertical and torsion stress
- Available as 6×4T/R and 8×4R



## Built to last. Designed to save time.

With Quester we have created a reliable and productive truck, built with proven quality components. Simply put, an enduring and more serviceable truck – so you'll spend less time on maintenance and more time working.

Ultimately it all comes to down to the details. Everything in and around the Quester is developed to create a strong overall solution. It's built with refined, tried and tested technology based on insights about our customers' day-to-day needs and cutting-edge know-how gained from our global network. The result: a truck made to go the extra mile.



#### **Anti-corrosion protection**

Quester has high quality anti-corrosion protection using the Volvo Group manufacturing standard. Phosphatizing dipping of the entire cab followed by three paint layers all of which are oven hardened. This secures protection for a long truck life.



**Three-piece bumper** 

On the steel bumpers the exposed corners are easily exchangeable. The headlamps are positioned on the side panel for better protection against damage.



Ease of daily service

Engine service points are located behind the grill for ease of service. Here it's possible to check the clutch fluid, washer reservoir and air conditioning filter. The oil dipstick is conveniently located at the back of the cab.





#### UD Extra Engine Brake (UD EEB)

The 11-liter engine is available with the optional engine brake (UD EEB). This provides powerful braking that is quick to engage. Improved braking safety results in higher average speeds especially in hilly landscapes. In addition it results in decrease in brake lining wear.

**Reliable chassis suspension** 

capacity and higher rolling rigidity.

Want to go the extra mile? If so, it's vital to

have reliable chassis suspensions. Quester has

long-life and lightweight parabolic front springs

that offer a smooth ride. The rear suspensions

consist of multileaf springs giving high load



#### Long-life hub reduction

Quester has robustly designed rear axles with high capacity. The 6×4T, 6×4R and 8×4R configurations also have optional hub reduction, where the stresses are split between the hub and the axle. It's fitted with inter-axle and inter-wheel differential locks, giving excellent grip and traction for extended vehicle availability.



#### **In-vehicle diagnostics**

Speed up daily inspections and increase safety. Quester introduces an advanced driver's display with tell-tale and self-diagnosis function. The indicators alert to issues that may require attention from the driver or a technician. In addition a service alert is given when the time is due.



#### Service and support

Genuine Service and Genuine Parts are there to make sure that everything runs smoothly at your end. It is essential support for your Quester, so you always get maximum uptime – wherever your truck travels.



**Drive connected with Telematics** 

Leverage your possibilities. Quester is prepared for the future with Telematics hardware that will take your truck's service to the next level. The system can provide real-time positioning and transport routes, preventive maintenance analysis and breakdown assistance information. This service comes as standard on all Quester range models.



#### Long-life S-cam brakes

S-cam high performance drum brakes are proven quality and recognised as the industry benchmark for many years. They are troublefree and easy to service resulting in low maintenance costs and minimized downtime.



### **Delivers** more than you expect.

A heavy-duty chassis with high flexibility and quality is one of Quester's main characteristics. The design of components comes from UD Trucks' proven commercial-vehicle technology. The entire chassis is subject to extensive tests in accordance with our global standards. This guarantees high reliability, good economy and a long life.

#### Strong and flexible frame

The Quester frame is robust and handles tough demands. The side rail section is made from strong and durable rolling form steel and is available in thicknesses of 7.0 or 8.0 mm. Rolling form is a torsional flexible frame with uniform stiffness, good for vertical stress and torsion stress when rolling and pitching happen together. This reduces stress from uneven road surfaces, loads with high center of gravity and unevenly distributed loads, making it suitable for many different conditions.

#### The toughest rear suspension

The T-ride rear suspension on the 6×4T/R is designed for rough conditions and particularly suitable for construction where durability and high reliability are of the highest importance. Rubber springs between the springs and rear axles contribute to good comfort under all axle loads. Rubber journalled V-stays and reduction rods give a smooth operation.

#### Cab suspension for greater comfort

A system of coil springs supports the entire cab, absorbing road shocks and vibrations. It's a reliable and hassle-free system, keeping maintenance costs to a minimum.



## Room for efficient driving.

It's all about space. Quester's cab reduces driver's fatigue in long operating times. But a well-planned driver's environment also results in safer and more fuel-efficient driving. After all, only a driver in top form can also produce top performances behind the steering wheel.

You immediately get a sense of quality when climbing into the driver's seat. Quester has a large fully transparent illuminated instrument cluster, the seats are upholstered with high-quality textiles and the switches are placed exactly where you want them. This is a place for long hours of work. Catering exactly to the driver's needs, making it easy to work with great precision in any situation.

#### Ergonomic dashboard

The ergonomic layout of the dashboard increases the safety on the road. The most important controls and switches are within easy reach of the driver, clearly marked and easily recognizable.

#### Driver's information display

A large 4.5" display in the instrument makes the information easy for the driver to read. It delivers bright and sharp contrast with quick and easy recognition of information. The display also gives information on the fuel coaching system. Monitor the performance of the engines and get an early warning of malfunctions through pop-up messages and warning lamps. With early warning, you can identify minor problems before they become major repair bills.

#### Safety tested cab

The Quester cab has passed the ECE R29/ AIS029 crash safety test, which includes a front impact test and a simulated roof strength test. This shows that the cab is able to withstand impact and provide a safety space for the driver.



#### In-vehicle diagnostics

#### **Ergonomic driver seat**

Either air suspended or mechanical suspended drivers seats are available. They are an ergonomic design with good adjustment and well-shaped seat cushion and backrest which reduces fatigue during long trips.

#### Auxiliary passenger seat

Do you sometimes need an extra hand on the road? A foldable auxiliary passenger seat is available as an option, which gives the possibility to carry an extra worker.

## Proven technology. Solid performance.

Empower your business. Our two engine alternatives are designed with proven fuel-efficiency and superior performance for mediumduty to heavy-duty applications. We are a step ahead in providing lower operating costs and increased productivity – making it easier for you to stay one step ahead of the competition.

The 8-liter engine – balanced and dynamic efficiency

The GH8E is based on UD Trucks' GH7 engine, which has established a good reputation for its performance and fuel consumption. The GH8E offers excellent performance and is ideal for distribution and construction work.

- 8-liter diesel engine
- Low operating cost through reduced maintenance and long service intervals
- Turbocharging with air-to-air intercooler
- Power/torque: 330 hp/1200 Nm



#### The 11-liter engine – better value for every mile

The GH11E was developed to provide the best possible performance in actual operation. It is based on advanced Volvo Group technology in combination with UD Trucks' manufacturing quality. The low fuel consumption is due to the wide rev range with high thermal efficiency.

• Fuel-efficient with good driveability

unum

GH8E engine

- Good torque at low revs results in quick response to acceleration
- Maximum torque within a wide rev range
- Optional UD Extra Engine Brake (UD EEB) for enhanced braking
- Electronically controlled cooling fan reduces losses
- Turbocharging with air-to-air intercooler
- Engine driven power take-off with high torque output of maximum 650 Nm
- Low noise and vibration at idling
- Power/torque: 420 hp/2000 Nm, 370 hp/1700 Nm

#### Auxiliary brake

The UD Extra Engine Brake (UD EEB) is a powerful engine brake that is optional with the 11-liter engine. The UD EEB is a means of using the engine as an auxiliary braking device. This is done by back pressuring the cylinders within the engine, using exhaust pressure and a patented ingenious valve system. There is no generation of heat or extra wear and tear on equipment.

#### Great engine driveability

The GH11E engine boasts a sturdy, dependable design featuring an overhead camshaft, four valves per cylinder and precisely controlled electronic unit injector. Driveability is excellent thanks to the broad torque range.

#### Hub reduction for tough jobs

For rough and hilly operation Quester offers hub reduction for the 6×4R, 8×4R and 6×4T configurations.

## A powertrain for endurance.

The heart of every Quester is our integrated powertrains that perform optimally because they're specially designed and manufactured to work together. They combine the efficiency and durability of a Quester engine with a first class selection of globally proven drivetrain components.

#### Made to work together

You get durability to go the distance. The Quester driveline is carefully balanced to optimize performance under varying conditions. It gives excellent fuel economy at cruising speed due to the possibility of matching the driveline with the correct rear axle ratio.

#### A transmission excelling on the essentials

A locally sourced and popular transmission based on well-proven technology. We have further developed it to withstand tough conditions and meet our customers' demands. After rigorous testing we have obtained first-rate results for reliability and durability. For the 11-liter engine you have a choice of 9 or 12 speed. For the 8-liter engine you can have 9 speed.

High power transmission Quester has a very high input torque - up to 2000 Nm with the 9-speed and

12-speed transmission.

#### High payload capacity axle

You want a rear axle that lasts and requires little maintenance. The Quester will fill your needs. Its housing is made from fabricated steel to effortlessly handle heavy loads – a supple choice for most heavy-duty applications. There is also a hub-reduction axle for more demanding applications.



#### Bogie lifting axle

The 6×2R configurations can be provided with a bogie lifting axle which is used to lift the axle in the unladen condition. The lifting function on the third axle gives the truck more traction when activated. It also gives you better fuel consumption, extended tyre life and a smaller turning radius. It can be supplied with bogie press which is used when higher traction is required.

## **Chassis to build** your business on.

#### Strong and flexible frame

The chassis frame forms the backbone of Quester. It is dimensioned to provide stability, payload capacity and long-life performance.

#### Wide wheelbase range

By having a wide product range and many available wheelbases, Questers is able to maximize the payload depending on your business needs.

Are you looking for new ways to transport more cargo every run? Or are you worried that your trucks don't have the capacity that your customers really require in order for you to guarantee safe and secure transport? With the Quester you can feel confident that you have a truck with payload capacity suited for your operation – whatever your business. It begins with a durable and rugged frame that provides a stable basis on which to build on.

#### Superior strength steel

The frame is made from cold-formed steel that combines high strength with light weight. For Quester it is produced in a rolling form process that gives the chassis extended strength and flexibility.



#### High axle load capacity

Due to the robust design of axles Quester is designed to operate at high GVWs and GCWs to give a competitive load carrying capacity. For the toughest conditions hub reduction is also available which maximizes the ground clearance.

#### **Reliable rear suspension**

Multileaf springs for high capacity and easy maintenance. Designed to deliver the best ride under the worst conditions. The rear suspension on the 6×4T/R and 8×4R features trunnion-mounted springs and rubber towers for excellent traction in off-road conditions.



### **Quester Model Line-up**

MODEL & CODE	APPLICATION			TION M)	(W)	OUTPUT	TRANSMISSION		PERFORMANCE 1	MASS RATING (KG)							
	<b>EDELCUIT</b>	TRUCK		CONFIGURATION W/BASE (MM)	ENGINE	KW@R/MIN	ΤΥΡΕ	FINAL DRIVE RATIO	GEARED SPEED (KM/H)	CHASSIS/ CAB	IS/ GVM	GCM	GA (FRONT)	GA (REAR)	TOTAL LENGTH (MM)	LEGAL BODY & PAYLOAD ALLOWANCE (KG)	MODEL NAMES
	FREIGHT CARRIER	TRUCK TRACTOR	CONSTRUCTION		EN	NM@R/MIN	SPEED/SYSTEM		MAXIMUM GRADE (%)		V	D/T	A (FRONT)	A/U (REAR)			
GKE370 E20				4x2 3 500	UD Trucks GH11E	278 @ 1 900 1 734 @ 1 000 - 1 400	UD Trucks STO2009 9/SYNCHRO	4,33 : 1	131 44 @D/T	6 760	20 000 16 700	44 000 44 000	8 000 7 700	13 000 9 000	5 940	9 940	GKE370
CWE330 E22				6x4 4 085	UD Trucks GH8E	243 @ 2 200 1 200 @ 1 400 - 1 600	UD Trucks ST1509 9/SYNCHRO	4,11 : 1	120 46,9 @ D/T	8 260	31 000 25 700	36 000 36 000	8 000 7 700	26 000 18 000	7 475	17 440	CWE330
CWE330 E23				6x4 4 085	UD Trucks GH8E	243 @ 2 200 1 200 @ 1 400 - 1 600	UD Trucks ST1509 9/SYNCHRO	4,11 : 1	120 46,9 @ D/T	8 260	31 000 25 700	36 000 36 000	8 000 7 700	26 000 18 000	7 475	17 440	CWE330
CWE330 E24				6x4 5 885	UD Trucks GH8E	243 @ 2 200 1 200 @ 1 400 - 1 600	UD Trucks ST1509 9/SYNCHRO	4,11 : 1	120 46,9 @ D/T	8 360	31 000 25 700	36 000 36 000	8 000 7 700	26 000 18 000	10 475	17 340	CWE330
CWE370 E25				6x4 4 085	UD Trucks GH11E	278 @ 1 900 1 734 @ 1 000 - 1 400	UD Trucks STO2009 9/SYNCHRO	4,63 : 1	123 46,5 @ D/T	8 380	31 000 25 700	45 000 45 000	8 000 7 700	26 000 18 000	7 475	17 320	CWE370
CWE370 E26				6x4 5 285	UD Trucks GH11E	278 @ 1 900 1 734 @ 1 000 - 1 400	UD Trucks STO2012 12/SYNCHRO	4,63 : 1	115 39 @ D/T	8 660	31 000 25 700	45 000 45 000	8 000 7 700	26 000 18 000	9 375	17 040	CWE370
CWE420 E27				6x4 5 285	UD Trucks GH11E	315 @ 1 900 2 000 @ 1 100 - 1 400	UD Trucks STO2009 9/SYNCHRO	4,63 : 1	123 42,3 @ D/T	8 660	31 000 25 700	60 000 56 000	8 000 7 700	26 000 18 000	9 375	17 040	CWE420
CGE420 E28				8x4 5 785	UD Trucks GH11E	315 @ 1 900 2 000 @ 1 100 - 1 400	UD Trucks STO2009 9/SYNCHRO	5,24 : 1	109 49,5 @ D/T	9 930	41 000 33 000	60 000 56 000	15 000 15 000	26 000 18 000	9 175	23 070	CGE420
CGE420 E29				8x4 6 285	UD Trucks GH11E	315 @ 1 900 2 000 @ 1 100 - 1 400	UD Trucks STO2012 12/SYNCHRO	4,63 : 1	115 35,7 @ D/T	9 530	41 000 33 000	60 000 56 000	15 000 15 000	26 000 18 000	9 675	23 470	CGE420
GWE420 E30		6_00		6x4 4 085	UD Trucks GH11E	315 @ 1 900 2 000 @ 1 100 - 1 400	UD Trucks STO2012 12/SYNCHRO	4,63 : 1	115 35,7 @ D/T	8 710	31 000 25 700	60 000 56 000	8 000 7 700	26 000 18 000	7 055	16 990	GWE420
GWE420 E31		6_00		6x4 4 085	UD Trucks GH11E	315 @ 1 900 2 000 @ 1 100 - 1 400	UD Trucks STO2012 12/SYNCHRO	4,87 : 1	109 37,9 @ D/T	9 120	34 000 25 700	60 000 56 000	8 000 7 700	26 000 18 000	7 055	16 580	GWE420
CGE370 E32				8x4 4 985	UD Trucks GH11E	278 @ 1 900 1 734 @ 1 000 - 1 400	UD Trucks STO2009 9/SYNCHRO	4,63 : 1	123 46,5 @ D/T	9 430	41 000 33 000	45 000 45 000	15 000 15 000	26 000 18 000	8 375	23 750	CGE370

## Quester

CGE 420 8x4 Tipper

## "Toughness to run further"













**UD Trucks South East Africa**